International Health Assistance: The Case of Cuba

CUBA'S INTERNATIONAL COOPERATION IN HEALTH: AN OVERVIEW

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In the first years after Cuba's 1959 revolution, the island's new government provided international medical assistance to countries affected by natural disasters or armed conflicts. Step by step, a more structural complementary program for international collaboration was put in place. The relief operations after Hurricane Mitch, which struck Central America in 1998, were pivotal. From November 1998 onward, the "Integrated Health Program" was the cornerstone of Cuba's international cooperation. The intense cooperation with Hugo Chávez's Venezuela became another cornerstone. Complementary to the health programs abroad, Cuba also set up international programs at home, benefiting tens of thousands of foreign patients and disaster victims. In a parallel program, medical training is offered to international students in the Latin American Medical School in Cuba and, increasingly, also in their home countries. The importance and impact of these initiatives, however, cannot and should not be analyzed solely in public health terms.

Cuba's national health system has gained worldwide recognition for its performance and results. In spite of economic hardships during the 1990s, which led to significant economic reforms, health care continues to be free and of good quality (1). Preventive and curative services, as well as rehabilitation services, are provided at different levels of care and with respect for the principles of equity, competence, participation, and health as a state responsibility (2). With an exclusively public health care system embedded in a socialist system that drastically transformed all aspects of society over the past half-century, Cuba has achieved health indicators that are among the best in the world.

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One important and lesser known aspect of Cuba's health care system is its activity in international assistance. Soon after the 1959 revolution, the Cuban government developed a number of international cooperation initiatives, and as early as 1962, 56 Cuban doctors went to Algeria for 14 months to work in the newly independent country, even though enormous efforts were needed to prevent the collapse of Cuba's own health care system—which had seen the departure of half of the country's 6,000 medical doctors since 1959. Today, Cuban medical staff are active in 69 countries.

This article gives an overview of the evolution of Cuba's assistance in international health care, and describes the different axes of the program: the emergency care program, the structural cooperation initiatives, the special program for Venezuela, and the international programs within Cuba itself, including the international medical training programs.[1]

FOUR PHASES OF DEVELOPMENT OF CUBAN COOPERATION IN HEALTH

International solidarity has always been at the center of the Cuban societal project. A historical perspective is helpful, however, to understand Cuba's emergence as an important player in international cooperation in the field of health.

The international commitment of Cuba's revolutionary government was underscored by the fact that it launched the first medical cooperation, with Algeria, as early as 1962, barely three years into Cuba's revolutionary transformation. Moreover, this was also the time that Cuba itself was just starting to develop its health system, and it was still in the midst of political turmoil, with the invasion in Playa Girón (Bay of Pigs) in 1961 and the missile crisis in 1962, to name just a few events of those early years.

The international political context needs to be taken into account to analyze Cuba's cooperation in health. This allows us to distinguish four phases. Before 1990, during the Cold War, the decolonization movement was influential throughout the 1960s and 1970s. The assertion of sovereignty by some poor nations led to realignments in the international political blocs. The economic relations with the Soviet Union, Cuba's political participation in the non-allied movement, and Cuba's military effort in Southern African front-line states in the war against the apartheid regime were accompanied by collaboration in the field of health. In this period, the relative isolation of Cuba in the Latin American region had one important exception: the Sandinista revolution in Nicaragua, from 1979 to 1990. The Sandinista government benefited from intense cooperation with Cuba, not least in the health sector.

[1] Our analysis does not include actual contractual cooperation agreements (e.g., with the government of South Africa), nor does it include the medical tourism programs in Cuba.

In the first half of the 1990s, after the collapse of the Soviet Union, Cuba entered a "special period" of economic hardship, worsened by the impact of an increasingly restrictive blockade by the United States. For the Cuban government, survival of the revolution became the main objective. But even under these difficult conditions, collaboration programs in the health sector continued at different levels.

From 1996 onward, the country's economy started to recover, but at a slow pace, and important economic limitations persisted. But despite these limitations, in 1998 a new phase of international cooperation began with the Program of Integral Health (PIS), which we describe below.

Finally, the intense collaboration between Cuba and Venezuela, developing rapidly from 2004 onward, is a pivotal element of the fourth phase in Cuba's international cooperation in health.

