

Interview with Antonio Carlile Holanda Lavor: we must invest in research to learn how to guide families against COVID-19

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Abstract *In this interview, public health physician Antônio Carlile Holanda Lavor with 57-year career and long and broad experience in the Brazilian Unified Health System (SUS) management, especially in primary health care, talks about his management at the head of the Oswaldo Cruz Foundation unit in Ceará (Fiocruz-CE), from 2008 to the present moment. Known internationally for institutionalizing the Health Worker Program in Ceará in 1987, he discusses the process of implementing Fiocruz-CE and the role of research in guiding the work of the Family Health Strategy during the COVID-19 pandemic.*

Key words *Primary Health Care, Family Health Strategy, Community health worker, Unified Health System*

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Ivana Barreto - Carlile, in July 2008, you had a 44-year education work trajectory as a professor at the University of Brasília, and in public policies, mainly in Primary Health Care (PHC). In 2007 and the first half of 2008, you moved to Angola as a UNICEF consultant to support the country in implementing Community Health Workers (ACS). What was it like assuming the direction of Oswaldo Cruz Foundation Ceará (Fiocruz) Ceará in this context?

Carlile Lavor – Miria [Miria Lavor, wife and coworker]¹ and I arrived from Africa in May. I was still excited to go back to Africa, but in June, Mária became seriously ill with meningitis. She spent ten days in a coma and was leaving the coma in early July. At the end of July, Odorico visited me at home [Luiz Odorico Monteiro de Andrade – at the time professor at the UFC Medical School in Sobral and Municipal Health Secretary of Fortaleza] and said, “we are establishing the FIOCRUZ here. It has been a year already, and we haven’t managed to move forward. We need someone to spearhead the process. Governor Cid [Cid Ferreira Gomes – at the time, Governor of Ceará] wants to know if you agree to assume the direction of the commission to implement Fiocruz Ceará”. I accepted.

Odorico Monteiro - In 2008, Paulo Buss was the president of Fiocruz and José Gomes Temporão was the Minister of Health. I provoked him by stating that it was about time someone coordinated the Fiocruz Ceará implantation group. I said to him: “look, this individual must dialogue with universities, the spheres of government, and society at large”. So, he said: “do you have a name for me?” To which I replied: “Carlile Lavor. If you authorize me, I shall make the invitation”. He authorized it. He suggested organizing a meeting at the Abolition Palace to introduce Carlile. That was when I handed the invitation to you, and you accepted.

Odorico Monteiro -When did you internalize the Fiocruz Ceará proposal?

Carlile Lavor - It had been discussed for a year and a half when you made the proposal to me. Decree n° 29.342¹ already made it very clear what Fiocruz was, and two things were absolutely relevant to me. First, a project to improve the industry and wealth of Ceará and the Northeast is the implantation of an industrial hub, bringing job opportunities and improved income to

the population and strengthening Brazil as a technologically autonomous nation. The second reason was Family Health, a strategy I worked on all my life. So, there are two points: one that I knew well and another that I knew nothing of but understood that it was necessary. So, I fully embraced it. I say, look, we have to obey this Decree. I have had this Decree in my hands for twelve years now because it brings an essential direction. You [Odorico and other members of the First State Committee for the implementation of Fiocruz] spent a year and a half discussing, from 2006 to June 2008.

Odorico Monteiro - The most crucial detail was that we had convinced Cid Ferreira Gomes in the campaign [for Governor] about the importance of creating a hub of technological innovation in health; that is, Fiocruz had to be the anchor of that hub. We wanted Fiocruz-CE to be one of the national Family Health reference centers. As for the definition of Biotechnology, we worked with Odorico de Moraes [professor at UFC], and he presented the UFC’s Research and Development Center as a reference center for the drug industry. We also had Abreu Matos in medicinal plant research, so we adopted biotechnology for drug development as a contemporary and supplementary line to the existing lines of research and technological development in Ceará.

