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Internist to Internist: Impression of the Cuban Health Care System

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After the Cuban Revolution of 1959, a new social system was established where education and health were considered human rights and a responsibility of the government. As a result, the Cuban health system was reorganized with a focus toward prevention.[1] The constitutional amendment of 1976 and the public health law of 1983 promoted the principle of health care for all as a human right, free of charge, and equally provided to all citizens.[2] The health care system placed the population in charge of its own care, integrated wellness programs with social and economic activities, and fostered international cooperation.[3]

After the exodus of physicians that followed the revolution, the need to train more physicians became critical.[4,5] Volunteer doctors from Latin America and from the newly created Rural Medicine Services (RMS) met the demand for services in the rural areas. The RMS required that Cuban medical students and new medical graduates work in rural areas providing care and health education to the population.[3] These changes to the medical workforce and a focus on prevention led to substantial improvements in mortality. Infant mortality decreased dramatically to 4.2 per 1,000 live births and maternal and child mortality decreased to 35.2 per 100,000 live births, and 1.8 per 10,000 inhabitants, respectively.[6]

Patients treated at the University of Illinois Hospital at Chicago and Health Sciences System (UI Health) are Hispanic/Latino (33%), African American (33%), Caucasian (28%), and Asian (6%). Under new leadership, the University of Illinois at Chicago (UIC) Department of Medicine (DOM) has recast the department's goals to focus on providing exceptional care for all, enhancing scholarly activity, and training the next generation. The DOM fosters these three goals in urban and global settings recognizing that lessons can be learned both close to home and at a distance. With these goals in mind, in September 2015 the UIC DOM sent a delegation of six faculty members to Cuba to explore opportunities for the establishment of scientific and clinical collaborations. Here we describe our impressions of Cuba's health care system and the lessons learned by the UIC faculty who visited Cuba in an effort to find solutions for health care challenges that know no borders.

Our group consisted of six physicians from varied specialties. The faculty were of diverse backgrounds: two women, four men, and three Latinos. Five spoke fluent Spanish. All faculty members had historical or cultural ties to Cuba as well as an interest in obtaining medical and scientific insights regarding the Cuban health system. The agenda included meetings with Cuban medical and public health professionals to learn about opportunities for collaboration and to develop an educational and scientific partnership between UIC and the University of Havana, which would foster the exchange of students, residents, and faculty. We sought to understand the Cuban polyclinic model, including primary care and specialty care, in order to inform strategies for urban health care delivery in Chicago. Ideally, our collaborations would provide opportunities to explore specific research projects in primary care, specialty care (i.e. cardiovascular, pulmonary, endocrine, hematology-oncology, and transplantation), and the human microbiome, as well as scientific and educational partnerships between the DOM Urban Global Health initiatives and the Cuban Pedro Kourí Institute of Tropical Medicine.

We began our visit with an introduction to the Cuban health care system at the Cuban Institute of Friendship with other Countries, an institution created in 1960 to foster and promote friendship with countries and groups that express solidarity with Cuba. José de Jesús Portilla, MD, professor of general surgery and member of the International Relations of the Cuban Ministry of Health, provided a comprehensive overview of the Cuban health system. The foundation of the public health system is a sophisticated primary care model composed of a network of family doctor's offices staffed by physicians and nurses who live in the communities they serve and who care for a defined number of individuals. The primary care offices are linked to secondary care facilities called "polyclinics" that offer more comprehensive specialty and laboratory services.[7] These polyclinics are the main referral source for tertiary care hospitals.

We visited the Victoria de Girón Medical School; the Latin-American School of Medicine (ELAM); the Hospital Pediátrico William Soler, the largest children's hospital in Cuba; and the Center of Genetic Engineering and Biotechnology, the premier Cuban institution for scientific inquiry and discovery. The center's main research areas are vaccines (e.g. HBV), pharmaceutical development, diagnostics, and plant/animal biotechnology. The delegation also visited Infomed, a center for the dissemination of medical information. This center operates a portal that indexes full-text Cuban medical journals and operates the local office of the Scientific Electronic Library Online.

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One of the highlights of the trip was a visit to a polyclinic, the centerpiece of the Cuban health care system. The "19 of April" Polyclinic is one of the polyclinics within the Plaza de Revolución Municipality of the Province of Havana. This polyclinic supports a number of smaller family doctor's clinics by providing a more advanced level of care in the areas of internal medicine, pediatrics, gynecology and obstetrics, psychology, and social work. It also provides dental services; performs ultrasounds; operates a 24-hour emergency room; and has clinical/microbiology laboratories, in-house epidemiologists, and statisticians.

We concluded our trip with a visit to the Pedro Kourí Tropical Medicine Institute, a modern facility for research, training, and clinical care of patients with infectious diseases. The hospital attached to this institute is a post-graduate training site for the University of Havana. The center offers doctorate programs, master's programs, and numerous workshops. A number of their programs have received the medal of excellence awarded by the Cuban Ministry of Health.

Wherever we went, we discussed future areas of collaboration in the areas of analysis of the microbiome; the impact of environment on both tropical and urban health; and opportunities for fundamental investigation as well as potential exchange programs for students, fellows, or faculty. The opportunities for training could be implemented at the level of student or resident exchanges based on current exchange programs run by the DOM Urban Global Health initiative in the Dominican Republic.[8] We also found common interest in supporting continuous medical education initiatives that could be held in Cuba or Chicago that would allow Cuban and UIC faculty to advance knowledge of modern technology and procedures.

Our experiences and impressions were presented at a UIC DOM grand rounds focused on urban and global health. Each of us has fully engaged our academic communities in describing the opportunities present in the Cuban health system. We recognize that in a resource-limited environment, the Cuban health system has succeeded in improving health outcomes. While there are socioeconomic and cultural differences in our Chicago and Havana populations, we noted several parallels and strategies that may benefit our patients.

First, the emphasis on prevention was evident at every health, education, and scientific site we visited. Stressing health rather than health care is also a priority for UIC. As noted by the World Health Organization, non-communicable diseases have become a focus of attention, given the significant rise in conditions such as obesity and diabetes. Cuba has been successful at stressing vaccinations and prevention, but it is also impacted by global environmental health challenges. Obesity, diabetes, and lung cancer are three conditions that are affecting Cuba as well as the rest of the world. In the United States, these conditions disproportionately impact underserved and underrepresented communities. Developing strategies for combating these global health challenges was a common topic of discussion during our trip to Cuba.

Second, the message in Cuba of patient-centered care, rather than hospital-centered care, was clear. Having the primary care physician located in proximity to the patient—in most instances in the community—could be translated at UIC to increasing the number of community-based clinics in local neighborhoods, rather than forcing patients to commute long distances to obtain care.

Despite political and health care system differences, Cuba and the DOM at UIC share a passion for providing a comprehensive approach to patient care at all ages; improving the health status of all regardless of socio-economic status; creating high-quality medical education with emphasis on urban and global health training; and fostering scientific innovation. The stage is now set for our DOM to continue a collaborative effort between Cuba and UIC.

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