EMERGENCY ASSISTANCE

Cuba's emergency experts have been leading teams of medical professionals to numerous countries for decades. In Latin America this happened in response to earthquakes (Chile 1960, Peru 1970, Chile 1971, Nicaragua 1972, Mexico 1985, El Salvador 1986, Ecuador 1987, Colombia 1999, El Salvador 2001); hurricanes (Honduras 1974, Nicaragua 1988, Dominican Republic 1998, Guatemala 1998, Honduras 1998, Nicaragua 1998, Haiti 2004); intense rains (Nicaragua 1991, Honduras 1999, Venezuela 1999); volcanic eruption (Nicaragua 1992); and dengue epidemics (El Salvador 2000, Honduras 2002) (3, 4).

More recently, emergency assistance was also delivered to other continents, such as after the tsunami that struck Asia on December 26, 2004. Cuba immediately sent a medical brigade to Banda Aceh, the capital of the Aceh province in Indonesia, and to Sri Lanka (5).

In response to Hurricane Katrina, which devastated New Orleans after its arrival on August 29, 2005, Cuba reorganized its emergency assistance and created the "Henry Reeves Contingent," ensuring the possibility of a quick and massive deployment of hundreds of medical doctors abroad for emergency health care (6). As the U.S. government turned down Cuba's offer to send 1,500 doctors to assist the affected population of New Orleans, a first important mission of this new contingent went to Pakistan on October 8, 2005, to help with post-earthquake relief efforts. The first 85 Cuban doctors arrived in Islamabad within 48 hours of the disaster and—in response to assessments revealing the enormous need for assistance—Cuba stepped up its collaboration. Eventually, more than 2,500 disaster response experts, surgeons, family doctors, and other health personnel were working in 30 field hospitals provided by Cuba (together with equipment and drugs), in seven refugee camps, in dozens of communities in the mountains, and in Pakistani field hospitals and regular hospitals. The Cuban brigades stayed for more than six months, until the end of the winter.

During the emergency program, Cuba also initiated a long-term collaboration program, including a clinic for orthopedic rehabilitation and prostheses for disaster victims, scholarships for medical training in Cuba for young Pakistanis from rural areas, and specialist training (7, 8). In its first year, the Henry Reeves brigade, besides its mission to Pakistan, was also active in disaster situations in Guatemala, Bolivia, and Indonesia.

STRUCTURAL COOPERATION

Since the early 1960s, 28,422 Cuban health workers have worked in 37 Latin American countries, 31,181 in 33 African countries, and 7,986 in 24 Asian countries. Throughout a period of four decades, Cuba sent 67,000 health workers to structural cooperation programs, usually for at least two years, in 94 countries (3), which means an approximate total of 134,000 worker-years or an average of 3,350 health workers working abroad every year between 1960 and 2000.

For example, in the 1980s Cuba was actively cooperating with the Sandinista government in Nicaragua in the fields of education and health. For the entire decade, hundreds of Cuban teachers and doctors were working in that country. Their role in the literacy campaign and in the development of a uniform national health system was significant. During that period, Nicaragua proved that an adequate public health policy with integrated curative, preventive, and health-promotion activities, complemented with comprehensive economic development initiatives, could drastically change the health status of a country in a relatively short time (9). This revolutionary example was actively and aggressively undermined by the U.S.-organized and supported Contra war (10).

Since then, things have been scaled up. As of 2004, 18,425 Cubans were working in 30 Latin American countries, 1,994 in 26 African countries, and 145 in 22 Asian countries (3). These figures continue to increase. (Table 1 shows the participating countries as of 2005.)

The Integrated Health Program (PIS)

Since 1998, Cuba's structural collaboration in the field of health has been reorganized in the "Integrated Health Program (Programa Integral de Salud, PIS) for Latin America and the Caribbean and for Africa." This cooperation program is free for the receiving country. The PIS is focused on first-line health services. Depending on local needs, the development of integrated health care at the primary level can be complemented with technical assistance to improve the performance of local hospital services, with training programs for local human resources, or with essential drugs programs. Most of the doctors working in this program are family doctors from all areas of Cuba. Their work is reinforced with that of specialists and academicians, according to local needs (3, 11).

