# ECONOMIC CRISIS AND ACCESS TO CARE: CUBA'S HEALTH CARE SYSTEM SINCE THE COLLAPSE OF THE SOVIET UNION

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This article explores the effects on access to health care in Cuba of the severe economic crisis that followed the collapse of the Soviet Union and the monetary and market reforms adopted to confront it. Economic crises undermine health and well-being. Widespread scarcities and self-seeking attitudes fostered by monetary and market relations could result in differential access to health services and resources, but the authors found no evidence of such differential access in Cuba. While Cubans generally complain about many shortages, including shortages of health services and resources before the economic recovery began in 1995, no interviewees reported systemic shortages or unequal access to health care services or resources; interviewees were particularly happy with their primary care services. These findings are consistent with official health care statistics, which show that, while secondary and tertiary care suffered in the early years of the crisis because of interruptions in access to medical technologies, primary care services expanded unabated, resulting in improved health outcomes. The combined effects of the well-functioning universal and equitable health care system in place before the crisis, the government's steadfast support for the system, and the network of social solidarity based on grassroots organizations mitigated the corrosive effects of monetary and market relations in the context of severe scarcities and an intensified U.S. embargo against the Cuban people.

This article reports on interviews conducted in Havana, Cuba, in April and May 2003, to investigate the impact of the severe economic crisis on access to health care following the collapse of the Soviet bloc regimes. First, we situate the study against the backdrop of the severity and suddenness of the economic crisis in Cuba and its impact on the health and well-being of Cubans. We then discuss our data sources and methods; present our analysis and findings, using official

International Journal of Health Services, Volume 35, Number 4, Pages 797–816, 2005 © 2005, Baywood Publishing Co., Inc.

statistics and other primary and secondary sources to evaluate self-reported assessments of access to health care in Cuba; and discuss the institutional, cultural, social, and political factors that influence access to health care in Cuba and factors undermining access since the collapse of the Soviet Union. We conclude with a discussion of the limitations of the study and suggestions for further research.

#### INTRODUCTION

The Economic Crisis

With the collapse of the Soviet Union and Eastern European regimes in the late 1980s and early 1990s, the Cuban economy experienced a severe external shock. As a member of the Council for Mutual Economic Assistance (CMEA), Cuba depended on relations with the Soviet bloc countries for 85 percent of its imports and 75 percent of its trade, finance, and credit on a preferential basis. These relations were rapidly undone, sending the Cuban economy into a deep crisis. Between 1990 and 1993, imports declined to one-fourth of their 1989 level, with imported oil, the chief source of energy, declining from 13 million tons in 1989 to 6 million tons in 1993 (1, 2). Productive industrial capacity, which stood at 85 percent in 1989, was reduced to as low as 15 percent in 1993. Thus gross domestic product (GDP), which grew an average of 3.1 percent annually during 1965-1989, declined 2.9 percent in 1990, 10.7 percent in 1991, 11.6 percent in 1992, and 14.9 percent in 1993, shrinking the economy to 65.2 percent of its 1989 size. A government decision to maintain employment and nominal salaries resulted in mushrooming of the state deficit, which grew from 1.4 billion pesos in 1989 to 4.2 billion in 1993 (3, 4).

At the same time, the U.S. government intensified its campaign to isolate and choke off trade with the country. In 1992, the Torricelli Bill (Cuban Democracy Act) was signed into law that barred U.S. subsidies in third countries from trading with Cuba, including food and medicine. It also prohibited ships that visited Cuban ports from visiting U.S. ports for six months. In 1996, the Helms-Burton (Cuban Liberty and Democratic Solidarity) Act was passed that, among other things, threatened companies and individuals in other countries against trading with Cuba.<sup>1</sup>

The impact on the daily lives of Cubans was immediate and grave. About half of the calories and protein for Cuban consumption was imported in the 1980s. Thus, per capita calorie intake was reduced 40 percent, from 3,130 daily calories in 1988–1990 to 1,863 in 1993. Per capita protein intake was similarly reduced 42 percent, from 79.7 to 46 grams (5). Because of Cuba's nutritional policies to

<sup>&</sup>lt;sup>1</sup> After protest by Canada and the European Union, this aspect of the Helms-Burton Act was suspended by presidential decree. However, the mere existence of such laws on the book increases the transaction cost of trade with Cuba and chokes off its development.

protect children, pregnant women, and the elderly, the burden of the calorie, protein, and micronutrient deficit fell predominately on adult men. Still, the proportion of newborns weighing under 2,500 grams rose from 7.3 percent in 1989 to 9 percent in 1993, reversing ten years of gradual progress (6). From 1992 to 1994, more than 51,000 Cubans were affected by an epidemic of optic neuropathy associated with low levels of vitamin  $B_1$  and toxic behaviors (7).