Carlile Lavor - The first commission dedicated to implanting the Technological and Industrial Health Hub in Ceará was a challenge, as I had not yet accumulated experience on the subject. However, regarding PHC, it was clear that we would have to train researchers and teachers in this field for developing PHC research in universities, as there was a large amount of research in hospitals, but nothing in the Family Health Strategy (ESF). Then, in the first meeting of the Implementation Committee of Fiocruz-CE, I proposed the creation of postgraduate studies in Family Health. Concerning the industry, I went to talk to the Federation of Industries (FIEC) and with the Development Agency of the State of Ceará (ADECE). During the first public examination, Dr. Paulo Gadelha and I decided to select three researchers for the Family Health research line and three researchers to serve as the basis for the Industrial and Technological Health Hub, specifically researchers in bioinformatics. We also select a public servant for the administrative part. We strengthened both areas

in the following public examinations. Three researchers were critical: you [Odorico], Vanira, and Anya Pimentel. Researchers Sharmênia Nuto, Roberto Wagner, and Ivana Barreto were incorporated by the 2014 public examination. Biotechnology received transfers from other units to Ceará, such as Carla Celedônio and Roberto Nicolete. We also received psychiatrist and researcher Maximiliano Ponte who was transferred from Fiocruz Amazonas. In the first months after assuming the direction of Fiocruz-CE, I dedicated myself to getting to know the national Fiocruz well, and I was captivated by its greatness and its diverse underlying organizations with their lines of research. The roadmap was the goals of Decree N° 29.342, created by Fiocruz. We had to work on these two goals, and I never let go of them. Now, getting to the industry. Well, we are still racking our brains, and, thankfully, you [Odorico] are directly responsible for that, developing this innovation district. When I went to the Federation of Industries, I said, “we will do the industry in Ceará, and I don’t know anything: how do we do it?” I also looked for ADECE, where I met Eduardo Diogo and visited with him an important generic medicine industry in Anápolis. Therefore, he was encouraged to establish the Health Chamber of ADECE and this discussion was necessary for some time. And now it’s up to you [Odorico]: how are we going to develop this innovation district, which is a challenge? We need to connect with innovation networks and investment in health technology.

Odorico Monteiro - Thank you, Carlile. We strive to strengthen Fiocruz-CE’s Chamber of Innovation and Entrepreneurship, although it is not easy in this pandemic context. Continuing the conversation about the implantation of Fiocruz-CE, tell us a bit about the conception of architectural design and construction?

Carlile Lavor - Initially, I tried to get to know the national Fiocruz well to understand what we were going to build here. On each trip, I got to know the people, their different organizations, their objectives and areas of knowledge and technology production, the National School Public Health (ENSP), Biomanguinhos, and Farmanguinhos. I also visited the regional units. Paulo Gadelha has always been an enthusiast for the national expansion of Fiocruz. So, what we built here started very much from the Presidency’s proposals and conceptions (Fiocruz). Gadelha had a spectacular architect, Leonardo Lacerda. So, my only hunch on the project was the