Table 1

Overview of the countries with which Cuba has a collaboration program in health, 2005

America

Antigua and Barbuda, Argentina, Aruba, Bahamas, *Belize, Bolivia,* Brazil, Colombia, Costa Rica, *Dominica,* Dominican Republic, Ecuador, Granada, *Guatemala,* Guyana, *Haiti, Honduras*, Jamaica, Mexico, Panama, *Paraguay,* Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States, Venezuela (29 countries, *7 countries*)

Africa

Angola, *Botswana, Burkina Faso, Burundi*, Cape Verde, *Chad,* Congo, Djibouti, *Eritrea*, Ethiopia, *Gabon, Gambia, Ghana, Equatorial Guinea, Guineau-Bissau, Guineau (Conakry),* Lesotho, *Mali,* Mozambique, *Namibia, Niger, Rwanda, SADR (Western Sahara),* São Tomé and Príncipe, Seychelles, *Sierra Leone*, South Africa, *Swaziland,* Uganda, *Zimbabwe* (30 countries, *19 countrie*s)

Middle East and North Africa

Algeria, Qatar, Yemen (3 countries)

Asia

East Timor, Laos (2 countries, *1 country*)

Europe

Italy, Switzerland, Ukraine (3 countries)

Source: Ministry of Health, Cuba. Dirección Nacional de Estadística. *Anuario Estadistico de Salud 2005,* Havana, 2006.
Note: Italic indicates part of the Integrated Health Program (PIS).

The main objective is to ensure the basic right to health care on a structural and durable basis to populations that have been excluded from free access to basic health care. Programs are long running, and Cuban family doctors—each for at least two years—go to rural or peripheral urban areas where no or very few local doctors are working.

The PIS was first implemented in Central America, which was still in the aftermath of Hurricane Mitch at that time, but was soon extended to other continents. In 2004 the PIS covered 24 countries: 1,560 Cuban health workers worked in 6 Latin American countries, 1,290 in 15 African countries, and 28 in 3 Asian countries (Table 2; see also 11).

Table 2

Medical personnel working in the Integrated Health Program (PIS), 2004

	Total	Physicians	
		No.	%
Latin America			
Belize	104	61	58.7
Bolivia	7	7	100.0
Guatemala	540	304	56.3
Haiti	492	223	45.3
Honduras	348	232	66.7
Paraguay	69	69	100.0
Total (6 countries)	1,560	896	57.4
Africa			
Botswana	74	52	70.3
Burkina Faso	13	9	69.2
Burundi	5	5	100.0
Chad	34	21	61.8
Equatorial Guinea	147	89	60.5
Eritrea	39	31	79.5
Gambia	250	197	78.8
Ghana	181	153	84.5
Lesotho	40	33	82.5
Mali	106	88	83.0
Namibia	183	148	80.9
Niger	62	46	74.2
SADR (Western Sahara)	4	3	75.0
Tanzania	11	10	90.9
Zimbabwe	175	127	72.6
Total (15 countries)	1,290	956	74.1
Asia			
Cambodia	1	1	100.0
East Timor	16	16	100.0
Nauru	11	11	100.0
Total (3 countries)	28	28	100.0

Source: Ministry of Health, Cuba, 2004.

Guatemala (12). Guatemala reestablished diplomatic relations with Cuba in 1998, and since then the two nations have developed growing links in health, education, culture, science, and sports (13). In November 1998, a first Cuban brigade of 19 health workers arrived in the port of San José, Department of Escuintla, to assist in the management of a cholera outbreak. Soon, in December 1998, the program was given a structural follow-up phase.

The Cuban cooperation is coordinated with the Ministry of Health and Social Assistance of Guatemala. The Cuban brigades work in deprived zones where no adequate public health services exist (14). Their work is concentrated in the western and northern parts of the country, where 22 different indigenous peoples live (15). In 2003, 550 Cuban health workers, of which 48.5 percent were women, worked in 20 health areas in 16 departments of the country. They ensured basic health care for 5.7 million inhabitants. Of these Cuban health workers 446 were family doctors, supported by 10 pediatricians, 11 gynecologist-obstetricians, 11 specialists in internal medicine, 8 surgeons, and 16 epidemiologists, among others. The curative care program is complemented with health education, sanitation programs, training of midwives and health promoters, and the support of social programs for children, elderly people, and pregnant women.

The Cuban brigades complement their health work with systematic teaching and research activities, in coordination with the Guatemalan authorities. This includes the training of nurses, auxiliary nurses, laboratory technicians, nutritionists, and other personnel for first-line services and hospitals (16). Short courses include emergency care, epidemiology, and other topics according to local need and demand. Research activities are directed toward mother and child health, importance of vector-borne diseases, health situation analysis, and the impact of health education activities. Finally, the collaboration includes technical support for the local Ministry of Health, mainly in the planning of human resources development, epidemiology and public health training, methodological advice in training programs, research activities, and strategic planning at the local level.