# Monetary and Market Reforms

As a part of its overall response to the crisis, the Cuban government initiated a series of monetary and market reforms designed to provide material incentives for economic activities. These included an expansion of international tourism and joint ventures, which were marginal in the Cuban economy before 1989. In 1993, possession of the U.S. dollar became legal, which made it possible, among other things, for Cubans to receive money from relatives or friends living abroad. Self-employment was legalized in the same year, including activities such as operating family-run restaurants. Most state farms were converted into agricultural cooperatives called Basic Units of Cooperative Production, where workers collectively own the product and the proceeds of its sale to the government and at agricultural markets. Agricultural markets and other markets (e.g., handicrafts) were legalized in 1994. A bank reform measure in 1994 made it easier for Cubans to accumulate wealth, and free trade zones were agreed to, in principle, in 1996.

While these reforms contributed to the subsequent economic recovery, they have also resulted in an increase in economic inequality, even though salary scales in Cuba still remain fairly egalitarian. The fact that a section of the population has higher incomes and/or primary access to dollars has created a segmented consumer economy with higher living standards for these economic groups.

### Research Goals

Even as, in the face of the crisis, the Cuban government promised to support universal, equitable, quality health care free of charge, lingering questions remained about access to health care services and resources given the economic and financial hardship, the rapidly expanding monetary and market relations, and differential access to hard currency. A case in point is the development of markets for the provision of health services for tourists and medical tourists. As a part of the measures adopted to combat the crisis, Cuba began marketing health care services for hard currency to international visitors (8). The agency SERVIMED was given the task of providing health services to international tourists at selected clinics for a fee, while the agency Cubanacan was charged with the provision and marketing of medical tourism in specialized clinics.

This pilot study focuses on the following set of questions:

- Was access to health care services and resources reduced after the collapse of economic relations with the former Soviet bloc countries? If so, how? And which services and resources were constrained?
- Did access to health care services and resources become subject to monetary and market relations? If so, how? And which services and resources? Have black markets developed?
- Have primary, secondary, and tertiary health care been affected by the crisis? If so, how are they affected?
- What other problems of access to health care services and resources have been or continue to be detrimental to the health care system?

#### SOURCES AND METHODS

In April and May of 2003, we conducted field research in Havana to collect data for this pilot study. Additional data from published sources were collected later. In all, data for the study come from three sources: (a) interviews with suppliers of health services, such as knowledgeable staff of the Ministry of Public Health (MINSAP) and health care providers; (b) interviews with users of the health care system; and (c) official health and other statistics from MINSAP, the Office of National Statistics, or other official sources that provide background for the qualitative analysis of these interviews.

We began with an interview with Dr. Jóse J. Portilla of the Department of International Relations of MINSAP. Questions focused on the economic crisis and its impact on the geographic, sectoral, and temporal distribution of health services, health care personnel, and health outcomes; evolution of the health care budget over time; medications and pharmaceuticals; the health status of vulnerable populations such as the elderly, pregnant women, and children; and epidemics such as AIDS and dengue fever. We asked direct questions about potential black markets and inequality in access to care, given the expansion of money and market relations and widespread scarcities.

We also interviewed a primary care physician in a large polyclinic in Vedado, a relatively well-maintained neighborhood. We asked her about potential problems in providing health care to all; any inequality in delivery of health care, shortages of and potential for a black market for medications, supplies, equipment, and services; and any suggestions for further improvement of the health care system.

We conducted two group interviews with users of the health care system. One group was composed of residents of La Timba. We selected this neighborhood because it is a historically troubled section of Havana. Nayeri, who had visited this neighborhood earlier, obtained the agreement of the community leaders to recruit a sample of residents for this study. To do so, we attended a workshop on sexuality at the neighborhood community center and asked the participants if they

would stay behind for a group interview about access to health care. Almost everyone, a group of 20 persons, stayed behind. The group included people of all ages, from teenagers to senior citizens. The majority was female. The interview session lasted about one hour.

We selected our second group from Vedado, a relatively well-off district of Havana. We interviewed participants in a Circulo de Abuelos (grandparents circle). Grandparents circles are developed through the expansion of the Family Physician Program, and the physician we interviewed helped arrange this group interview for us. We arrived at the end of the group's morning exercise and asked if they wished to participate in the interview; the entire group, composed of 15 elderly persons, agreed. All except one were women. The interview lasted about 50 minutes.

While these two groups do not represent random samples, we have no reason to believe that they were different in important ways from others in their community or social group. In La Timba, the group seemed to represent a cross-section of the neighborhood (except for an absence of young men). In Vedado, the group seemed no different that any other set of elderly from the neighborhood (except for the presence of only one male participant).

Questions for the two group interviews included the following. Does everyone in your household have a family doctor? How far is your family doctor's office from you? Is there a polyclinic near where you live? Do you need an appointment to see your family doctor? How long do you wait to see your doctor? Are you happy with your family doctor? Have you recently had a hospital visit? Were you satisfied with your visit? As it turned out, there were many complaints about access to care in the early 1990s in both groups. We asked questions about these problems as well as direct questions on any inequality in access to health care services and resources, especially medications, and whether participants have encountered black markets for services or resources. Because of difference in the two groups, we also asked questions specific to each, such as a question on maternal health (the La Timba group) and geriatrics (the Circulo de Abuelos group in Vedado).

