Silent Massacre: The Politics of Chronic Kidney Disease

By Carlos Martinez

In Chichigalpa, Nicaragua, everyone knows their creatinine level. Or at least it seems that way. Creatinine blood tests are used to measure the state of a patient’s kidneys. Too much creatinine in the blood — anything above 2.0 milligrams per deciliter — is an indication that the kidneys are seriously impaired. When I began meeting people in Chichigalpa for my research in the summer of 2017, they often introduced themselves to me with their creatinine level — without any solicitation on my part — as if it were their last name.

Chichigalpa has also gained notoriety for being ground zero of one of Central America’s largest, deadliest, and most mysterious epidemics: chronic kidney disease (CKD). Over the past two decades, CKD has claimed thousands of lives, primarily among young men living on the Pacific coasts of El Salvador and Nicaragua. It is estimated that since 2000, the disease has killed more than 20,000 people in these two Central American countries alone. Along with violence, kidney failure is one of the top causes of death for young men in El Salvador. Indeed, the epidemic so heavily impacted a specific area in Chichigalpa — Guanacastal Sur — that this neighborhood was dubbed “La Isla de Viudas” (The Island of Widows), after many of the community’s young men died.

Although it has received greater attention from epidemiologists in recent years, the etiology of the disease continues to elude researchers. This peculiar outbreak of kidney disease has been so extensive in Central America that some epidemiologists created a new name for it: Mesoamerican nephropathy. But other researchers — like Dr. Ramón García-Trabanino, a nephrologist based in the capital of El Salvador — simply call it a “silent massacre.”

García-Trabanino put the CKD epidemic on the map by publishing some of the first journal articles on the phenomenon. While working in San Salvador’s Rosales National Hospital in the late 1990s, he unexpectedly began seeing cases of young men — mostly residents from coastal towns — with late-stage kidney disease. These young men, he recounted, often died within days or weeks of their first visit to the hospital. Out of sheer necessity — and a healthy dose of curiosity — García-Trabanino began to research this odd influx of CKD patients. After nearly two decades studying the disease, García-Trabanino seems to have more questions than answers.

Fortunately, García-Trabanino is no longer the only person researching the epidemic. Countless articles on studies using multiple methods and reaching various conclusions have now been published on CKD in Central America. As research has progressed, several theories have emerged on the cause of the disease. For his part, García-Trabanino proudly states that he is more committed than ever to scientific doubt, rather than certainty.

Yet this uncertainty shouldn’t be mistaken for indifference. García-Trabanino speaks passionately about the need for a more comprehensive response to an epidemic that has remained silent partly due to the nature of the disease and partly because it impacts poor rural communities that tend to be neglected by the medical system. While García-Trabanino doubts that any single cause will emerge as the primary culprit for CKD, there does appear to be a growing consensus on some common factors among its victims.

Agricultural work, particularly in the sugarcane industry, is one of those key factors. But what about this work could possibly be leading to kidney disease? Studies by Dr. Carlos Orantes, a nephrologist and researcher with El Salvador’s Instituto Nacional de Salud (National Institute of Health), pointed to pesticides as a possible factor. In response to this research, El Salvador’s legislature approved a decree prohibiting the sale of 53 agrochemicals approved by publishing some of the first journal articles on the phenomenon. While working in San Salvador’s Rosales National Hospital in the late 1990s, he unexpectedly began seeing cases of young men — mostly residents from coastal towns — with late-stage kidney disease. These young men, he recounted, often died within days or weeks of their first visit to the hospital. Out of sheer necessity — and a healthy dose of curiosity — García-Trabanino began to research this odd influx of CKD patients. After nearly two decades studying the disease, García-Trabanino seems to have more questions than answers.

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However, some researchers, including García-Trabanino, remain doubtful about the role of pesticides, arguing that studies conducted by Orantes’s team never actually showed a statistically significant connection between exposure to pesticides and CKD prevalence. Pesticides, some researchers argue, were simply a politically expedient culprit used by the current left-wing Frente Farabundo Martí para la Liberación (FMLN, Center for Latin American Studies, UC Berkeley)
Chichigalpa has essentially been a factory town for more than a century. For the most part, sugarcane production provides the only jobs. All of the men who have CKD have worked at the sugar mill, and they all place the blame squarely on the company. Most of the men I spoke with tend to believe that pesticides used by ISA had a role to play.

Grupo Pellas, the Nicaraguan conglomerate that owns the refinery, has consistently denied any responsibility for the disease. That is, until recently.

After years of promoting research and generating news about the CKD epidemic, La Isla Network (LIN), an international non-governmental public health organization, was finally able to convince the company to collaborate with them in implementing an occupational health protocol that they believe will curb the spread of the disease. The LIN protocol, dubbed the Worker Health and Efficiency (WE) Program, emphasizes that workers must use heat-appropriate clothing and have access to water, rest, and shade. Former rivals Grupo Pellas and LIN will now work together to pilot the program for the next two years.

But both Grupo Pellas and the Nicaraguan government have yet to take full responsibility for the plight of the sugar refinery’s former employees who are still struggling with kidney disease. One former employee, Nelson, explained to me that if he goes to receive dialysis, he won’t be able to feed his two children. While the dialysis is covered by the social security from Nelson’s years of working at ISA, he must travel to Managua to receive the treatment, and the cost of the trip is not covered.

Former employees have founded a number of organizations to demand a response from the company and the government. But they say that their protests have been suppressed by the police or ignored by the media and that some of the organizations have been co-opted by the company. Indeed, when former workers occupied the entrance to the sugar mill in a protest in 2014, two men were shot by the police — one was killed, and the other was left paralyzed.

Bloodshed in the desire to get their blood cleaned. In Chichigalpa, blood and creatinine mean everything. While the mystery of CKD continues unresolved, life for these sugarcane workers goes on, and Chichigalpa recently opened its second cemetery.

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