During its first 18 months the Cuban medical cooperation in Guatemala, along with the Health Ministry of that country, implemented a network of primary health care in six departments. Local research showed that implementation of a mother and child health care program over that period reduced the infant mortality rate in the covered areas from 40 to 18.5 per 1,000 live births (17).

Haiti (18). In the last months of 1998 Hurricane George made its way over Haiti. Hundreds of people died and thousands lost their homes and belongings. In response to a request from the Haitian government, the first Cuban doctors arrived in December 1998.

In the first phase of the intervention, until March 2000, the main objective was a response to the emergency situation, for which hospital care was reinforced. Step by step an "extension plan" was set up, sending hundreds of Cuban family

doctors and nurses to remote areas. At the same time, the first Haitian students were sent to Cuba to study medicine. In a second phase, from March to December 2000, emphasis was placed on the strengthening of first-line health services based on the integrated program as it functions in Cuba (2). A system of epidemiological surveillance was also set up. A third phase started in December 2000. The existing programs were developed further, and a "health situation analysis" was made, leading to an intervention plan. Secondary care was included in the collaboration program, and a referral and counter-referral system was set up. Furthermore, a new school of medicine was instituted in Haiti, with the help of Cuban academicians. Since then, the Cuban brigade has further developed its activities and integration in the Haitian health system.

The activities of Cuban health professionals in Haiti have been similar to those in Guatemala, but there is one specific aspect in the collaboration with Haiti that should be pointed out. At the 1999 graduation at Cuba's medical schools, the students with the best overall qualifications (scientific, technical, and social) were invited to volunteer for the health services in the mountains of eastern Cuba for their first year of social service. Consequently they rotated their service in provincial hospitals to improve their clinical skills in internal medicine, pediatrics, and traumatology, among other clinical specialties. They finalized their preparation at the Institute of Tropical Medicine Pedro Kuri in Havana, where they were trained in tropical and re-emerging diseases that no longer exist in Cuba. Finally, at the end of 2000, these young doctors joined the "Cuban Internationalist Contingent" in Haiti, where their colleagues had already been working for almost two years. In the following years, these young doctors reinforced the contingent of Cuban health workers.

As of September 2003 there were 551 Cuban health professionals working in the 10 departments of Haiti, 61.9 percent of them women. A total of 318 of these were physicians, including 112 specialists in family medicine. The Cuban health brigades worked at that time in 124 neighborhoods in 85 of the country's 133 municipalities.

More than 15,000 Haitian health workers have benefited in one way or another from training initiatives (courses, conferences, practical trainings, etc.) that were part of the Cuban medical cooperation. In November 2001 a medical faculty was opened in Port au Prince, with the support of Cuban academicians. In the first year 122 students started their studies, in the second year another 68. Twenty-five Cuban academicians participate in this education program.

After two years of work, in June 2002, the impact of the program in the covered regions of Haiti was illustrated by the following figures: infant mortality had dropped from 80 to 33 per 1,000, under-five mortality from 135 to 59 per 1,000, and maternal mortality from 523 to 285 per 100,000. One important element in this was the increase in proportion of hospital births, from 20 to 40 percent (19).

Triangular Cooperation in the PIS. In most cases, the financial burden of salaries and equipment of the PIS has been assumed by Cuba. The exceptions are so-called tripartite initiatives. In this triangular cooperation, the Cuban government provides the human resources for a partner country, while a third party ensures the necessary material and financial support. Cuba has been promoting this approach actively. For example, within the framework of activities of the World Health Assembly in Geneva in 2005, the Cuban delegation presented its PIS program and invited other governments to cooperate. The director of cooperation of the Cuban Ministry of International Affairs, Yiliam Jiménez, emphasized that Cuba was not looking for financial support, but rather for an integrated effort of solidarity and to improve the well-being of the populations of the receiving countries (20).

One of the places where this tripartite cooperation with international organizations, governments, and international nongovernmental organizations (NGOs) has been extensively developed is Haiti. The Pan-American and World Health Organizations (PAHO/WHO) support the epidemiological surveillance and immunization programs, while the Official Development Assistance (ODA) of France and Japan ensures material backing of different initiatives of the Cuban collaboration program.

