MEDICC Review
ISSN: 1555-7960
ISSN: 1527-3172
editors@medicc.org
Medical Education Cooperation with Cuba
Estados Unidos

de Delàs, Marià
A Cuban Physician on the Front Lines in Barcelona Reflects on COVID-19 Responses in Europe and Cuba
MEDICC Review, vol. 22, no. 3, 2020, July, pp. 61-62
Medical Education Cooperation with Cuba
Oakland, Estados Unidos

DOI: https://doi.org/10.37757/MR2020.V22.N3.14

A Cuban Physician on the Front Lines in Barcelona Reflects on COVID-19 Responses in Europe and Cuba

Marià de Delàs

Dr Raúl Herrera Nogueira is a young Cuban physician who completed dual specialties in Cuba in family medicine and cardiology. He is now pursuing a residency in anesthesiology at Bellvitge University Hospital in Barcelona. We publish excerpts from his report as a doctor on the front lines of the pandemic there and his reflections on differences in his home country's approach to medicine, public health and COVID-19. The original article, titled En Cuba, en caso de epidemia, "el personal sanitario sabe inmediatamente dónde tiene que ir y qué tiene que hacer," *was published April 9, 2020, in the Spanish/Catalán publication* ***Público*** *available at https://www.publico.es/sociedad/coronavirus-cuba-caso-epidemia-personal-sanitario-inmediatamente.html*

Several territorial governments in Spain are considering inviting Cuban doctors to participate in the fight against the coronavirus epidemic, just as they have done in Italy and Andorra…Cuba's healthcare culture is different from Europe's, and the response to the epidemic likely would have been different if criteria were used similar to those followed in Cuba.

Dr Raul Herrera Nogueira has been an anesthesiology resident at the Bellvitge University Hospital in Barcelona since May of 2017 after becoming a licensed physician in Cuba and completing a master's degree in Madrid. He explains that as soon as COVID-19 cases began arriving at his hospital, work was reorganized and he was transferred to the ICUs, joining critical care doctors and anesthesiologists on duty there.

Organizational Problems and Lack of Consistent Protocols

He believes, from an organizational perspective, that "the response has been slow and perhaps a bit late." In a telephone interview with ***Público***, he explains: "In terms of health personnel—doctors, nurses, orderlies—it took quite a few days to restructure the work, resulting in delays for optimizing resources and wasteful use of them in the meantime."

But he has also been positively impressed by "everyone's willingness, their desire to do more, to contribute and collaborate, even outside their usual setting or work area." He notes: "I think this has been really positive and compensates somewhat for the lack of order or the Salut [health authorities'] inability to effectively drive, in terms of the hospital where I work, a speedier response to the epidemic."

"I'm referring especially to the way shifts are structured, the capability to predict needs: while perfectly understandable in such a chaotic situation, this affects organization in some areas such as those for critical patients. So staff are not only overloaded with work and the stress of the situation, but have the added tension of not knowing who each person reports to, who needs to be consulted in certain situations," he adds.

From the technical side, he notes that "every two or three days, protocols change. So this makes providing stable treatment very difficult. There isn't an entity in Spain or in Catalonia that is defining [treatment] protocols. Every hospital issues its own, and these are followed depending on the unit or person in charge."

The Cuban Experience

"In terms of health system organization, and I say this with all modesty, I think we have an advantage, because in Cuba, we're well accustomed to health emergencies related to epidemics because of our experience with dengue. Of course we're not at all talking about the same kind of disease or the same means of transmission, but in Cuba, every two or three years we have dengue epidemics, and the health system response is fairly well structured in these kinds of situations," says Dr Herrera Nogueira. "In a situation like the one we have now, the vast majority of medical staff will immediately know where to go, who they have to report to, and exactly what they have to do," he says.

Dr Raúl Herrera Nogueira (l.) and colleague in Barcelona.

Community Care in Cuba

With regards to preparing for emergencies, the physician emphasizes another factor: "the ability to involve large numbers of health personnel in the campaign, resulting from community-based care and specifically, case detection" through "active screening," an information collection system aimed at finding people who may be ill. It means "going door-to-door to find people with respiratory symptoms, while maintaining safety measures and physical distancing to avoid direct contact in their homes with those who may have fever or other symptoms. Thus, people also don't have to go to health centers to be seen," he explains.

The screening means that every 48 hours or so, "a person who could be a medical or nursing student, a doctor or nurse, calls at your door to ask if there is anyone in the household with symptoms, waiting outside to maintain physical distancing," he says. "Then, if there is someone, the family doctor goes to the home to follow up, see how the person is doing," and decide if they need to go to an isolation center or hospital. "In Cuba," he points out, "medical students make up quite a share of personnel, and they are integrated into the campaign to stem the epidemic."

