

# Unraveling the “Cuban miracle”: A conversation with Dr. Enrique Beldarrain Chaple

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Cuba is an island state of barely 11 million inhabitants, with a per capita GDP of \$9900 (USD), ranked 110 among 226 countries (based on GDP). And yet, Cuba’s health achievements compare to, if not outperform, far wealthier countries. For example, Cuba’s infant mortality rate of 4.7 per 1,000 live births compares favorably with the rate of 6.17 per 1,000 in the United States.<sup>1</sup> Racial and ethnic health disparities are all but nonexistent,<sup>2</sup> whereas in the United States racial and ethnic minorities bear a disproportionate burden of disease.<sup>3</sup> Further, while the US health care system has left at least 51 million persons with no health coverage<sup>4</sup> and an increasing number underinsured, Cuba offers access to all medically necessary services to 100% of persons living or working in the country, absolutely free of charge at the point of use.<sup>5</sup>

What is the secret of what has often been called the “Cuban paradox”<sup>5</sup> or even the “Cuban miracle”?<sup>6,7</sup> In an attempt to understand this “miracle,” I’ve been traveling to Cuba over the last two years, studying the country’s fascinating history, researching Cuban healthcare, and teaching about it in a graduate seminar on international healthcare systems at the University of California in San Francisco. Our country has just implemented a bitterly fought healthcare reform law which will leave over 31 million individuals uninsured<sup>8</sup> and countless more at the mercy of bare-bones “narrow network” health insurance policies, with high deductibles and co-pays. Nonetheless we still lead the world in

healthcare expenditures per capita.<sup>9</sup> I have concluded that it is important to reflect upon the successes of countries like Cuba, which have significantly fewer resources than the United States. We have something to learn from Cuba’s strategies and vision of health justice. With this objective I interviewed Dr. Enrique Beldarrain Chaple, a physician and professor of Epidemiology and Anthropology at the Medical University of Havana, Cuba.

**Social Medicine (SM):** Dr. Beldarrain Chaple, thank you for taking the time to talk to *Social Medicine*. Most readers of our journal are medical students, residents or fellows, or physicians in the first years of their medical practice. Thus, we would like to begin by asking you what, in your view, is so special about Cuba’s approach to health that has led scholars to call it a “miracle.” As you lay out the basic structure of Cuban healthcare, please give us some examples of what Cubans need to do to see a doctor, how much they have to pay, how they choose their physicians, and how they negotiate the need to take care of their health with other competing needs and responsibilities, such as work or child care.

**Dr. Enrique Beldarrain Chaple (EBC):** Let me begin by thanking you, Claudia, for approaching me to do this interview. Also, let me say that I do not agree that the results achieved by the Cuban health system are a miracle. They are the result of a clear strategy and a set of actions implemented for more than fifty years, when after the triumph of the Revolution it was decided that health services needed improvement. This decision led to a paradigm shift where a system that basically had taken care of the sick was transformed into one whose goal was to prevent disease and promote health, thus privileging

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the protection of a healthy community, investment in health literacy, and the promotion of healthy lifestyles.

The process that international bodies such as the World Health Organization and the Pan American Health Organization call health reform (*reforma sanitaria*) began in Cuba in the early 1960s. At the end of that decade the first phase of this reform was completed, and in 1970, a unified National Health System emerged that was publicly funded and operated, free at the point of use, available to everybody living in Cuba, and built upon primary care. This reform continued over subsequent decades, as strategies were improved and adapted to changing conditions, including conditions pertaining to the economy, the state of technology, and the development of human capital.

The development of a national health system also required a revolution in the training of human resources, which was done by extending medical training from five to six years, and by including an internship in general medicine. As the Revolutionary government removed barriers to higher education in medicine (and elsewhere), the number of students increased dramatically, greatly expanding the pool of health professionals. In 1963, the Rural Social Medical Service was created, and young medical graduates were sent to practice in rural areas, of difficult access, first for six months, then for one year, then for two, and, by the 1980s, for three years. The Rural Social Medicine Service made it possible for the system to reach the most remote places. At the same time, the Revolutionary government also began the construction of rural hospitals, and, in 1965, of polyclinics, which started as primary health care units and evolved over the years. This system of polyclinics is still in place and is available in all municipalities. They serve geographical areas whose boundaries take into account population and other characteristics. In the 1980s the model of the family doctor and nurse team was created, which is the way the Cuban health system brings primary care to the community. Each team has an office where a doctor and a nurse serve the local population and where specialists come periodically to offer expert care. This model is available throughout the country, so health care is always

available in every community, no matter how far from major urban centers a community may be.

As I mentioned earlier, health services are fully free at the point of use. If you require medical attention, you visit your local doctor, who will assist you and request whatever tests are needed from the nearest polyclinic or, if necessary, from a specialized hospital. If your doctor feels you should be evaluated by a specialist, you are referred to those working at the local polyclinic, the hospital serving a given area, or a national hospital or specialized research institute, which constitutes tertiary care. In sum, everybody has access to three levels of care.

