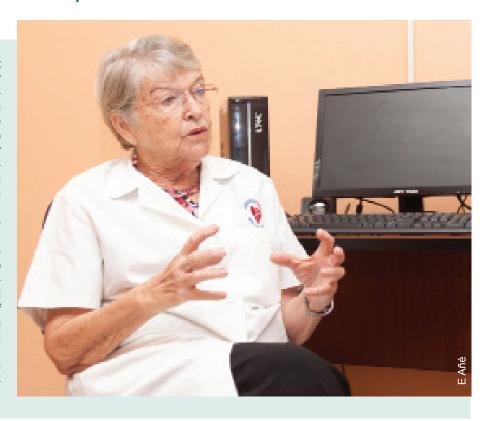
"Retirement, what?" Herminia Palenzuela MD PhD Coordinator, National Pediatric Cardiology Network William Soler Children's Heart Center. Havana

Gail Reed MS

"Our family wasn't rich, but we didn't want for anything," says Dr Palenzuela by way of introduction. In 1950s Cuba, her father drove a taxi and her mother was a homemaker, raising two daughters-one now an economist and the other a top pediatric cardiologist. In many ways, Dr Palenzuela's career rode the wave of social change that swept Cuba beginning in 1959. Like many others, time and again she stepped up to the plate, and in 1986, she became a founder of one of the Cuban health system's premier institutions: the William Soler Children's Heart Center, a tertiary facility in Havana. There, to this day, she balances multiple responsibilities—as coordinator of the National Pediatric Cardiology Network, head of the Center's Quality Assurance Program and lead professor of the annual National Certificate Course in Pediatric Cardiology. MEDICC Review spoke with her between phone calls, meetings and patient consults.



MEDICC Review: Let's start with the early 1960s, a fast-paced time in Cuba. How old were you then?

Herminia Palenzuela: I was 12 in 1959, enrolled in a Catholic secondary school, the tuition covered by an uncle. Two years later, I went on to high school and also joined the national literacy campaign. Teens like me were volunteering to head across the country, especially to rural areas, to teach people to read and write. But my dad wouldn't have any of it: "You're going where? To do what?." I was determined to participate but wasn't ready to cross him by running away. So I ended up teaching some of my own neighbors who were illiterate, five altogether.

MEDICC Review: Growing up, did you have any female role models?

Herminia Palenzuela: No, none. In one sense, my role models were mainly negative since there were no professional women in my family back then. What led me to medicine was the call the government made for more young people to become doctors. We had only about 6000 physicians for the whole country to begin with, and then half of them migrated after the revolution, mainly to the United States.

Since I really hadn't decided what I wanted to do, I took a chance and signed up for the 15-month pre-med course. After that, I was all in

and with good grades, I went on to medical school and graduated at 22. Today, not too many graduate at that age!

MEDICC Review: And then you went into pediatrics.

Herminia Palenzuela: Yes, I did my residency at a Havana pediatric hospital and then went on to do postgraduate work in eastern Cuba in the small rural town of Banes, now in Holguín Province. My husband (also a recent graduate) and I went for two years, which turned into four because of the tremendous need for doctors there. We were still facing a lot of childhood malnutrition and parasites, and ramping up the national vaccination program.

After Banes, where my mother-in-law helped us at home with—by then—our two children, we spent another seven years on the Isle of Youth, south of the main island. As its name implies, the Isle was full of young people—thousands of Cubans and also foreigners, mainly Africans, who were on scholarship in boarding schools there.

MEDICC Review: From those early years, are there children, parents, faces . . . that you particularly recall?

Herminia Palenzuela: I remember most the children who died, not the ones we were able to save. They and their families stay with me, like the little boy who died of meningitis . . . like others. I'm forever

grateful for the children we successfully treated, who survived, but they aren't the ones I think of most.

MEDICC Review: For over 35 years, you've dedicated yourself to pediatric cardiology. How did you decide on that specialty?

Herminia Palenzuela: (*laughing*) I decided, like I did almost everything else: because it was needed at the time and there was a place for me. In the effort to reduce Cuba's infant mortality, it had become clear that congenital malformations were playing an outsized role in infant deaths—about 3 per 1000 live births for congenital cardiopathies in the early 1980s.

At the time, such infants and children had nowhere to go in Cuba for treatment. So, in 1983, the government decided to establish the Children's Heart Center at Havana's William Soler Pediatric Hospital and with it, the National Pediatric Cardiology Network. The first would become a tertiary care, research and teaching institute, and the Network would offer us an organized way to locate, treat and follow our patients throughout the country.