We also conducted several brief off-the-tape-recorder interviews with other providers and users of health care and other informed persons. These were conducted either to prepare for formal interviews or to learn about aspects of the problem of access that required specific knowledge. A particularly informative interview was with a nuclear medicine physician who worked in Cuba's medical regulatory office. He was knowledgeable about the impact of the economic crisis on access to medical equipment, supplies, and medicine. We took notes of all off-the-tape interviews, either during the interview session or immediately afterward. All the main interviews were taped. When necessary, the interviews were conducted with the help of a Cuban translator. All tapes were transcribed, reviewed, and analyzed. In addition, we obtained relevant official Cuban health statistics and other data for the post-1990 period to provide context for the information offered by the interviewees. These data were used to assist with the qualitative analysis of interviews. In particular, we wanted to learn whether views expressed by individual and group interviewees were consistent with official data on health services (infrastructure, personnel, and services provided) and with outcome measures (morbidity and mortality). We also wanted to know whether and how Cuba's stated goal of preserving the health care system was backed up with budgetary support.

It is important to note that this research was conducted as a pilot study to prepare for a large-scale survey of access to care in Cuba since the collapse of the Soviet Union. As the reader will note, the study's findings provide important and useful information about access to care in two neighborhoods in Havana. While these findings are corroborated by official data and other sources, suggesting their generalizability, the study's methodology and scope would disallow such generalization.

#### **FINDINGS**

We found no evidence of monetary- or market-based access to health care for Cubans. Some Cubans receive medications and medical supplies from relatives or friends who live abroad. However, we found no evidence that a black market has developed in these supplies. Furthermore, we found no evidence of inequality in access to health services and resources based on monetary and market relations or due to recent scarcities.

Those we interviewed consistently complained about scarcities of health care resources and services in the early 1990s, particularly those associated with secondary and tertiary care, and of imported equipment, supplies, and medicine. However, these scarcities have gradually diminished because of the economic recovery and consistent, supportive public policy. Finally, we found an impressive enhancement of access to primary care and public health since 1990, resulting in improvement in important health outcomes.

# Improved Access to Primary Care

No one we interviewed complained about present-day problems in access to health care.<sup>2</sup> No one reported inequality in access. On these matters, the spokesperson for MINSAP, the polyclinic physician, the interview participants in the two groups of users, and several others to whom we talked about access to care spoke with the same voice.

<sup>&</sup>lt;sup>2</sup> An exception was a statement by the polyclinic physician that, because United the States dominates in the patenting, production, and sale of pharmaceuticals, the embargo complicates Cuba's effort to import the medications it needs. We discuss this later in the article.

It seems from our interviews with the user groups and the polyclinic physician that people are generally happy with their family physicians and have easy access to them and their neighborhood polyclinic. Health services and health outcomes statistics help explain this general sense of satisfaction expressed by providers and users. About 45 percent of Cuba's doctors are family physicians (9); although, as the MINSAP spokesperson told us, because of the housing shortage only half of them are able to live in the community they serve. Ideally, the family physician would live in a three-story building in the community, the lower floor serving as the medical office and the second and third floors as the residences for the doctor and the nurse. The family physician is trained in three areas: pediatrics, gynecology, and internal medicine during a three-year rotation. The responsibilities of the family physician, who provides care to a median of 140 families, include vaccination programs and health promotion (tobacco, alcohol, diet, exercise).

Every 10 to 15 family physicians form a Basic Work Group, with responsibility for pediatrics, gynecology, psychology, and social work, to provide more specialized care to the community. The health area (served by a polyclinic) includes all medical specialties and certain equipment and facilities—such as ambulances—to provide care to a large portion of the population. Thus, a health area in Hayana might cover 50,000 persons, but in rural areas it can serve as few as 1,000. Recently, the rebuilding and upgrading of polyclinic infrastructure has occurred. As a result, polyclinics now include medical specialties, modern medical equipment, physical rehabilitation rooms, and laboratories, among other facilities. They also include a conference room, a library, and a computer room with access to Infomed, Cuba's digital medical library. Secondary care in Cuba consists of hospitals with as few as 40 beds in rural areas and as many as 350 in the urban centers. Specialized hospitals form the tertiary level of care.

Several users reminded us that their family physicians live and work in the neighborhood. Some elderly persons reported that family physicians make house calls as needed. Others said that there is no need for an appointment to see their family physician or to visit the attending physician at the polyclinic. We witnessed this at the Vedado polyclinic, which we visited in the late afternoon to interview the attending physician, at a time when many people return home from work or school. Patients who arrived sat on a small bench with four seats. There were never more than four persons waiting, and no one had to wait for more than 15 minutes. A physician's assistant also attended to some patients.