Also in Haiti, Cuba has been developing joint initiatives with a dozen NGOs from Canada, the United States, Spain, France, and Belgium. Throughout Latin America, and in Africa, this tripartite collaboration is booming. The German ODA supports Cuban health initiatives in Honduras, while Japan does the same in Honduras and Guatemala. Germany is also supporting activities in Niger, while Switzerland collaborates in Mali. The WHO is financing the development of a medical faculty in Gambia, and the PAHO is supporting medical training of foreign students in Cuba itself (13, 15). A new and equally significant evolution is South-South cooperation: South Africa supports the Cuban health cooperation in Mali, while Libya and Nigeria finance Cuban health activities in Burkina Faso, Niger, Mali, Chad, and Sierra Leone (3).

Venezuela: Misión Barrio Adentro (21)

During the 1970s and 1980s liberal social policies in Venezuela led to a breakdown of public health services through systematic reductions of the national health budget while drastic privatization programs were pushed through. As a consequence, some 17 million people (65% of the Venezuelan population), mainly in the slums and populous suburbs of the main cities, were left without accessible and acceptable medical care (22).

Since the late 1990s, under the presidency of Hugo Chávez, Venezuela has taken a drastic turn in its government's general policies. As part of an overall effort of socioeconomic transformation known as the Bolivarian Revolution, the government is exerting considerable effort to ensure coverage with decent health

services for these millions of people (23). From the start, Cuba developed an intense collaboration with Venezuela to ensure the execution of this health program (and comparable initiatives in education, culture, and sports). After the coup attempt against President Chávez in April 2002, the Venezuelan government intensified its collaboration with Cuba. Since 2003, strategic agreements have led to a far-reaching integration of the two countries' social efforts.

Today, the so-called Misión Barrio Adentro ("Inside the Neighborhood"; MBA) counts on the participation of more than 20,000 Cuban medical doctors, mainly family doctors, and other health professionals. The approach to health is not only curative. A series of preventive and educational health activities are developed with direct participation of the population. Health committees are set up in each neighborhood to organize and support the health work. They assist the family doctor in home visits and organize activities for prevention and health promotion, including government-supported soup kitchens for people in need of free meals (24). Free dental care (3,019 units) and ophthalmologic services (459 units) have also been put in place, covering all of the 17 million target population. This program covered 76 million medical consultations in 2004, on top of the 20 million consultations in the regular public system. In comparison, during the five years before the Chávez presidency the public health services in Venezuela realized only some 14 million medical consultations a year (23).

A second phase of the MBA started in 2005, with the installation in these peripheral—and until then marginalized—neighborhoods of 600 diagnostic centers (1 per 30,000 inhabitants) with emergency services and an intensive care unit. These centers are equipped with the necessary diagnostic, therapeutic, and rehabilitation facilities to ensure an adequate first-line back-up for family doctors working in the communities. The centers are connected with 35 diagnostic centers having high-technology diagnostic equipment, and 600 rehabilitation and physical therapy centers (21).

The program has raised the question of whether Venezuela really needs so many Cuban doctors who might compete with Venezuelan doctors. The answer is found in the Venezuelan government's dedication to ensuring health care as a basic right for all citizens and thus drastically improving accessibility to adequate health services. To realize this objective, official Venezuelan health policy has shifted its focus from health institutions to the community, where adequate health care services are combined with far-reaching preventive and health-promotion activities. All forms of people's participation are therefore encouraged and developed as the only possible way to tackle the enormous challenges of poverty and backwardness in this relatively rich country (24).

It is true that Venezuelan medical organizations have opposed the presence of Cuban doctors. But more than making a public health analysis, they take a political stance, defending their own professional interests. The need for expanding the accessibility of health services is not questioned, and the program is seen as an answer to this need. And while in Caracas jobless medical doctors

are a fact, there are many other regions where vacancies are hard to fill. Many Venezuelan physicians, who come from the middle and upper classes, do not want to work in the populous neighborhoods, far from the center of Caracas, for the limited salary the government is offering.

The MBA also accepts Venezuelan doctors, and almost 1,000 of them are indeed participating actively (25). And in 2005, Venezuela started a special program in which 20,000 young Venezuelans from poor neighborhoods entered university to study medicine in order to work as family doctors in the MBA in their own neighborhood and to reinforce the Cuban collaboration in other places (23). They will, in the words of President Chávez, "unite with the Cuban physicians to fight this tragedy of poverty and misery all over the world where our participation is required" (26).

