CDC Ebola Response Oral History Project

The Reminiscences of

Mohamed A. Vandi

David J. Sencer CDC Museum

Centers for Disease Control and Prevention

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Mohamed A. Vandi

Interviewed by Samuel Robson and Daniel Martin
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Interview 1 of 1

CDC Ebola Response Oral History Project

Q: This is Sam Robson. It is March 24th, 2017, and I have the pleasure of being joined by Dr. Mohamed Alex Vandi today at his office in the DHMT [District Health Management Team] in Kenema, Sierra Leone. I'm interviewing Dr. Vandi today for our CDC [United States Centers for Disease Control and Prevention] Ebola Response Oral History Project. Thank you so much, Dr. Vandi, for agreeing to do this interview.

Vandi: You're welcome.

Q: Can I ask first, would you mind just stating, "my name is," and then just saying your full name?

Vandi: My name is Dr. Mohamed Alex Vandi.

Q: Perfect. What is your current position?

Vandi: I'm currently the district medical officer for Kenema District.

Q: If you were to describe to someone in just a few sentences, two to three sentences, your role in responding to Ebola, what would you say?

Vandi: My role in responding to Ebola was coordination and community engagement, community sensitization and engagement.

Q: Thank you very much.

Vandi: And of course surveillance. Coordinating surveillance and treatment.

Q: Perfect. Can you tell me when and where you were born?

Vandi: I was born in 1969, October 24th, in Kailahun, the neighboring district.

Q: Did you grow up in Kailahun?

Vandi: Yes, I grew up in Kailahun, attended primary and secondary school in Kailahun, and later on moved to Freetown. Moved to Bo. I did my sixth form in Bo. I then moved to Freetown, attended university, first year at the University of Sierra Leone, Fourah Bay College. Later on, I got a scholarship to study medicine. So I left for Russia. That was 1991, around ’91, 1990-1991 academic year.

Q: What inspired you to go study medicine?

Vandi: I'd always been interested in doing medicine. We had role models around when we went to school. I'd admire doctors who wore a stethoscope on their chest, running here and there to save lives, surgery, I was very interested in surgery. That's what I wanted to do in medicine. I went to Fourah Bay College because I didn't have the opportunity to go straight to medical school, so I was looking for the opportunity. Once I got it, once I grabbed it, I left, I abandoned my courses I was doing at Fourah Bay College. I was really [unclear], biology, chemistry, and mathematics, and I left.

Q: What took you to Russia?

Vandi: It was a scholarship, government scholarship. I got a government scholarship to study medicine in Russia.

Q: Can you tell me about what it was like attending school in Russia?

Vandi: It was very challenging. In the first place, we arrived in Russia in winter, and I'd never seen winter before. [laughter] In fact, we started getting a taste of it at the airport. It started snowing. Other countries had arrived earlier, they arrived in summer. Sierra Leone was a bit late, we came late. It had just started snowing. From the airport to the hotel, it was terrible for all of us. [laughs] Russia, it was very difficult because of the language. The course was in Russian throughout, so the first three months of the course is intensive Russian language, and after that, you have to do revision of your sixth-form

course in mathematics, chemistry, biology, physics, you have to do a revision of all that. Latin, because most of the medical terminology in Latin is similar in Russia, you have to learn the terminology in Russian as well because lectures were in Russian. Examinations, you write your exams in Russian. You are compelled to know the Russian language.

Q: And then you just have to study med [medical] school, which is so easy as everyone knows. [laughing]

Vandi: Oh yes. Two troubles. You are studying something very difficult in a foreign language. Two troubles.

Q: Did you during your time in medical school start to gravitate toward one field of medicine?

Vandi: Oh yes. In fact, in Russia, we were by then, before the break of the Soviet Union, we were taken to Kazakhstan, Kazakhstan in Central Asia. That's where we did our language course the first year, in Kazakhstan. After that, the medical college proper, we moved back to Russia to Kalini. There is a town between Moscow and Leningrad, it's like a one-hour drive by train, fast train. That's the university where I studied. Tver Medical Academy. That's what they call it, Tver State Medical Academy, that's where I studied. Of course, during the training, one field I was really interested in was ophthalmology. I was really fascinated by ophthalmology, particularly the professor who was lecturing us about ophthalmology was very interesting, and it interested me that the

eye is the smallest organ to study but it's very complex. Very complex and very interesting. I was really attracted to it. But that was at the beginning of the training. As we moved towards fifth year, final year, I started getting interested in general surgery, and looking at my background, where I was coming from most of, I would be of immense help if I knew general surgery. So I started gravitating towards surgery.

Q: That means that you always knew that you were going to come back.

Vandi: Oh yes. I had been going for holidays to England, we'd go by train from Poland, Belarus, and from Belarus to Germany, Holland to England, and I was there for six months after completion, when the war was here. But I always knew I would come back. I'm not going to spend several years in cold Russia and then go back to England. [laughter] No, no, no. I always wanted to come back.

Q: What happened when you got back?