Concerning your last point, how to negotiate work or family responsibilities, such as child care, with health needs, whoever needs medical care will be given a medical certificate, which states the type of care needed, the time required to receive that care, and whatever limitation upon the worker's abilities the medical condition might cause. So workers can take time off to get treatment and recover without jeopardizing their jobs, leisure time, or income. As to child care, it is provided free of charge to all families pretty much since birth, so the need to care for your child never interferes with taking care of your own medical needs.

**SM:** Could you please describe what sectors of society other than the health care system are involved in promoting public health?

**EBC:** Health promotion is a complex activity because it involves not only health professionals but also communication experts, whose role is to translate the scientific message into a lay one that can be disseminated via radio, TV, and other media. Then there are community meetings (*audiencias sanitarias*), where health professionals gather information and discuss specific topics with people in the community, address their concerns, elaborate collaborative strategies, and so forth. This is a critical activity, because the community interacts with experts in troubleshooting and finding solutions to their own health concerns.

**SM:** Please tell us about some of Cuba's major achievements in public health.

**EBC:** There have really been many public health achievements in the past 50 years. The one I think is critical is that health services have been absolutely free at the point of use since 1959, the year of the revolution. This allowed the population to access needed services without any barriers whatsoever, which in turn allowed the different public health programs that had been developed to really impact population health. An equally important achievement has been that not just financial but also geographical barriers to care were eliminated.

Concerning more technical achievements, let me mention the first epidemiological campaigns conducted in the early 1960s: the diphtheria campaign, that reached every child in Cuba, and the polio vaccination campaign, launched in 1962, which managed to eliminate that disease in the first year through the immunization of all Cuban children. Vaccinations continue yearly to assure continued high rates of protection. There was also the campaign for malaria elimination that began in 1962; by 1967 the last indigenous case of malaria was reported. These public health campaigns were conducted very early in the revolutionary period, and their impact was immediate. Then, there was the development of surveillance systems such as the program for control of TB, begun in 1963, which reduced the cases of TB to numbers comparable to those of wealthy nations.

Finally, the program to control infant mortality was able to reduce, over the years, the rates of infant mortality to extraordinarily low numbers; by 2010 we achieved a rate of 4.1 deaths per 1000 children, matching if not surpassing that of many wealthy nations. These are Cuba's fundamental public health achievements. There are many more, and it would take us a long time to describe them all.

**SM:** I know you have researched and written about public health and healthcare in Cuba in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. Please tell us how the current Cuban healthcare and public health systems came into being. How did Cubans get their healthcare prior to the revolution?

**EBC:** Our current public health system dates from 1970. That was the year when the last private clinics

run by so-called relief societies were closed down and only public medical establishments, run by the Ministry of Health, remained. Before this time the population had access to health services in several ways: If we go back to the 17<sup>th</sup> through the early 19<sup>th</sup> century, there was private medical attention for privileged sectors of society. In those times doctors made house calls to the homes of those patients who could pay for their services. The poor went to charity hospitals, usually run by the Catholic Church. There, they were assisted by monks with only basic medical training, so the quality of the services they received left a lot to be desired. In 1825 the 'Doctor of the Week' model was established by the local Spanish authorities. It consisted of a doctor who, by law, had to provide services to the poor one week per year. Of note, the listings produced by the Royal Tribunal indicate that all registered physicians in Havana had this obligation.

Around 1830 the first private clinic opened. This was more like a nursing or rest home. It was founded by Dr. Belot in the Havana neighborhood of Regla. This was the first of many private clinics, and it provided services to the wealthy who could afford to pay for them. However, primary care for the majority of the population, which was very poor, remained a charitable enterprise. Around that same time relief societies of Spanish origin established so-called "Health Homes" (*Quintas de Salud*), which met an important need and offered high-quality services, both primary and specialty care, to their members. But services were provided only to members of these societies, who paid a monthly fee, which was fairly reasonable, and received whatever health services they needed, including hospital care.

This system of private clinics grew substantially throughout the first half of 20<sup>th</sup> century. In the meantime, basic healthcare for the poor continued to be provided exclusively by charitable establishments (*Casas de Socorro* and *Dispensarios*). Yet, as earlier, services were few, quality was substandard, and the healthcare needs of the poor remained unmet. During this period, larger public hospitals emerged that provided free services; yet they were few and limited to major cities. Moreover, the hospital budget of the Ministry of Health was never enough to maintain them in decent shape. The bottom line was

that private medical establishments provided quality medical services, but only to those who could afford them. This is the historical overview, briefly summarized, of public health and healthcare in Cuba before 1959.

**SM:** Please describe to us how physicians are trained, and what, in your view, are the key features of medical training in Cuba.