INTERNATIONAL HEALTH PROGRAMS IN CUBA

Children of Chernobyl (27)

Since 1990 Cuba has been treating children affected by the radiation fallout from the Chernobyl nuclear disaster in a special treatment facility. More than 20 years after the disaster, Cuba is still receiving and treating these children as the largest donor country in the world for Chernobyl victims. The children suffer from cancer, neurological diseases, vitiligo, and hair loss. Over half of the Chernobyl children who are treated in Cuba are orphans. More than 19,000 children have received treatment since the program started. Cuban doctors in the Ukraine select those who would benefit most from the treatment. The U.S. embargo has made it increasingly difficult and expensive, however, for Cuba to bring in the badly needed drugs used to fight leukemia and lymphomas through chemotherapy.

Operación Milagro

Under Operación Milagro (Operation Miracle) thousands of visually impaired people are receiving free eye surgery in Cuba. The program, which allegedly got its name from the dramatic changes achieved by small interventions, started in July 2004. In its first six months, before the end of 2004, some 19,180 Venezuelan patients were flown to Cuba and 18,745 ophthalmologic interventions were performed. The majority (13,678) were surgical treatments for advanced cataract with serious visual impairment. There were also 4,628 other ophthalmologic interventions and treatment of 325 other health problems (28).

In 2005 the program was extended to other countries; it treated all types of ophthalmologic problems for almost 100,000 patients who were too poor to get treatment in their own country. As of 2006 this program was still expanding and now provides treatment of all forms of ophthalmologic disorders in newly organized ophthalmologic centers in Cuba, Venezuela, Bolivia, and other countries (29).

MEDICAL TRAINING PROGRAMS

With more than 70,000 medical doctors, Cuba has one physician per 160 inhabitants. The total number of health sector personnel reaches some 450,000. In 2005, 31,047 students were studying medicine, 8,188 of whom were in their first year. More than 85,000 students are pursuing paramedical careers (30). This extensive experience in the training of physicians and other health workers is also benefiting the international collaboration program.

From 1963 to 2004, Cuba was involved in the creation of nine medical faculties in Yemen, Guyana, Ethiopia, Guinea-Bissau, Uganda, Ghana, Gambia, Equatorial Guinea, and Haiti (3). Today there are three medical faculties in Africa with Cuban academicians: in Equatorial Guinea, Gambia, and Eritrea, with a total of about 400 medical students (4). Moreover, during the same period, Cuba had a long-term cooperation with 37 medical faculties abroad. Today, 240 academicians are working in 23 medical faculties in 15 countries (3).

Complementary to this academic collaboration abroad, Cuba continues an important program of medical scholarships for foreign students in its medical faculties. As early as October 1961, the first 15 Guinean students arrived in Havana to study medicine. Many thousands would follow their example in the following decades. In 2004, 17,700 students from 115 nations were studying more than 30 different subjects in Cuba (4).

Medical Scholarships in Cuba (ELAM)

In 1998, as part of the PIS program, the Latin American School for Medical Sciences (ELAM) was opened in Havana on the seaside campus of what was once a naval and merchant marine academy. It is the most modern of Cuba's 15 medical schools. In its first year the school had 1,900 students. Black and indigenous peoples of Central and South America are well represented among the students, half of whom are women. Board and lodging and expenses for education are provided by the Cuban state, as well as medical and dental care for the students. The first six months enable students to "catch up" in the preparatory subjects. Then come two years of the essential basic courses of medical education. The final four years of work and study are spent at the other Cuban medical schools, together with Cuban students. Just like the Cuban students, the foreign students spend a lot of time learning from actual practice in neighborhood doctors' offices, clinics, and hospitals (15, 31).

Registration of students is organized through the Cuban diplomatic missions, and academic requirements to enter the school are comparable to those for other medical schools in Latin America (32). There is positive discrimination, however, toward sons and daughters of families with limited economic resources to start a medical career.

In 2001, Cuba offered to provide free medical education to 500 low-income minority students from the United States, as they are under-represented in the U.S. health workforce (33). In 2004, 71 Americans were studying at the ELAM (1). In the eastern city of Santiago de Cuba, situated near Haiti, a French-speaking medical school has been set up. In 2003, 381 Haitians were studying medicine there (18).