ground floor of the management building. One definition I participated in was that buildings had a library open to any professional. I also insisted on a reception that serves people well and is equipped with an exhibition room for visitors to understand what Fiocruz is. It took me a while to understand Fiocruz because each building has a different organization. Farmanguinhos has nothing to do with IOC (Oswaldo Cruz Institute), INCQS (National Institute for Quality Control in Health), and Bio (The BioManguinhos Institute). Each one has a world of its own. So, I said, I want a place where we call Fiocruz, where people come and know that Fiocruz is here and are well received. With this idea of having the industry in mind, I always thought it was vital for us to have someone who received and guided people along this line. Because if an industrialist came and wanted to know something, there needed to be someone helping him enter Fiocruz, advising on products and patents. So, it was my hunch, and they accepted it. What racked my brain was expropriating the land because it is not easy to expropriate such land. God knows how many times I went to the Prosecutor’s Office to resolve this. This is not easy. People have been living there for a lifetime, and we had to convince them to leave. We talked to the families, and they left the land quietly, without any problem. I saw that the architect was spectacular, and the idea was to hire a local group, which I also really liked and trusted completely. So, my job was to support and select, and the State had to grant us the land to move forward. A verbal agreement was useless, “look, here is the land”: it had to be on paper, assigning to Fiocruz and, from there, proceeding with the licenses to move forward. ADECE (Ceará Development Agency) played an essential role in this process. We considered it vital for Eusébio to recognize the relevance of Fiocruz project to the municipality and help supply electric power, water, sewage, and other utilities. That was my painstaking work in this project, and I closely monitored each step. We have also always maintained a good relationship with the Government of Ceará to support the implementation of Fiocruz, nurturing a relationship with the national Fiocruz. The only Governor who went to the induction ceremony of President Paulo Gadelha was Cid Gomes, and then, the only Governor who went to the induction ceremony of President Nísia Trindade was Camilo Santana. Last year, the resources we received to equip Fiocruz-CE’s research building were from Governor Camilo Santana and the

federal bench of Ceará, who secured funds from the federal budget. Another significant action was always to maintain a good relationship with the deans of the universities in Ceará.

Odorico Monteiro - The deans participated in all meetings before, and this was very important. That is, Ceará has five RENASF centers, and this is an important asset.

Carlile Lavor - The Vale do Acaraú University (UVA) even elected me as an honorary doctor, and now Regional University of Cariri (URCA). So, they recognize me as someone who helped build RENASF and integrate Fiocruz with universities in Ceará. Today, our Biotechnology and Bioinformatics researchers are participating in doctoral courses at the Federal University of Ceará (UFC) and State University of Ceará (UECE), working with the Federal Institute of Ceará (IFCE). So, Carla and Gilvan participate in doctoral courses at other institutions because they have additional research. The University of Fortaleza (UNIFOR) help was crucial, and all universities contributed to the implementation of Fiocruz-CE. URCA and UVA supported the RENASF classes. It is all too important to train four hundred masters in Family Health. We only achieved this result by working in a network with the institutions underlying the RENASF.

Odorico Monteiro - This is a big asset, Carlile. Unfortunately, we are experiencing a certain numbness due to the pandemic. However, activating these masters and doctors will be a fantastic thing.

Ivana Barreto – Carlile, bringing our interview to the current context, how do you see the action of the ESF and the ACS in facing this calamity in this pandemic moment? What is it, and what could it be?

Carlile Lavor - I think that the State Health Secretariat has focused a lot on expanding hospital and ICU beds and hardly worked coping with the pandemic with the Family Health teams. Now we are starting here with the Municipal Health Secretariats of Eusébio, Itaitinga, Aquiraz, and Tauá an institutional support project in which we are reorienting the work of the ESF, and particularly, the health worker in coping with COVID-19. So, you identified the first symptom, diagnosed COVID, how to organize the family and the home, take care of this patient,

and prevent transmission at home and outside the home. An individual who is feeling nothing or having few symptoms must be monitored to ensure isolation. This is the first experience in which you, Odorico, and Vanira are already participating in this story of establishing routines so that the ESF can guide home isolation because teams still do not know how to proceed. We managed a grand maternal and child program in the past because I had accumulated experience in child health at the University of Brasília, and we had an essential group of pediatricians with a public health vision at the Albert Sabin Children's Hospital, spearheaded by Dr. Anamaria Cavalcante, who participated intensively in the process. This group managed to create protocols for the care of children in PHC, shared with health workers. We need to understand that the ACS are not graduated, and it is up to the health team to create continuing education strategies to help solve problems.

Ivana Barreto – Talking about setting up the Family Health Team, when both the doctor and more nurses came. We had a proportion of one nurse for every twenty health workers. With the Family Health Strategy, the ratio was one nurse for six, even ten health workers, plus a doctor working together. How did the implementation of the Family Health team affect the ACS work and the PHC?