Vandi: Very interesting. The war was here, the resourced region, the rebel war we had here. I escaped to England for six months, hoping that by the time I graduated, the war would have ended. When I graduated, the war was still on, and I decided to come. I came to Freetown. One week after my arrival, the rebels invaded Freetown. I escaped the ten-year war, but it caught up with me right on my arrival. [laughter] It was very interesting.

Q: What was Freetown like then? What happened?

Vandi: It was, I don't know how to describe it. I had not seen the war. That was the first time I saw the rebels in Freetown with weapons all over the place, shooting indiscriminately. RPGs [rocket-propelled grenades], all sort of weapons they had with them. Dead bodies on the streets when the ECOMOG [Economic Community of West African States Monitoring Group] went to flush them out. It's not good to see that scene. Dead bodies on the street all over. Smelly. Oh, it wasn't pleasant at all. It wasn't pleasant at all.

Q: As a doctor who had specialized in general surgery, did some of those injuries become part of your work?

Vandi: Oh yes. The hospital was overfull with injuries. Gunshot wounds, machete wounds, they were hacking people's hands, limbs off. Brought them to the hospital. We were working around the clock. Even with that, they were threatening some doctors, they were even abducted doctors to work along with them. Because if you say you're a doctor, they won't kill you; they will take you along so you can heal their wounded combatants. At times they come, you disguise, you deny you're not a doctor because if they know you're a doctor, they will abduct you. They won't kill you, but they will abduct you. If you refuse, then maybe something else will happen.

Q: So what happened then?

Vandi: Gracefully, we went through that. At the end of it, I was posted to Kono [District]. I spent four years in Kono in the theater. As I said, I was interested in surgery. Four years in Kono. Kono is in the eastern part of Sierra Leone. That was a devastated district because of the mines. Almost every structure in that town was destroyed. Every structure, including the hospital. I was there for four years, up to 2007. I went in 2003, the end of 2003, and I left in 2007. That's when I was transferred to Bo, to Bo Government Hospital to head the surgical department. I spent three years in Bo in the Bo Government Hospital, being in charge of theater. After that I was posted to Koinadugu [District]. I went to Koinadugu for two years, by then I was alone. In fact, the only doctor in the district had left four months before my arrival, so I was the only doctor in the district. When I went there, I went as a district medical officer, that was my first posting in public health. I went there as district medical officer in Koinadugu at the same time as medical superintendent, because I was the only doctor in the district. I was doing the surgery and doing coordination, meetings and everything. So, Koinadugu two years. That's where we launched the free health care, I was there, free health care when the president went. Took him around the hospital, showed him around, and put forward all the problems and constraints the district had. After that, I got a scholarship to go to Ghana. That's when I went to Ghana to read public health at the University of Ghana, Legon. Spent one year there and came back [home. I was posted to Pujehun District.]

[interruption]

Q: What was it like—it sounds like your first surgical experience in the field in Sierra Leone was in Freetown, right?

Vandi: Yes, but when you train, you come back, you want to go in the service. You have to go through what we call "apprenticeship." You have to do house jobs, housemanship. The house job is rotational. You do three months in every department, major department. The major department here refers to internal medicine. You do three months internal medicine, three months in surgery, three months in pediatrics, and three months in obs and gyns [obstetrics and gynecology]. That's what they do. That is one year. After that, you are registered as a medical officer. Then you do post-registration. With post registration, you have to choose your area of interest. If you're interested in internal medicine, you go there for another six months. You sit through there for another six months or one year. That's where you stay and you grow up now. If you're interested in surgery, you go to the surgery department and you're there for six months until you are good to go. "Good to go" in a sense that you can now go on your own and practice health, particularly in the provinces. And the provinces here, our situation is different. If you cannot operate, you cannot go to the provinces because the perception of our people is when they say "a doctor," a doctor must operate. If you don't know how to operate, if you can't do surgery, then they don't consider you as a doctor. You need to know that because you will be the only person in the district, so you need to know everything.

Q: My question was going to be, how were things different in the districts, and you just answered that without me having to ask, [laughter] so thank you. You mentioned you transferred to Pujehun. Where did you go from there?

Vandi: From Pujehun I came to Kenema. I spent two years in Pujehun. I came to Kenema, and that's where the story starts. In Kenema, I arrived here, and within less than two weeks—in less than two weeks we had the outbreak. But I don't even know the staff I'm working with. I don't know them by name. Most of them I don't know by name. I have just come to the district, and we had a major outbreak. The outbreak was in Kailahun, the neighboring district. But we started the response, organized response. Because we have Lassa fever here, the Lassa project, the Tulane Lassa project is here. They have some sort of organized surveillance team. They have a laboratory, and they have the field officers who go out to do community engagement whenever they have a Lassa case. They go there to engage the community. So they have a structure. That was the only structure in the country that could handle Lassa, something that is very similar to Ebola. That was one advantage.