As a founder of the Center, I joined other specialists in a year of preparatory training in Prague, (then) Czechoslovakia prior to the Center's opening. Later, I also trained in Britain and France.

MEDICC Review: If we fast forward, what would you say are the Center's main results?

Herminia Palenzuela: We have managed to reduce the part congenital cardiopathies play in infant mortality from 3 per 1000 live births to less than 0.5 per 1000 live births today. We carry out some 120 to 150 interventionist catheterizations and 250 to 300 surgeries per year, including open-heart or cardiopulmonary bypass. Our surgical survival rate has increased to 91% in 2019, despite the fact that there are more newborns as a share of the total, younger patients in general, and the reality that they come to us with more complicated pathologies.

One thing that has helped greatly is our ability to use the National Network to detect abnormalities during pregnancy, so we are aware what the baby may need even before birth.

MEDICC Review: Nevertheless, this must be a scary time for parents and families. How do you approach them?

Herminia Palenzuela: We've always been very transparent, very direct with parents. We explain each procedure's risks and benefits, reviewing in detail chances for survival, recovery and for living a normal or close-to-normal life. Especially in the early years, more parents were afraid of the surgeries. But as we gained a reputation and as parents' educational levels also increased over time, fewer of them would simply say, "Well, we have our child for as long as he/she lasts . . ." Now, they ask more informed questions, often researching the problem on internet. The key is that they are always the ones who make the decisions, and so we do our best to make sure they have the information they need.

MEDICC Review: You coordinate the National Pediatric Cardiology Network.

Herminia Palenzuela: Ah, yes. That's my pride and joy. In each of the country's 15 provinces, we have a team headed by a pediatric cardiologist who has received training here at our Center. He or she is joined by other specialists and together

they link with provincial and municipal hospitals that, in turn, link to community polyclinic pediatricians and neighborhood family doctors.

Through the Network, we screen for and identify cardiopathies before birth, decide treatment options with specialists and parents, and assure followup for life. Truly, we have patients who are now 20, 30 and 40 years old! The Network also allows us to provide postgraduate training in pediatric cardiology throughout the country, constantly updating professionals and involving newly minted specialists.

MEDICC Review: I know that the Children's Heart Center, like all health care in Cuba, faced particularly difficult challenges during the economic crisis of the nineties, known as the Special Period. What were some of the toughest and which ones persist today?

Herminia Palenzuela: It was a terrible time, and when I look back, I think the Center was kept open by the sheer will of our leadership and our professionals. One thing that made it especially problematic, and does so today, is the tightening of US sanctions on Cuba starting in 1992. There were and are medications very specific to these patients that remain under US patent, and others whose manufacturers have been absorbed by US companies. While supposedly licenses can be obtained by these firms to sell to Cuba, most have been unwilling to even apply or are apparently afraid to do so. As a result for example, medications such as prostaglandin E (used to keep 'blue babies' arteries open before surgery) became very difficult to obtain at one point, and supplies were severely limited.

And that doesn't take into account the broader effects of what we call the US blockade: the fact that US-patented drugs and equipment purchased through intermediaries come at a higher price and are sent from further away and thus sometimes delayed.

As we emerged from the worst of the Special Period, early in the new millennium we decided to take a national census to see how many patients had accumulated during the most resource-scarce period . . . and to see which cases were by then the most urgent. During the Special Period, with the tightening of US sanctions, children became victims, and certainly some died as a result, despite all our efforts.

MEDICC Review: Turning to women in your profession, what is the status of women in pediatric cardiology today?

Herminia Palenzuela: A significant portion of our specialists on the clinical side are women, perhaps even most. But this isn't true on the surgical side, where men still prevail. I really don't have an explanation for why this is so, especially since the doors are open to women and in fact, right now women are the majority of physicians. So, it's a good question, worth looking into.

MEDICC Review: After so many years of constant activity, any thoughts of retirement?

Herminia Palenzuela: Retirement, what? No, none at all, even though I'm 73. We now have a good pipeline of younger leaders here at the Center, so this doesn't worry me. As a consulting professor, I teach, continue my research on pulmonary hypertension and I weigh in on the most complex cases. This keeps me hopping. But I also have a flexible schedule that suits me. So, as long as I'm in good health, I'll be right here for some time to come.