Carlile Lavor – The beginning was excellent because the State Health Secretariat coordinated the implementation of the ESF. We had Quixadá, Jucás, Beberibe, and Iguatu to deploy in each city. Inês [Amaral] was the one who assumed this coordination, guiding what doctor and nurse had to do. There was only one nurse, and we started to have three or four, but within the ACS program. Thus, Family Health was implemented with the coordination of the State: it was great, excellent. Suddenly, the State coordination of the ESF disappeared. Each municipality invented its program. You [Odorico and Ivana] were very concerned with Quixadá and then with Sobral. It was crucial because you set an example of how to do it, but things were loose in the rest of the State. The ACS and ESF program disappeared after Inês left because it was only a Municipal Health Secretariat program. Of course, any good secretary would go there to learn from Sobral, Beberibe, or Iguatu and Jucás. So, we were showing it. However, Ceará has 184 municipalities. The administration of Jurandi [Fruoso, former

Health Secretary of Ceará] focused on the School [School of Public Health of Ceará], with the ACS Technical Course. The program got a big boost, but not as a Secretariat. Then it was over, both the ACS and ESF programs died out at the State Secretariat.

Ivana Barreto – I think that the ESF and ACS can now play a fundamental role in the pandemic. However, they need to understand the transmission of the disease, the incubation period, the quarantine needs, the transmission period, the tests; that is to say, they need to master this to operate, as Josete [Tavares, Secretary of Health of Eusébio] is doing at Eusébio.

Carlile Lavor – It is vital to document scientifically how it is done. Because if you asked me today how you do the isolation in a small house with six people, I can't say. Hence the need for research. That is why we are here with six master's students, researchers, and other people, studying how we can isolate. Patrícia [Aguiar, mayor of Tauá] has already thought of renting a house or hotel in Tauá. We have to observe the reality in each municipality. If you asked me today how I knew that oral serum was necessary, vaccine was important, monitoring children not to get malnourished was critical, I would explain, but I do not know how to isolate in the life situation of our vulnerable communities. That is why I see research as a way of learning and guiding the State Secretariat – showing with data that we managed to reduce the number of cases in such a municipality while we started to isolate. This Family Health line of research we started at Fiocruz-CE must now meet an urgent need: the pandemic. Family Health and Fiocruz researchers cannot ignore this topic. So, the lab people are working on the research, but what about Family Health? What is the role of this line of research in the pandemic? Strengthening this research group to see how it learns to do isolation will be helpful in this disease and others that will emerge.

Vanira Pessoa – People have been talking a lot about the post-pandemic world. However, I still don't see it. I see the present: many people dying, with PHC disregarded by the Health System. How will we get PHC into care and actions, promotion, prevention, and pandemic management?

Carlile Lavor – We have to learn. That is what I am asking you [researchers] together with the municipalities. You have the methodology, and they have the labor. Now, what are the methods for learning how to do this? We have to provide them with scientific techniques: how to do scientific work, collect and analyze data, and submit the research for the ethics committee's approval. They have to learn to be scientists because that is the idea: the family health worker should be a scientist and contribute to innovation. So, you have to help them train these innovators. How do I convince someone to wash his hands, for I don't know how many times a day? This is important because he has never seen a virus. How will he believe that this bug is going out of his nose and going to the other? Five people had contact with an infected person, and only one became ill. How am I going to explain this transmission? It is difficult for someone to understand. Wasn't it because that someone didn't pray properly? If it were measles, it would be easier to understand because it passed from one to the other, and everyone in the house got cholera. Here [the COVID-19 pandemic], some get the disease, and others don't. That is why I am insisting that you teach these people to do the research. They should understand how to guide a family to isolate and how health workers work with it. Health workers knew how to talk. I don't know how their conversation skills are doing today. We need to convince the secretaries, doctors, and the Governor: everyone. For now, we only talk about isolation, ICU, and hospital beds. I don't see anyone talking about how it is and how they visit the people's homes to guide them. The ESF is fundamental in this work.

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