Cuba's determination and capacity to improve primary care through a consistent increase in the number of health and medical providers and facilities is evident from the following data. Between 1990 and 2003, the number of physicians increased by 76 percent, dentists by 46 percent, nurses and nurses' aids by 16 percent, and technicians and assistants by 31 percent (Table 1). Most importantly, the Family Physician Program, which covered 46.9 percent of the population in 1990, was extended to cover 99.2 percent of the population

Table 1

Supply of health care providers, Cuba, 1990 and 2003

			Increase	
	1990	2003	No.	Percent
Physicians	38,690	68,017	29,327	76%
(family physicians) <sup>a</sup>	(11,915)	(32,291)	(20,376)	171
Dentists	6,959	10,167	3,208	46
Nurses and nurses' aids	69,060	80,354	11,294	16
Technicians and assistants	51,838	67,942	16,104	31
Total	166,547	226,480	59,933	36

Sources: MINSAP (Havana), Informe anual 1990, 1991; Anuario estadístico de salud 2003, 2004. Note: The rate of growth of the population was 6 percent in 1990–2003.

in 2003. In a decade characterized by severe economic crisis, the total number of health care providers in the categories noted above increased by 36 percent.

These statistics remain impressive when adjusted for population growth. During 1990–2001, Cuba's population increased by just 5.6 percent, from 10.7 to 11.3 million (10). Thus, the ratio of persons to health care professional declined significantly in every category cited in Table 1 in 1990–2003: for physicians, from 277 to 166; for dentists, from 1,538 to 1,111; for nurses and nurses' aids, from 155 to 141; and for technicians and assistants, from 206 to 166.<sup>3</sup>

Concurrently, efforts were made to increase health-related and medical facilities. Between 1989 and 2003, the number of maternity homes increased by 86.5 percent, elderly day care centers by 107.8 percent, homes for the disabled by 47.8 percent, and research institutes by 18.2 percent (Table 2).

There have been encouraging improvements in child and maternal health outcomes that are important indicators for the success of public health and primary care efforts (Table 3). Infant mortality, perinatal mortality, mortality of children ages 1 to 4 and 5 to 15, and maternal mortality all showed improvements between 1990 and 2002. The fact that maternal mortality increased between 1990 and 1995, the years when Cuba suffered most from scarcities, indicates the need to examine the dynamics of the maternal mortality time series to understand patterns of this type of mortality.

<sup>&</sup>lt;sup>a</sup>Figures in parentheses are a portion of the amounts above.

<sup>&</sup>lt;sup>3</sup> Ratios reported for 2003 represent a conservative approximation, because for the numerator (population) we used the 2003 data and for the denominator (health care professionals) the 2001 data. If we assume that the rates of growth of supply of health care professionals in each category continued to outpace the rate of population growth for 2001–2003, these ratios understate the progress made by 2003.

Table 2 Supply of health care facilities, Cuba, 1989 and 2003

			Increase	
	1989	2003	No.	Percent
Hospitals	263	267	4	1.5%
Polyclinics	420	444	24	5.7
Dental care clinics	163	165	2	1.2
Research institutes	11	13	2	18.2
Maternity homes	148	276	128	86.5
Blood donor units	23	27	4	17.4
Elderly day care centers	153	318	165	107.8
Homes for the disabled	23	34	11	47.8

Sources: MINSAP (Havana), Informe anual 1989, 1990; Anuario estadístico de salud 2003, 2004.

Table 3 Maternal and child health statistics, Cuba, 1990-2002

	1990	1995	2002
Infant mortality per 1,000 live births	10.7	9.4	6.5
Perinatal mortality per 1,000 live births and fetal			
deaths, 500 g or more	19.4	18.7	16.6
1- to 4-year-olds mortality per 1,000 population	0.7	0.7	0.3
5- to 14-year-olds mortality per 1,000 population	0.4	0.4	0.2
Direct maternal mortality per 100,000 live births	31.6	32.6	31.1

Sources: MINSAP (Havana), Anuario estadístico de salud 2002, 2003; Salud en el tiempo, 1998.

There is no doubt that health and well-being improved over the course of the 1990s as Cuba began to climb out of the crisis of 1990-1994. For instance, the nutritional situation improved as Cuba registered a relatively high calorie intake (2,916 calories per capita) in 2001, similar to that of 1989 (11). Life expectancy at birth was 76.2 years in 1998–2000 (74.2 for men, 78.2 for women), 21.1 years at age 60, and 7.8 years at age 80 (12). The leading causes of death in Cuba remain similar to those in the advanced capitalist economies. Heart disease, malignant neoplasm, cerebrovascular disease, influenza and pneumonia, and unintentional injuries continue to be the five leading causes of death, constituting 73 percent of all deaths in 2003 (13). Mortality due to infectious and parasitic diseases represents only 1 percent of all deaths.