When the outbreak caught on in Kailahun, the team was leaving here on a daily basis to go there to do surveillance, to investigate cases, to isolate cases, and to even affect burial. All trainings of health workers were done here because we had, as I said, the foundation for viral hemorrhagic fever because the lab is here, they have the staff, my late colleague Dr. [Sheik Humarr] Khan. Khan was the one who was leading the training because he's a physician and also a specialist in VHF [viral hemorrhagic fever]. He was leading the

Lassa unit. Himself, myself, and a few others were sort of organizing. This office was the war cabinet, if I can say so. And that's why you see those handles peeled off; that is a result of chlorine. We used to spray this room, and I would do it myself. I didn't allow office assistants to do it. My chair I sit on, everywhere. Why we were doing that, because up to five of our colleagues who were coming to attend meetings here, were having briefings, died of Ebola. Contracted the virus and died. Some of them were sitting there, and some would be sitting here in meetings. Maybe after a day or two, you didn't see them. You saw, that person is down, tests positive, and is gone. After a week, they are gone. So I was spraying myself, even the door, even the wall. In and out, I would spray everywhere. That's why you see those seats like that. I would spray everywhere with chlorine because we were very scared.

We could meet four or five times a day here, brief the press, Freetown was also interested, the Ministry [of Health and Sanitation], the minister [Abu Bakar Fofanah] would call, the CMO [chief medical officer, Bernice Dahn] would call. Dr. [Amara] Jambai, director of DPC [Directorate of Disease Prevention and Control]. Everybody would be calling. They kept calling a hundred times a day to know what was happening. We were very, very busy. Kailahun, we were organizing troops to Kailahun. Training, surveillance, burial, case investigation. We were doing all of that for them at the beginning because they didn't have the structure, they were not prepared at all.

Within that, I think the next question you asked is, how did you do it in Kenema that was different? Back then, we didn't have resources. There were no resources. The

government was not prepared. WHO [World Health Organization] was also sitting on the fence, let's wait and see, because we were not getting any clear-cut instructions on SOP [standard operating procedure] as to what to do. We designed our response on our own. We designed it as we went along. Of course, we perfected it as we went along, but there were mistakes from the beginning because we didn't have the know-how. We didn't have the experience, we didn't have the resources to afford, for example, the IPC [infection prevention and control], the IPC comfort, we didn't have that. That's how we started.

Q: Simply because you did not have the gloves, and the equipment, and that kind of thing?

Vandi: No, we didn't have the equipment. We didn't have the money. We had the staff that had limited experience with Lassa. Of course, with Lassa and Ebola, they are in the same family but Ebola is more virulent than Lassa. The IPC is slightly different. Not slight, very different from Lassa. That's where we had a problem. We didn't have the resources. We started with resources from Tulane University because they had a minimal budget for—because we never got more than fifteen Lassa cases at one go. We never got that. The budget they had was never more than fifteen patients at a go, so it was limited. That was what we were using to pay staff, burial teams, grave diggers, ETC [Ebola treatment center] staff, those who were there, cleaners, porters. That money got exhausted in six weeks. There were no more resources, and that was the first time the Ministry came in. We requested that look, Tulane is exhausted. We are being overwhelmed.

The cases were coming from Kailahun. By then it was only from Kailahun. It was coming from this end. We were not getting cases from Freetown or other districts, it was only Kailahun. But Kenema had not registered any positive case yet. All the cases admitted here were from Kailahun. They were brought here from Kailahun. The first case we diagnosed on our soil where the sample was collected—because samples were coming, being tested in the lab [laboratory]. But the one we collected here, we suspected and collected here, was a young lady who miraculously survived. She came in with an incomplete abortion, was admitted at the maternity ward, the ward opposite here. She was admitted for over ten days in the ward. She was taken to theater for D&C [dilation and curettage]. The doctor who performed the procedure, all of them were quarantined when we realized she was positive. What happened, the bleeding could not stop. We had the IV [intravenous] line, the [unclear] got removed. Either by accident or so, it got removed. They wanted to reset it, but the blood was not clotting. That rang the bell and informed late Dr. Khan. Khan was the physician going around, doing rounds. He came over to assess the patient and straight away, he suspected that this was a Lassa case. The case was transferred to a Lassa ward, not as an Ebola suspect, but as a Lassa suspect. But we tested for both since we had the epidemic already in the neighboring district, and this patient was from that district, was from Kailahun, the patient was from Kailahun. But she came here on her own, she was not referred, and she got admitted straight to the ward. The test was done and it came out to be positive for Ebola. That was how we got the first case here. All the staff that were on duty, both clinical and support staff were all quarantined for twenty-one days, including the doctor who performed the surgery, the procedure. After she [the doctor] successfully went through the quarantine, I think she

spent less than a week, and she had a young baby, I think a one-year or two-year-old son with her, and there was nobody to take care of her baby, and she was very, very terrified. She grabbed her baby and fled. After that, she didn't return. She never returned to Kenema. The doctor fled. She left, she didn't come again. That's how we started getting the cases. That was the first case where it started here. Fortunately, even though the IPC was not that effective, none of the hospital staff, the clinical staff that actually came in touch with this patient, got infected. That was miraculous. None of them. We quarantined all of them for twenty-one days, none of them became infected.

From there, we started getting cases. What brought the cases to Kenema is people were moving from Kailahun, and the first stop would be Kenema. There was one health worker, the first health worker that was infected from Koindu. I'm sure you've heard of Koindu?