Immediacy and Early Detection

Summarizing two differences between health system behavior in Cuba and Spain when confronting the epidemic: "First, there's the immediacy in terms of organization: I believe it has been slow [here]. I can speak about my own hospital... organizing the shifts and their structure, so that everyone knew which rotation they had, took two weeks. In this kind of situation, that is a lot of time. I think that in Cuba, it would have been done more immediately," he notes. "The second [difference] is the number of personnel dedicated not only to hospital care of patients, but also in the community, directly involved in early case detection, for a more effective response," he adds.

"One thing we are seeing here with our ICU patients is that the time between when they are seen in the emergency room for their symptoms until they are sent to the ICU is about four to five days. Perhaps if they had received more direct follow up care at home first, they might have been sent to hospital earlier, and thus isolation measures for such cases would have been optimized."

Sources consulted by ***Público*** indicate that in Cuba, active screening for cases has been carried out among some 9 million of the country's 11.2 million population.

"I don't know if it's a correct measure in this situation," notes Dr Herrera Nogueira, "but it's being done and it's getting results. I don't want to be overly optimistic—because things could turn the same or worse [than in Spain], because in Cuba's economic situation, it's difficult to maintain isolation—but for right now, after some two weeks in Cuba, the increase in cases and the numbers of patients going to emergency rooms with respiratory symptoms is not overwhelming the health system."

According to the BBC, until this week [April 6], Cuba had detected a total of 396 patients infected with COVID-19, and 11 had died. [As of July 2, 2020, Cuba had accumulated 2361 cases, with 2224 recovered, 94.3%; 86 deaths; and 49 active cases—Eds.]

Western Arrogance

Asked what could have been done to stem such a rapid spread of the virus, Dr Herrera Nogueira criticized the attitude of many governments, including Spain's, in relation to the situation in China. "I think the magnitude of the problem in China was underestimated, as Chinese health and epidemiological authorities were being challenged [by the Europeans], and it seemed as if they were saying that this happened in China because the health system wasn't very organized, because they simply couldn't conceive of the fact that an epidemic of such proportions could happen in Europe."

"The mortality we have in these countries is almost three to four times that of China's. It's an example of a certain arrogance when faced with the situation, and that led to a late response in the first stages, and a level of response below what the situation demanded," he says.

"I think much more rigorous measures should have been taken, and much more urgently than what was done, not waiting for an increase in cases, because when those numbers begin to explode like a chain reaction, then a lot more time is needed to stem that tide. It happened with China, and here in Spain, it happened to us when the same was going on in Italy. In Italy, the hospitals collapsed, the hospitals and the ICUs, and still in Spain, strong measures hadn't been taken to limit travel, promote isolation and physical distancing," he recalls. "I think that we're now paying the price for an arrogant view of experience in other countries."

Was Lockdown Necessary?

Dr Herrera Nogueira has no doubts: "I think it was necessary and much earlier than it was done. I think that a more rigorous and scaled lockdown would have been ideal, even before we were seeing symptoms, before we had symptomatic patients, patients testing positive. The goal in a situation like this isn't to have patients testing positive but controlled; instead it's to have the smallest possible number of positive patients…and in that sense, we have been too slow."

Safety in the ICU

"We have not had sufficient personal protective equipment (PPE) and what we have had is not optimal," he comments. "A critical patient demands a nearly constant presence of nurses and doctors. These are very dynamic patients, who need changes in their medication regimens and in respiratory parameters. Within an hour, there can be changes, a new result, and then the need to change again in a very short window of time. Thus, care for these patients who require isolation is extremely difficult, and I think that we are seeing higher mortality in the ICUs not only due to the disease itself, which can undoubtedly evolve quickly to serious and critical, but also because the care we are providing to these patients isn't that which we would usually give to a critical patient…due to the distancing that is needed," he explains.

To illustrate more clearly, Dr Herrera Nogueira offers an example from personal experience: "I had a patient, a young patient, who got disconnected from the ventilator. This patient

was evolving well, and we were waking them up, and the patient was moving, because even though sedated, they had some responses, and in one of those movements, one of the cables of the ventilator came disconnected. This is something that can happen, but usually you simply need to enter the room and reconnect the ventilator, in a normal situation. But imagine what it was like now."

"You have to get dressed immediately, with all the protective gear, double gloves, mask and so on…ensuring no contact takes time. But just as we were about to enter, we discovered there was no PPE on hand. It was on the way. So we had to go in with protection that wasn't optimal, with a patient disconnected who was releasing into the air their entire viral load, which most probably was high. We had to go in, dressed as we could, to reconnect the ventilator."

Lessons for the Future

One of the most important lessons for the future, says Dr Herrera Nogueira, is the value of public health. "If there is one lesson we have to extract, it's that we need to take care of public health. And not only take care of it, but nurture it to make it more powerful. This doesn't mean no private health care, and in fact the link between public and private should be recognized. But going forward, more value and a greater leadership role needs to be given to public health."

"The capacity for response in this situation has been determined by the public health systems, and if there are weaknesses, then it is because public health itself has been debilitated, because in the last few years, its funding has been significantly cut."

Published July 10, 2020
https:doi.org/10.37757/MR2020.V22.N3.14