Table 4 shows the most recent relevant health indicators for the Cuban population. As documented by de la Torre and colleagues (11), Cuba has already achieved important targets set by the World Health Organization's Millennium Development Goals. For example, the goal of reducing the under-five mortality rate by two-thirds between 1990 and 2015 was achieved in Cuba by 2000, and maternal mortality rate was the ninth lowest among 36 countries in the Americas in 2003. The United Nations Development Program places Cuba's achievement in combating HIV/AIDS, malaria, and other infectious diseases in its best category (see Table 4 for data). At the same time, the last autochthonous case of malaria in Cuba occurred almost four decades ago. The incidence rate of tuberculosis is one of the lowest in the Americas, equal to that of Germany and Switzerland, and lower than that of France, Great Britain, Austria, and Australia.

# Shortages in Secondary and Tertiary Care

In contrast to the upbeat mood about current access, everyone we interviewed complained about scarcities in the early years of the crisis. As summarized above, the health and well-being of the Cuban population were undermined in those years. Nayeri, who visited Cuba in June 1994 (which proved to be the lowest point of the economic decline), reported some of these shortages that undermined the health care system: a severe shortage of fuel for transportation (including the ambulance service), long and frequent disruptions in running water and electricity, and a lack of hygienic supplies (soap, detergents, insecticides). Due to the tightening of the U.S. economic embargo, Cuba has had an even more difficult time meeting the challenges posed to the health care system. For instance,

Table 4

Indicators of population health, Cuba, various years

Infant mortality rate (per 1,000 live births), 2004	5.8
Under-5 mortality rate (per 1,000 live births), 2003	8.0
Direct maternal mortality rate (per 100,000 live births), 2003	35.1
Mortality due to infectious and parasitic diseases (% of total number	
of deaths), 2003	1.0%
Incidence of tuberculosis (per 100,000 population), 2003	7.2
Incidence of HIV/AIDS (per 1 million population), 2003	20.9
Incidence of tetanus (per 100,000 population), 2003	0.0
Life expectancy at birth (LEB), 1998–2000	76.2 yr
Healthy life expectancy at birth (HALE), 2002	68.3 yr

Sources: Periódico Granma, January 3, 2005, p. 5; MINSAP, Anuario estadístico de salud 2003, Havana, 2004; WHO, The World Health Report 2003, Geneva, 2003.

purchase of medical textbooks from a Spanish publisher was halted because the U.S. company McGraw Hill had just bought the publishing firm and, under the embargo laws, could not honor the contract to continue with the sale of these books to Cuba (14).

There were even more immediate and serious problems challenging secondary and tertiary care, related to medical equipment and supplies purchased from abroad. The physician who works at Cuba's medical regulatory office explained it to us as follows. Before 1989, Cuba purchased its medical equipment at preferential prices from the CMEA countries. The collapse of the CMEA resulted in a crisis of procurement of new medical equipment and supplies and of the maintenance of old ones, leading to a deterioration of medical services. As Dr. Portillo, the MINSAP spokesperson and a surgeon, candidly summed it up: "There was a lowering of quality of care in the 1990s, when X-ray machines and laboratory diagnostic equipments were not always available."

Cuba turned to France and Canada for the purchase of new medical equipment and supplies with hard currency. To reduce its dependence, Cuba diversified the sources of its medical equipment and supplies. Today, according to the physician who works in the medical regulatory office, 90 percent of medical equipment is imported mostly from suppliers in Germany, Brazil, and the Netherlands. Cuba also managed to gradually overcome the shortages of medicines through production of generic drugs such as antibiotics, vaccines, and hormones, and through importation from various sources in the world pharmaceutical market.

Still, secondary care and tertiary care were disrupted. As Figure 1 shows, the number of surgeries performed in Cuba declined during the crisis years of 1990-1994, bottomed out in 1995, and then climbed back up. It also shows that fewer minor surgeries than major surgeries were performed during the crisis period, but this pattern was reversed when the economy began to recover. The decline in the number of major surgeries by more than 115,000 (18 percent) between 1990 and 1995 is an indication of the degree of hardship and sacrifice imposed on Cubans by the crisis. It is remarkable that the Cuban health care system was able to recover from a crisis of this proportion in relatively few years.