Q: Yes.

Vandi: From Koindu. They brought this nurse from Koindu in a truck, and the truck did not stop in Kailahun but went straight to Pendembu. And that's why initially, the Kailahun town itself, they didn't get the virus, the virus came to Pendembu, to Daru, and back to Kailahun. Because the first case went straight to Daru. In Daru, this health care worker fell ill, seriously ill, and because of tradition, she died and her friends and—no, before even she died, her friends came around to establish an IV line, to nurse, to sympathize. In the process, all of them got infected. She died and because of tradition,

they had to traditionally wash the body and bury traditionally. All those who were involved got infected. That's how it got spread. Daru was very serious. That's why Kenema got our own cases. Because of this, almost all the health care workers would think that Daru access, all of them got infected and died. So people lost confidence in the health facility. They would no longer go to the health facility, they would run away, and they came to Kenema. And the thing is, most families in Daru had relatives here in Kenema, who had settled here in Kenema. When they came, they didn't go to hotels, they didn't go to guest houses, they went to stay with their relatives. And when they fell sick, they were not going to the hospital. They were not going to the hospital, they asked nurses who were neighbors or maybe around their area and asked them to go and treat them in their homes. That's how things started spreading in Kenema. It was terrible. It was terrible. By then, we started getting expatriates. WHO was sending people. CDC would send, Public Health England, Metabiota was here. In fact, it was Metabiota who brought a field epidemiologist from Uganda, Dr. Monica [M. Masanza]. Chris was there. I don't know whether you know Chris, is it Chris what? He worked for WHO. Chris, that is the first name I can remember. Chris was here first, he was the first epidemiologist on the ground. After three weeks or so, he left. The others, they were coming for three weeks intermittently, they came and went, came and went, came and went. The one that came for a longer period was Monica. Dr. Monica was brought in by Metabiota as a field epidemiologist. She was the one actually who pioneered, or who gave us the confidence that we could fight this fight even without resources. If we were going to wait for resources, we would never fight it. She had fought Ebola in her country, Uganda. She's a veteran Ebola expert in Uganda. She could go to every household. She was a household

name here. In every community where Ebola cases were picked up, they knew Monica. Monica had been there. So that was one.

But before we get to Monica, why did Ebola stuff start getting serious? As I said, I was just three weeks old in the district. I had met the mayor for introductions for the first time as the new DMO [district medical officer] in the district. That was the first time I met him. The second time I met him, that was the outbreak. I went to him and I said, "Some of our resources are channeled through the councils," and we had raised what we called "pet" forms. That is the procedure to access funds from the council. You need to fill out certain forms to indicate what activity you want to carry out, whether that activity is budgeted for in the annual budget, whether money is available for it. You need to go through that procedure. We had submitted our activity budget to the council, but then there were some delays. Two or three signatories were not there. There had been major changes of core staff at the council. That delay getting access to the fund—by the time all those signatures were in the post, now the outbreak was out. So we had to cancel all the activities we had planned to do. I went to him and I said, "Ebola is here and we are the only treatment center, we have the only laboratory. We have to prepare. The Lassa ward is just like a fifteen-bed capacity. We are going to be overwhelmed if we don't move now." He asked me, "What do you want us to do?" I said, "We have to start to put up a tent, we have to be in a tent on our own." "Where are we going to get the money from?" "All the activities we had planned to do before, forget about them. Let's concentrate on this. This is the issue now at hand." And they agreed, if someone on the procedure says if you want to deviate from your project, you need to summon the counselor. The counselor

has to meet and agree, just like your [US] Senate or whatever. They have to agree, okay yes, although this is what you had planned to do, because of the prevailing circumstances, we agree for you to use this fund instead of this. So they met that same day. They summoned all of them, they met the same day, and they agreed. We started to put up the tent. We thought we only wanted—and they said no. A station of ten beds. Before the construction could complete, the walls were already overfull with patients lying on the floor, there was nowhere. So we decided to dismantle that and extend the tent. But if we extended the tent, the money from the council, the council said it would not be enough. We had to go to the district council. But the district council—I didn't have a problem with the district council because the chairman is a medical officer himself; he was a DMO and he knows the stuff. It was easy for me to communicate with him. My thought was maybe I would get the difficulty with the mayor, since he's not a medical person, and since I'm a new man, I'm just two weeks in the district, telling him to abandon what we had planned to do this. I told him, and we argued. And he did it. That's where I always said that he was—actually, I've mentioned this in every given opportunity. If I'm making the speech or if I'm making a presentation, I've mentioned this. Even in the presence of His Excellency the President. When he came here, I told him that. I was really moved through that because I was expecting, as usual, I was expecting him to have a series of questions. "Why do you want to do this? Why do you want to do that?" But the moment I said, "Ebola is here, we have to do this," he said, "Okay, what do you want to do? We only need to follow the procedure. Only procedure must be followed." I agreed. Some of his counselors agreed, they met, they had the meeting to the effect that they gave permission for us to use the money. We started that, and there was very good