Currently, the ELAM has more than 10,000 students from 19 Latin American countries, 4 African countries, and the United States. In July 2005, the first medical doctors graduated. Some of them are continuing their training as family doctors in the Cuban health services, but most have returned to their home countries where many of them can join or replace the Cuban doctors working there.

Decentralized Teaching

Currently, plans are being implemented for decentralized training of foreign medical students, integrating the training within the missions abroad. This will bring medical students nearer to the basic health services by organizing medical education in the polyclinics, with a central plan and strict supervision. In Venezuela decentralized medical training is already starting in the diagnostic centers, and comparable initiatives are being developed in Guatemala and Haiti, among other countries.

This new academic approach is based on pilot experiences in Venezuela and in different Cuban municipalities, where "university polyclinics" have a threefold function of health care provision, training of health personnel, and health services research. It is too early to assess how this initiative will develop, but Cuban authorities ensure that it is closely monitored to maintain and improve the quality of the academic teaching (29).

DISCUSSION AND CONCLUSIONS

Today, Cuba is one of the very few important players in international health that actively oppose the dominant neoliberal discourse that advocates privatization and profit-driven health services. Cuba refers to the quality and accessibility of its own public health services, and of those in some other countries, to disprove the prevailing opinions about public services not being effective and efficient. Cuba's contributions to this international debate are inextricably linked to its economic and political policy choices (34).

The fact that Cuba is training many physicians only to send them abroad, or so it seems, has drawn criticism for being a unilateral and inadequate strategy toward health for all (35). Cuba's answer is straightforward: while acknowledging the need to fight the deplorable socioeconomic conditions in which billions of

people are living, this does not imply that adequate and accessible health services should be considered less important.

When in 2001 the director of first-line health services of the Cuban Health Ministry was asked whether a health system with such a high number of doctors is not inducing medical overconsumption, she answered: "Our first task is to ensure that every person has the right and the possibility to decent health care. In many countries this is not the case today. The family doctors play an important role in avoiding over-consumption. They have a social role and are essential to put in practice our integrated health care model" (36).

Another often repeated criticism is that Cuba is sometimes developing a "system within the system" in the partner countries. This fear is understandable, as the well-organized Cuban interventions often target regions with very weak and disorganized local structures. This contradiction between the pressing necessity to ensure high-quality health services for the population in need and the existing weaknesses of the local system is inevitable and difficult to manage, because adequate coordination with the national level does not always ensure sufficient integration at the local level. Cuba is aware of these difficulties and develops strategies to overcome them, with respect and support for the national health policies of the partner countries. This includes trying to strengthen the local health system mainly through the training of health personnel. In that light, the importance of the scholarships in Cuba and the decentralized training of medical doctors and other health personnel becomes apparent.

Cuba's interventions are living proof of the viability of its socialist societal project, in which—even under difficult economic circumstances—health for all has become a reality. Its international collaboration, although humanitarian in nature, cannot and should not be understood solely in humanitarian or even public health terms. The extreme poverty of billions of people in today's world, and the even more extreme wealth of a few, is denounced by President Fidel Castro in many of his notable speeches. Sending doctors all over the world, Cuba not only addresses immediate humanitarian needs but also makes a statement that alternative development strategies are at hand and are even quite successful.

At the same time, international collaboration is contributing to Cuba's diplomatic strategy to break U.S. attempts to isolate it. In the case of its collaboration with Venezuela, the important humanitarian dimension of the cooperation is intimately linked with political and economic objectives and with the will to develop an alternative form of Latin American political and economic integration, in opposition to the U.S.-imposed globalization. Here, the solidarity is clearly reciprocal. The economic agreements with Venezuela help the Cuban revolution to improve its economic capabilities, notwithstanding the tight U.S. blockade and the changes in the oil market. Fidel Castro acknowledged this, saying: "Oil is very important for us. Our work in Venezuela is not purely philanthropic. We are philanthropic with what we have. That we have proven already" (28). The bilateral cooperation program covers health, education, culture, sports, and

important economic sectors including oil, industrial investments, and trade. This comprehensive collaboration is seen by both countries as essential for the development of their revolutionary programs.

Recently, the Cuban-Venezuelan collaboration became a cornerstone of coalition-building in Latin America against U.S. domination of the region. Cuba, Venezuela and, since 2006, Bolivia are advocating a "Bolivarian" alternative for Latin America, as an option other than the U.S.-imposed Free Trade Agreement of the Americas.

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