#### Financial Support for Health Care

Economic crisis initially affects the health care system as a financial crisis, so it is important to understand how the Cuban government supported the health care system financially. At the onset of the crisis, the government made a pledge to continue to support health care and education. As Figure 2 shows, it continued to expand the peso budget for the health care system during the 1990s. The peso budget pays for internal resources for the health care system, including personnel

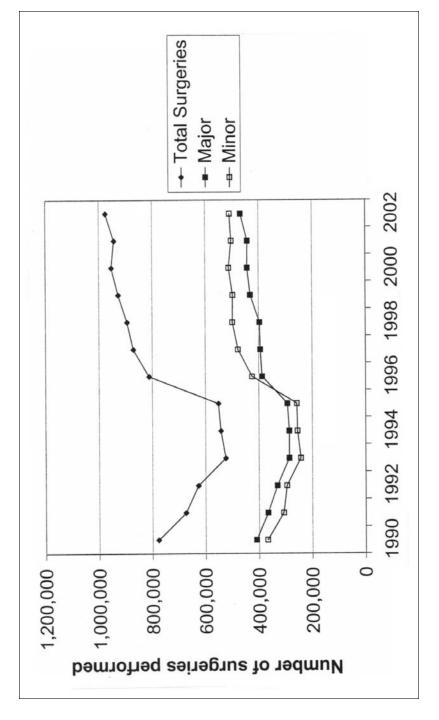


Figure 1. Surgeries performed in Cuba, 1990–2002. Source: MINSAP (9).

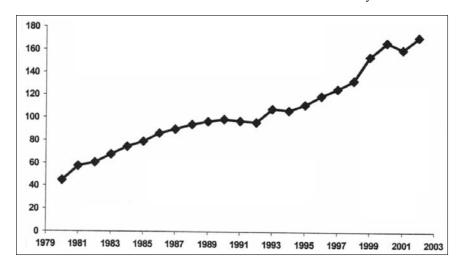


Figure 2. Cuba's peso national health budget, per capita, 1980–2002. Per capita national health budget figures are in current pesos. However, peso inflation has been very moderate. UNICEF reports that the average annual inflation rate was 1 percent in 1990–2003 (www.unicef.org/infobycountry/cuba statistics.html). *Source:* MINSAP (9).

salaries.<sup>4</sup> This expansion of the peso budget was essential for the success of the public health and primary care effort, as we showed earlier. In 2002, health expenditures represented 6.3 percent of GDP and 11.8 percent of total budget expenditures (10). Similar figures were registered in the past five years.

The national health care system also has a dollar budget for its import needs. This budget, however, suffered because of the severe shortage of hard currency due to the nature of the crisis itself: an abrupt loss of preferential trading agreements and the need to purchase imports at higher, far less predictable, world market prices, especially because of the U.S. embargo and its further tightening in the 1990s. Figure 3 shows the dollar budget for the Cuban health care system. The budget closely follows the decline and recovery of the Cuban economy in

<sup>&</sup>lt;sup>4</sup> Medical professionals, while held in high esteem, are not paid especially high salaries, and this is an important contributing factor to the ability of the Cuban state to expand health care personnel and access. Physicians' salaries range from 385 pesos a month for those with a general internal medicine degree to more than 600 pesos once they obtain a second specialization degree. Physicians also receive additional income through extracurricular activities such as teaching and research. The mean monthly salary in Cuba was 261 pesos in 2002 (10). Thus, physicians' starting salary was 1.5 times the national mean and could increase up to 3 times the mean. The national mean salary increased 40 percent between 1990 and 2002, from 187 to 261 pesos. Thus, physicians' salaries in Cuba are modest in absolute and relative terms compared with international standards.

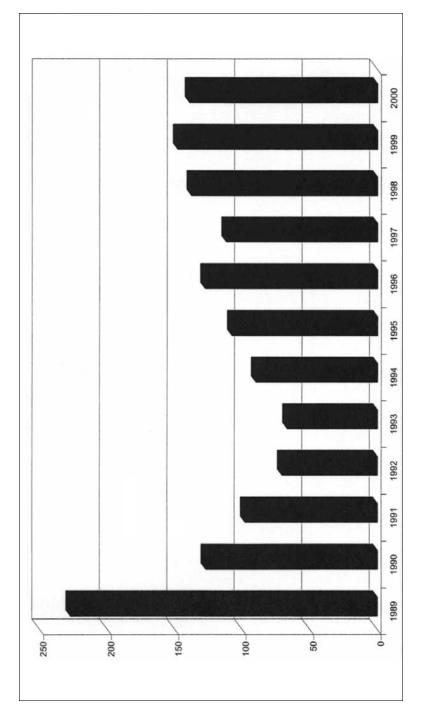


Figure 3. Cuba's dollar national health budget, millions of dollars, 1989–2000. Source: MINSAP, The Cuban National Health System, Havana, 2001.

the 1990s. The dollar budget pays for the importation of medical equipment, supplies, and medicines, and for contracts with international firms to maintain technologically advanced equipment.

#### DISCUSSION

The Cuban health care system is built on the principles of universal, equitable, and free access to quality care and is a national priority supported by central planning.<sup>5</sup> While the health care system is focused on public health and preventive medicine, there is also a commitment to provide advanced secondary and tertiary care. The Council of State (Cuban government) is mandated to support this national priority through appropriate levels of funding. In 1990, Cuba spent 20.08 percent of its GDP on social programs, including health and education (15). (It is notable that Cuba spent relatively more on social programs in 1990 than did Japan, Australia, and the United States, and twice as much as Latin America (10.4 percent) as a whole; 15). We have documented that this priority has been maintained for the health care system since the collapse of the trade relations with the CMEA countries and the consequent onset of economic crisis. As a result, Cuba now has many more health care providers, especially family physicians and health-related facilities, including maternity homes, day care for the elderly, <sup>6</sup> and homes for the disabled.