collaboration between us, the DHMT, and the districts stuck with us, the politicians. I said, that is the major difference between here and other parts of the district, of the country. They allowed us to make a decision. They were only there to give us support, because Ebola is like—you have to deal with the community. You have to deal with movement of people. You have to deal with compliance. So you need to talk to people who people can listen to. The paramount chiefs, the sub-chiefs, the counselors. You need to be very close to these guys because they can talk to the people and they understand. Because we found it very difficult to convince them that this is Ebola, it's an outbreak, and it's serious. Very difficult to convince. Even the so-called educated elites around, they were the ones in fact making sarcastic remarks that it is not Ebola, because the money, the resources for HIV [human immunodeficiency virus] have dwindled, now we are looking for somewhere else to spend money, so we are making up all of these things, we are making it up, it's not real. Until and unless two staff, key staff got infected and died. That was the turning point. The head of the ETC, that was the Ebola treatment center, the nurse who was there happened also to be the training coordinator for the maternal and child health school, training school here. Almost all the staff in the district, they knew her, she was the coordinator. She was head of that. She got infected and died. Dr. Khan, who was the overall—the whole country, who was the specialist in VHF, also got infected and died. That was a time actually we were able to convince them, finally. All those who were sitting on the fence, that was when they really realized that this was serious. Even with that, we had some people insisting that we were lying. We brought an empty casket here, empty coffin, [unclear] America, someone in America was lying. A few of them were still saying that, but the majority now really believed that Ebola was

here, it was real, and it was here, and if they didn't comply, we were telling them everybody may die, because they were seeing now the number of cases we were reporting on a daily basis. The entire hospital was used as an ETC. We only started with the Lassa ward, which had a fifteen-bed capacity. That was full. We went to the annex building, we went to the main ward, surgical ward, the whole hospital became—except maternity and peds [pediatrics] ward. But the rest of the hospital became an ETC. That's how we started.

The surveillance of course, I mentioned Dr. Monica. Monica was the one who actually—we've had so many epidemiologists that came and went. I go outside usually and say a very good amount of them were desktop epidemiologists. They didn't go to the field, they were just glued to their computers, checking data and communicating with their computer, taking pictures, communicating with whoever was funding them, the funding agency. They would not go to the field. Very few of them went into the field, very few of them, like—we had Prof [Professor] Andy [Andrew Ramsay]. Prof Andy was working for the WHO TDR. Tuberculosis something something training and research [Special Programme for Research and Training in Tropical Diseases]. He's based in Geneva. He's an old man, Scottish, I think Scottish. He's a Scottish man. He met Monica here, he was another one. Very influential. He could go to every corner. Wherever there was Ebola, he would go there. Monica and this guy. It was very interesting. Here was Monica, who was brought by Metabiota. Metabiota had been in research with Tulane on Lassa here. This lady came and because of her background, because she had fought Ebola before in Uganda, and because the setup was very similar to ours, she was very quick to pick up

what to do and what not to do for us to fight this. She was giving us the inspiration, she was giving the confidence that, look, you guys, if you organize—give me some guys, let me train them, we can do this, we can do that. And fortunately, the entire DHMT, all the DHMT, those who were nutrition-focused persons, malaria-focused persons, all of them were handed over to her to train them as surveillance officers. All of them were not surveillance officers, they went out to do surveillance. This did not go down well with some people from WHO's part. There was one Philippe Barboza who was the field coordinator here. He became jealous, or I don't know. He could not withstand seeing Monica making presentations in our stakeholders meeting, and were meeting every day. We'd met over eight months, even Saturdays and Sundays. They stuck with that. Everybody, including the resident minister, the paramount chief, the counselors, everybody was meeting. In that meeting, when he was making presentations, he would make fun of her, like "Monica is not doing anything." He even wanted us to ask Monica out [to leave]. I said, "Oh? Why?" "Monica is—" I said, "No, no, no, you have been here before Monica, we've seen epidemiologists come and go. We were not seeing any light at the end of the tunnel. She is here, she started doing something, we are starting to see results. Why do you want us to ask her out?" We said no. He was not happy with that. He did not stop at that. They went on to Monica's contract source, prematurely terminated with Metabiota. And they asked Monica to back out in twenty-four hours, to go back to Uganda. The role she started playing, we were seeing light at the end of the tunnel. Our staff, everybody was getting confidence now to go out to the field to do surveillance and pick up the cases because we wanted to break the transmission chain. You can't break the transmission chain if your surveillance is not good. So we said no, she's not going. I took

her to the resident minister, myself and the mayor and the district council chairman. I said, "This woman is not going, this woman is the pillar here. If we let this woman go, we are not going to fight this Ebola effectively. Let her stay with no contract that they can remove from her." Luckily, the resident minister has a hotel, he's running a hotel here. We took her there and gave her a room and said, "Provide any food to this woman, whatever she wants to eat here in this hotel is free. And give her a vehicle and a driver who can go everywhere." That's how it stood. [laughs] It was a serious battle. We finally won that, and later on, she was recruited by WHO. The WHO that was asking her out, she was recruited by WHO. Currently, she is living in Makeni, she is now in Makeni as the field coordinator. She's been there for three or four months now. She was actually the hero to give us the inspiration, give us the guidance, and do the initial training.