**EBC:** Medical education in Cuba is grounded both on the theoretical study of basic and medical sciences and on practical training in primary care in the community. Medical students work with teams of doctors and nurses and get to know the problems of a given community, the most prevalent diseases, and the vulnerabilities of that community. They are also trained in identifying community health and other relevant social problems, as well as in delivering health education to that community. If say, an epidemic occurs, students may temporarily interrupt formal classes and delve into “real-world” work in the community. In sum, especially since the implementation of the physician-nurse team model, students work in health promotion and primary care early on in their medical training. Needless to say, medical education is completely free and slots at the university are very competitive. The profession of medicine is very respected, and the curriculum trains students in a strong ethic of solidarity and service.

**SM:** Some health professionals and medical students in the United States, but not too many, have heard about Cuba’s policy of assisting other countries, especially poor countries, by sending physicians or even by providing free medical education to young people from other countries – what has been called Cuba’s “medical internationalism.”<sup>10</sup> Could you please tell us about it?

**EBC:** Let me point out that medical internationalism became Cuban state policy early on in the Revolution. Back in 1963, we sent a medical team to assist earthquake victims in Chile. Later that year, another group of doctors and nurses traveled to Algeria to support the revolutionary government of

workers and farmers that had formed after the defeat of the French in 1962. Since then, Cuban health professionals have had a continuous international presence, which has expanded to include a large number of countries on three continents. Cuban medical students learn early on in their careers that they are expected to contribute their skills to peoples in need around the world, wherever they might be. This international solidarity work is something that many young doctors look forward to.

**SM:** In my visits to your country, I was particularly struck by the difficulties most medical establishments experienced in getting supplies. In my quest to understand the causes of these hardships, I have read about what some call a “US economic embargo” and others call an “economic blockade,” opposed, and deemed illegal, by most countries, given its severe implications for the health and well-being of the Cuban people.<sup>11</sup> Could you please expand on this embargo/blockade?

**EBC:** Sure. The main problem imposed by the blockade has been with certain lines of pharmaceuticals, especially cytostatics that are American-made and that the blockade prevents us from buying. Also, we have problems with spare parts for some medical equipment, and even certain computer equipment that is critical to run large organizations, like hospitals. We can purchase none of these from the United States, so we have to purchase them from other countries, and greater distance virtually always translates into higher prices. Lately, we’ve had the added problem that even equipment produced outside of the United States but which includes parts made in the US, is also out of our reach because blockade-related regulations forbid these companies from selling to Cuba. On the other hand, these constraints forced us to be creative, and as a result of them we’ve developed a very thriving biotechnology industry. In 2006, we exported 3 medicines to 40 countries and in 2007, the exports grew to 180 medicines, which generated close to 400 million dollars in hard currency.

**SM:** It is my impression that people, particularly in the United States, have many misperceptions with

respect to Cuba and Cuban healthcare, encouraged, no doubt, by the ban on Americans traveling to Cuba, which has prevented most of us from talking to Cubans and seeing the country for ourselves. Is my impression correct? Could you elaborate on this?

**EBC:** Well, I must agree with you that there is a lot of negative propaganda against Cuba in your country. This propaganda includes – though it is not limited to – remaining silent about Cuba’s achievements in health and education. So when Americans come to our country and see for themselves our health system, with free access, equity, and a remarkable capacity to achieve a lot with very little, they are surprised to find out how distorted their views were. Indeed, many are surprised at distortions they have concerning many other features of our country and society, and it would take us at least another interview to discuss them. Undoubtedly a much greater effort is needed to exchange information between the two countries. In my opinion, my country has been willing to engage in that exchange with the American people for a long time, yet to little avail. All US administrations, to varying degrees, seem eager to prevent this from happening.

**SM:** You may be aware that the United States leads the world healthcare costs,<sup>12</sup> and among wealthy nations, it leads the world in the number of uninsured and underinsured, in deaths due to lack of health insurance,<sup>13</sup> and in medical bankruptcies.<sup>14</sup> You may also be aware that in 2010, President Obama signed legislation to address this state of affairs, yet in the best-case scenario, there will still remain close to 30 million Americans with no access to health insurance, therefore, much-needed healthcare services, when the law is fully implemented.<sup>15</sup> Why do you think this is so and what would you recommend the American people to do?

**EBC:** Well, I must confess I don’t know enough about the context of US health care to provide specific insights or recommendations. But I think Americans need legislation that can provide universal coverage that is free or close to free at the point of use, such as that which regulates health care in Canada or in the UK – which are clearly not Com-

munist countries – so that’s not something that Americans need to be worried about. Such a system would be very good not just for the poor but also for the middle-income sectors of US society, which I understand are currently suffering substantially under the weight of a very dysfunctional, profit-driven health care system.

**SM:** Dr. Beldarrain Chaple, is there anything else you would like to share with the readers of *Social Medicine* to help us better understand the Cuban people and their vision of health justice?

**EBC:** I think we have addressed all the key points and fundamental premises in Cuban health care in a way that is understandable to readers and people in your country who may not be familiar with them. It has been a pleasure and a privilege to share with you our experience, achievements, and challenges, and I am very grateful for your invitation to do so.

**SM:** We are grateful too, Dr. Beldarrain Chaple, and thank you very much once again for sharing with us your knowledge and insights.

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