MINSAP is responsible for the health care system, as it manages the primary, secondary, and tertiary health care sectors, the training and allocation of health care providers, the development of health care facilities, and some research institutes. At the same time, elected governmental bodies called Podar Popular (People's Power) oversee the health care system on the local, provincial, and national levels. The municipal People's Assembly concerns itself with the activities of the municipal health office; the provincial People's Assembly deals with the activities of the provincial health office; and the Council of State of the National Assembly of People's Power overseas MINSAP. On the local level, Podar Popular townhall meetings offer ordinary Cubans the possibility to raise and collectively discuss, analyze, and solve community problems, including problems in health care. Elected officials are held accountable during these meetings. This form of community participation and control is reported in some detail in the ethnographic studies of Cubans' everyday life (16–18).

<sup>&</sup>lt;sup>5</sup> An indication of government's attention to health care and the efficacy of central planning is reflected in the fact that the number of students admitted into medical- and health-related studies stayed almost constant between 1988-89 and 1999-2000, at 4,960 compared with 4,846. These accounted for 14 percent of total admissions in 1988-89 compared with 29 percent in 1999-2000. Over the entire period from 1959-60 to 1999-2000, of the total 668,891 admitted to universities 110,372 (16 percent) were enrolled in medical- or health-related professions. The statistics are from the Ministry of Education.

<sup>&</sup>lt;sup>6</sup> Cuba's demographics have come to resemble those of the advanced industrial countries. The elderly in Cuba account for 14 percent of the population. This demographic change entails financial pressures on some social programs, including the health care system, retirement, and social security.

Cubans also influence the health care system through their grassroots organizations such as the Committees in Defense of the Revolution (CDRs). CDRs were initiated in 1960 as citizen action groups organized on the block level for defense and other needs of the neighborhoods. Gradually, the CDRs have become largely preoccupied with social issues in the neighborhoods. They are typically led by locally elected, mostly older, women and pay special attention to public health campaigns and the local functioning of the health care system. Such community involvement gives the ordinary Cuban a sense of empowerment. (Such community involvement and social and political processes are by no means flawless, but we wish to underscore their importance for the health care system in Cuba.) Asked whether they could change their physicians if dissatisfied with their performance, participants in our group interviews answered in the affirmative. Some volunteered that health care professionals who did not serve the community according to the generally accepted norms could and would be replaced.

The interplay of social agents and institutions in health care—that is, health care providers and MINSAP officials in various levels of the health care system, elected officials, and community initiatives—creates a highly desirable setting for public health and health care campaigns that can potentially contribute to improving access to care. For example, we have witnessed local volunteer efforts to build neighborhood residences and clinics for the Family Physician Program. Vaccinations are often conducted by enlisting popular participation. As explained earlier, the La Timba community interview participants were recruited from a community-organized class on sexuality that was taught by a volunteer professor from a nearby university. The class was held in the community center built by the community and was genuinely informative and interesting. The Circulo de Abuelos in Vedado is organized by a 76-year-old volunteer who works in conjunction with the local Family Physician Program. In fact, volunteer labor is widespread across Cuba. Of course, this enormous social effort is neither reflected in the financial budget of the health care system nor reportable in official statistics. Yet, it is an important social support network that acts against the self-interested tendencies fostered by monetary and market relations recently forced on Cubans under the economic crisis.

The same social network of solidarity also works to lessen the pains of shortages, including medicines. We asked about the differential access to medications due to the possibility of receiving medicines from family or friends abroad and whether, combined with scarcities of other goods (unmet needs), this could lead to the development of a black market. The physician in Vedado polyclinic told us she had never seen a case of black-market sale of medicine: "If someone tries to do so, I will report it. Medicine is distributed with a prescription from the doctor according to the diagnosis. It would be illegal to distribute it otherwise." At La Timba community, we were told that it was a good thing that some Cubans received needed medications from their relatives abroad, especially from the

United States. Most Cubans believe the U.S. embargo policy is at least partially responsible for the shortages of medical supplies, particularly medicines. Therefore, they support any effort to get medications to Cuba. Furthermore, user group participants believed that those who receive medications from abroad tend to share them with others who need them.