But for the transmission chain, breaking the chain, you have to have a very good surveillance system. You have to have people who understand the community, and also the community engagement. Before Ebola got to Kenema, we had the win in Kailahun. I visited every chiefdom's headquarters town with a PowerPoint presentation. Myself, the district council chairman, all those people I think they are in [unclear] to those communities. I would make sure the paramount chief was in attendance, all of them in the burial, they were there. I would do a PowerPoint presentation. At that time, we were only concentrating on burial methods and prevention, how we can contract Ebola from bush meat, from contact with the bush. That's how we started, because the material we were using, the messages we were using, were just like cut-and-paste from East Africa. Because we had never seen it before, we didn't have any social mobilization messages on

our own. We were just borrowing what they used to say in Uganda—even the pictures were the same. That's the picture we were showing them. Except after some time, we realized that some of them were not true, or some of them were not applicable to our setting. So we started modifying them. Even the burial method, the quarantine and the like. We started changing them to suit our situation.

Q: What kinds of things were inapplicable, and that you changed?

Vandi: We were saying, bush meat, everybody should stop eating bush meat. And throughout the response, we didn't see anybody who got infected by eating bush meat. We were looking for bleeding. When you have fever, diarrhea and bleeding, and when you say bleeding—because the community we have—this is an endemic area for malaria. We have Lassa fever, we have typhoid fever, we have a lot of viral illnesses around. Most of them mimic that of Ebola. The only addition to it is when you say bleeding. And we didn't see the bleeding. The bleeding is at the tail end, when the person is about to die. We didn't see that bleeding. Most of the cases we saw here were severe diarrhea, dehydration. They died of dehydration rather than hemorrhage. So in the middle of it, we had to change our message because people were hiding the way—in fact, they were denying—when you say, "You are an Ebola patient," they would say, "No, you said bleeding, but I'm not bleeding." So we were forced to change the message. Also, what we did with the eating of bush meat and the like, we didn't see any cases that were a result of bush meat. It was mostly nursing relatives that were ill and burial. This was where we were getting the infection from. So we went around the district, doing

PowerPoint presentations, showing them, allowing them to ask questions. We spent three hours in every chiefdom. In a meeting, town-hall meeting where you had up to five to six hundred people in attendance, you'd make a presentation, maybe one hour, mostly pictorial, with some commentary, and you allowed them to ask questions. Allow them to ask any crazy question, because this is something new. I wanted their cooperation, wanted to pick them out, wanted to isolate cases, wanted them not to nurse their loved ones; when they fall sick, either you call the health care worker or ask them to go to the facility. If they die, don't touch them. This is the message we were going around to give them. It worked out well here, as compared to other parts of the country. In fact, some authorities, local authorities, including paramount chiefs, were contributing out of their pocket. They were contributing money, they were contributing materials to fight Ebola. We were going on air and we were saying, look, we don't have money to fight this, the government is not prepared yet. We are not waiting for international—by then, the [international community] was still not decisive, what to do. They had not come yet. They were still not decisive on what to do.

We realized a lot of things here, like for example, when we started doing quarantine, we got a list from Freetown that WFP [World Food Programme] should supply so-so quantity of foodstuffs to each household that is quarantined. But when we looked at it, we thought this was not sufficient because if you want to quarantine somebody and prevent him or her from moving for twenty-one days, you have to make sure you provide everything that he or she needs. Otherwise, they'll be tempted to move out. They will be tempted to move out. We looked at this and said, "This is not enough." They said, "Okay,

add this, add this." Even water, we didn't want them to fetch water at the common well, we didn't want them to go and fetch water at the pump where the other people—other neighbors were there. So we said, "We need to get water tanks or storage tanks for quarantined homes." We didn't have it at that time. We just said it in a meeting like that, a roundtable meeting. Look, this is what we need. The resident minister was the first person, he paid two million out of his pocket to buy one, followed by the district council chairman, followed by the mayor, other people, those seated on the table, they started contributing because we didn't have resources. The news went around. Even students, old people, business people started contributing. Some people were coming with rice, some were coming with milk, some were coming with used clothing. We were able to mobilize a lot of items for this purpose because the people were committed. They were not wanting to be bribed, they were not wanting to be given money to. Instead they were paying, they were contributing. We had volunteers who were contributing cash. Some were giving food, some were giving animals, live animals for the response. Some partners were paying for air time. We had partners who were paying—CRS [Catholic Relief Services] paid for sixty days consecutively, we had air time for sixty days. We could go on air every day, every day we were on the air for one hour, every day, [unclear] program, for sixty days. It was paid for by that. We didn't have resources. By the time the resources came, we were already through the epidemic. The virus had already entered the city and was going to the north. When the resources came, the attention was paid—of course, the resources were following the virus. We were told, you don't have the virus now, so we are going to where the virus is.

That is how we fought it, but by the time it was there by August, September, we're already down. In fact, we only had a few spillovers. Otherwise, we would have been the first district to be declared Ebola-free. We got three spillovers, one from Monrovia, from Liberia, came through—we border with Liberia. Came through and infected somebody in Perry, and we got a lot of infections there. We got a case from Kailahun that escaped. That case was a positive case. They called for an ambulance, the ambulance was on its way to go and pick up the patient, and he escaped. They came through Kenema here somewhere, and that was another spot. Those are the two, and another case came from Freetown, fled to Kenema here. Those are the three areas that actually kept us with the virus up to December, January, and February. Otherwise, we would have addressed—effectively controlled the epidemic here by November, October/November. We would have been the first district to do that. The cooperation was there. I enjoyed working with the community, the stakeholders. The stakeholders were fully supportive. But me, by then there were enough resources to fight over because if it was the other way around, we were contributing. They were contributing instead. They were attending meetings, we were not asking for refreshment for the meeting. They were not asking for [unclear], they were not asking for fear to attend meetings. They attended meetings for six months consecutively. No professional was prepared, and we had to be there by eight o'clock. If you came one minute after eight, you were not allowed to enter. Even the resident minister. We were very strict about that. We were very strict about that. So everybody complied. When it got outside of Kenema, the picture changed. When the resources were there and the DERC came in, and that was the sad part of it. The DERC came in, they brought in the DERC, the [District] Ebola Response Center. We had a NERC [National

Ebola Response Center] in Freetown and a DERC at the district level. Fortunately, the coordinator here was very reasonable because he was here, he had seen all that we had done. When he was appointed, he came over to me and said, "I know you have done everything, we just want to work with you. We are not going to set a parallel system. We want to work with you. Please, let's work together." That's why we didn't go down like other districts. The other districts, when the DERC came, they said, "We are the new boss, so all of you have to do things the way we want it, not the way you want it." And the virus was not waiting for them. While they were in that mess, the virus was not waiting for them, and that's why it spread like that. It took that long time for us to handle it. If you ask me, I think these are the experiences and these are the things we went through during the response.

Q: Thank you so, so much, Dr. Vandi. I know you have a six o'clock appointment right now actually, and so excellent timing on your part. Can I ask, just because I am with CDC Museum, about working with CDC, your experience working with CDC, anybody you especially remember who came from there?

Vandi: We had so many epidemiologists from CDC. In fact, CDC established the lab when we were doing the testing, Tulane was doing the testing. Later on, CDC came with more advanced equipment, and they would replace the Tulane equipment. CDC were now bringing it. They did it for some time. The turnover time was shortened, and there was more coordination, more effectiveness in the results we were getting from the lab when CDC joined the race here. So many of them came in the lab, in the surveillance,

and the—what was the name of this lady? There was one with—no, Makiko [note: unconfirmed spelling] was with WHO from Geneva. Chris was also from WHO, I think. Chris was WHO. Philip Aboya [note: unconfirmed spelling] was WHO. I will think of it. We had a lot of epidemiologists that came, and in fact, was it from CDC or MIT [Massachusetts Institute of Technology]? There was another team from MIT who came to put the data in place. I cannot remember the name. There was a team from there also. But we had a series of CDC staff here both in the field, on the computer, in the meetings, in the lab, they were there. They were interested more in the lab and the surveillance. It was WHO that was actually responsible for the ETC, the treatment center. Most of the clinicians were brought by WHO. There were a series of them that came, three-week rotations, and they were gone.

Q: When you described those desk epidemiologists, did CDC make up some of that population?

Vandi: Oh yes, CDC made up some of that population. Why do I call it "desktop epidemiologists?" If you come for three weeks, maybe you spend one week in orientation in Freetown. You come here, you're also here between the lab and the meeting on your laptop. You spend maybe twelve to ten days, and the last week, you announce, "I am going tomorrow, my rotation is finished, I'm going tomorrow." I wasn't seeing much field epidemiology in this. That's why I call them desktop epidemiologists. That is my own terminology. [laughter]

Q: I appreciate that because, as you know, we're really looking for honest feedback about what it was like working with CDC. I appreciate that. I need to get out of your hair, you have your next appointment. Was there anything else though that you wanted to describe about Ebola, about your experiences, before we end the interview?

Vandi: Maybe I would just end by saying that the response, the Ebola response needed resources. Huge resources. But the most important was coordination. If you don't coordinate well, you spend unnecessarily. We saw that in some parts of the district where you had three or four or five partners doing the same thing, overlapping and duplicating. Some didn't even have space to stand to ask questions, because there were so many of them. You saw that when we went to Operation Northern Push. But I don't know, maybe that was the tail end of it, so everybody was there to make sure we effectively pushed the virus out of the country. But my experience here is if you have coordination, effective coordination, and the politicians allowed the professionals to make decisions, if they allowed the professionals—come in when you're required to. Don't force to say "I will do it." No partition was—quarantined homes here. We didn't allow that. In one meeting, one of them attempted, and Dr. Monica was very firm on that. She said, "No, we have to stop it, because if you allow that, it's going to pray for it, it's going to boomerang, it's going to create chaos." While politicians may want to create quarantine committees so that they say, "Okay, supply food to them, and you be quarantined, and [unclear] from quarantine." It was happening in some of the other districts. We didn't allow that here. It was purely professional. It was only the surveillance team who would decide who to quarantine, the method of quarantine, how long and when to end the quarantine. Only the

surveillance team, nobody else. If you strictly follow that, and the politicians be politicians and play their own part and let the technical people, the professional people make decisions, I think we can fight any epidemic.