The question of access to medications and medical supplies brings into focus the 45-year U.S. embargo. Many studies have documented the damage this embargo has inflicted on Cuban health and the health care system (19, 20; see also 14). The demise of the Soviet bloc greatly facilitated the damage that an intensified U.S. embargo policy caused, while the increased international competition for markets and areas for investment weakened it. Through unrelenting pressure to undermine stable trade, finance, and credit relations for Cuba, the embargo aims to disrupt Cuba's international economic and financial relations or, at least, to increase its transaction costs, choking off economic development. In this very real sense, the embargo affects all areas of development in Cuba, including the health care system. We have noted how Cuban access to medical equipment, supplies, and medicine suffered because of the shortage of hard currencies and the tightening of the U.S. embargo in the 1990s. On May 6, 2004, President George W. Bush escalated the embargo and announced measures that include a military threat to Cuba. The 500-page report of the presidential Commission for Assistance to a Free Cuba, headed by then Secretary of State Colin Powell, included a call for an Iraq-style U.S. "transition coordinator" to oversee Cuba's forced transformation to a capitalist economy (21).

We can conclude that, confronted with a severe economic crisis, Cuba succeeded in *limiting* the forced reduction of access to resources and services in secondary and tertiary care while expanding access in public health and primary care. In this, Cuba provides an important contrast to the experiences of much of the rest of the world.

An economic crisis reduces incomes, increases poverty, and lowers the standard of living, thereby undermining well-being and health. It also limits the options open to public and health policy. In capitalist economies, economic crisis typically undermines the health care system by reducing access, equity, and quality. The impact is particularly severe in less-developed economies that have important resource constraints. In contrast, Cuba, with per capita spending of about \$2,000, has pursued a socialist development strategy that emphasizes education and health. The combination of planning, a commitment to universal and egalitarian values, and the participatory organization of Cuban society has actually strengthened and improved the health care effort, including access to health care in important areas. However, Cuba today faces deferred maintenance of hospitals and shortages of some medicines, medical equipment, and textbooks. To sustain Cuba's internationally recognized health care system, it is necessary to work for a change in U.S. policy in favor of normalizing relations with Cuba and supporting its efforts with economic and medical assistance.

# LIMITATIONS OF THE STUDY AND PROPOSALS FOR FURTHER RESEARCH

There are a number of areas where further research is needed to improve our understanding of access to health care in Cuba since the collapse of the Soviet Union. We want to emphasize that the findings from the present study are preliminary. Although our findings from interviews with health care providers and users are consistent with patterns observed in official data (i.e., they are validated by them), they are limited by our study design. The study was designed to provide the information necessary for developing a full-scale survey focused on the problem of access. The sample of interviews that form the primary data collected for this study has important limitations. To begin with, the sample is rather small, and for various reasons we were limited to interviewing select groups of individual users as opposed to randomly selected individuals. Two methodological problems arise. First, the group interview structure might have exerted social pressure on respondents, increasing the likelihood of socially acceptable responses or limited critical remarks. Further, when the interview subjects did not speak English, we conducted the interview in Spanish through an interpreter. Finer points might have been lost in translation. Second, the two groups were small and not randomly chosen. The La Timba group was selected through contacts with the neighborhood leadership, and the Circulo de Abuelos was introduced to us by the polyclinic physician we had interviewed earlier in Vedado. Even if these groups are representative of their peers, we could not claim that they represent the opinions of the residents of Havana or the people of Cuba.

Thus, we recommend, first, conducting a large-scale survey of health care providers and health care users to facilitate a quantitative analysis of the issues surrounding access. We believe the present study is helpful for the design of such a survey. Second, we have documented the limited availability of medical equipment, supplies, and medicines and the reduced quality of secondary and tertiary care. Other studies (some cited earlier) and some of our own findings indicate that the sudden drop in resources and incomes adversely affected the well-being and health of Cubans during the 1990s. We recommend a study of patterns of morbidity and mortality during this period compared, when appropriate and possible, with the 1980s. This research will locate areas of vulnerabilities in the health care system and can be the basis for further research to improve it. Third, from the health policy perspective, it is important to assess how changes in the allocation of funds and resources for secondary and tertiary care versus public health and primary care have affected morbidity and mortality. In other words, from the perspective of improving the health care system, we should ask: are allocation decisions between sectors optimal? Finally, as the macroeconomic conditions have stabilized there has been a growing gap in incomes due to the workings of monetary and market relations (although Cubans still have a fairly egalitarian system of salaries). Increasingly unequal access to dollars creates an unequal access to resources. It is important to examine whether this disparity translates into a growing gap in well-being and health among Cubans, reversing the trend of overall improvement and narrowing of such gaps that began in 1959.

Acknowledgments — This study was made possible with a grant from the Center for Health Research, University of California, Berkeley. The Cuban Ministry of Public Health, National School of Public Health, National Statistical Office, Institute of Science and Technology, a number of neighborhood organizations in Havana, and many individuals in Cuba assisted with this research. Jane Gilbert Madulon, associate professor at Goldman School of Public Policy, University of California, Berkeley, contributed to this study in its planning stage and commented on two drafts. Without her contribution, the present article would not have been possible. Reviewers for the International Journal of Health Services also offered helpful comments.

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