Q: Thank you so much, Dr. Vandi. I very much appreciate the time you spent on this. Thank you.

Vandi: You are welcome.

Q: Was that okay? What is it like talking about it?

Vandi: Talking about the experience? You will never finish saying everything because this was something that took us a year or so. This is an experience you may never have again. It was very strenuous. You don't sleep. We were meeting—I left my house by seven thirty, I didn't go back until twelve. At night, the minister would be on the line, CMO would be on the line, Dr. Jambai, the mayor, the statehouse would want to know. It was a miracle some of us survived because I saw five of my colleagues, very close colleagues we were organizing, and they died. When the news went around that Dr. Khan got infected, everybody said, "Vandi is next because they are very close." We were planning together, we were moving. If you saw Khan, you saw me. So they thought Vandi was also infected.

Q: They wrote you off.

Vandi: Oh yeah, they wrote me off. The [unclear] is showing on WhatsApp my casket. [laughter] My wife could not sleep, calling me, "Daddy, when are you coming?" I quarantined myself, I couldn't go to Freetown for six months until we were declared Ebola-free, before I went to Freetown. It took over six months for me to go.

Martin: I sure remember what you're talking about with the crowds so thick that you couldn't have a place to stand in Port Loko. It was crazy. It was really crazy. I also saw those same desk epidemiologists you were talking about. In fact, I was telling Sam the other day we really have the two kinds at CDC. We have the field people and we have the—

Vandi: The desktop people, those who are glued—are very good at reporting and—

Martin: It's all about seeing whether they can find statistics that have a high p-value.

Vandi: Yes, that is it.

Martin: If it's a high p-value, then they've found something and—

Vandi: And they are very ecstatic about it.

Martin: Meanwhile, the rest of us are out there getting our shoes dirty. The two do not understand each other.

Vandi: Yes. [laughter] This one was very stressful, very stressful.

Martin: Yeah, it was.

Vandi: In fact, if something—we could have stopped it. If they had listened to us, yes, we could have stopped it here.

Martin: What you were talking about, you did some things really differently, from what I saw—not in Tonkolili [District], because when I got to Tonkolili, the DERC hadn't gotten there yet either. So the same kind of thing where it had to be the DHMT and the stakeholders because nobody else was there. But by the time I got to Port Loko, exactly what you described, everybody was there. The DERC was there, the military was there, all the NGOs [nongovernmental organizations] were there, WHO, CDC.

Vandi: Before that in fact, the DMO in Port Loko was going on air and announcing that they had Ebola in Port Loko. And the paramount chief would go there and counter that statement and say it's a lie. The MP, the parliamentarian, would go on air and say different things and say the DMO is lying.

Martin: We had a real problem with that in Port Loko and in Kambia. In both of those districts, nobody trusted the health authorities.

Vandi: They didn't trust them at all. They were openly challenging them, disputing whatever statement they would come up with. Any figure they'd come up with, they would dispute it.

Martin: That was such a fight. And really, honestly, I don't think we ever won that fight. I think the epidemic burned out without us ever really—

Vandi: —resolving it.

Martin: Yeah. We never won that trust from the stakeholders, especially in Kambia, the last place I worked. We never had what you just described, not to the very end. Well, you know what it was like last January. We had two hundred fifty missing contacts.

Vandi: Two hundred fifty. And people kept escaping from quarantined homes. I said, you know what, you think the people in Kambia are different from those in Kenema? You look at your approach. Look at your method of quarantine. Look at your approach. Is it proper? It's not. That's why people are escaping. You put checkpoints. You think they come to the checkpoints? No. They know police are there and the military. They will not come through the checkpoint.

Martin: They'll go around them?

Vandi: They'll go around them. [laughs]

Martin: Right. But you know what? You tried to tell—I was there when you did it, you tried to tell the leaders that in Port Loko. I remember you doing it. I also remember how much they didn't listen to you. [laughter] I remember you saying that because there were a couple of us from CDC, and the leader of the DfID [Department for International Development] response. Mick [Michael G. Robson], remember?

Vandi: Yes, Mick.

Martin: And the two guys from GOAL. When you were talking about, "No, we need to make the quarantine less coercive, less forceful, more cooperative," we were all standing back there cheering for you, but they didn't listen. I wish they would've.

Vandi: Quarantine, you have to be tactful. You know how to enter a community, how to bring them aboard, how to win them over. If you go with force, they are not going to cooperate with you.

Martin: No, you're absolutely right.

Vandi: They are not going to cooperate with you. This fight, you need to win over the community, otherwise you won't succeed. You have to win them over.

Martin: And that's not what happened in the North.

Vandi: I quite agree. I quite agree with you. Here, we were able to really convince them. We were able to convince the stakeholders. They were very cooperative. You couldn't enter any village, you're a stranger from somewhere, they wouldn't allow you.

Martin: Of course.

Vandi: They wouldn't allow you.

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