

## HIV Care in the Dominican Republic: A Student's Reflection

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The Dominican Republic is a country of just under 10 million people that shares a small Caribbean island with Haiti, situated along its western front. According to World Health Organization statistics, its gross national per capita income is \$5,550 USD, with a total per capita expenditure on health care in 2006 of \$449 USD, or 6.0% of the GDP. By comparison, residents in the United States, a significantly richer country, currently spend about 1 in every 6 dollars they earn on health care (1).

The estimated adult (age 15-49 years) prevalence of HIV infection is about 1% in the Dominican Republic, not as bad as its neighbor Haiti (about 2.2%), with the highest prevalence in the Western hemisphere, but significantly higher than current United States population estimates (about 0.6%). As in many other countries in the world, HIV care has seen dramatic changes in recent years. Whereas in 2004, estimated antiretroviral therapy coverage was only about 5% in the Dominican Republic, by 2007 it had increased to almost 40% (1).

I recently returned from a 4-week-long HIV rotation in Santiago, the second most populous city in the country. The rotation was organized by a family practice physician and professor at Case Western Reserve University, who has been traveling to the Dominican Republic for over a decade for charity care, along with a delightful and dedicated Dominican woman working in Santiago who earned her masters in social work in Cleveland, OH.

The "José María Cabral y Báez" hospital, the large regional public hospital where I worked, has been taking great strides to treat and prevent HIV infection locally. Through a Clinton Foundation grant, they are providing highly active antiretroviral therapy (HAART)

to several hundred infected adults at no charge to the patient. Some, although far from all, antiretrovirals offered in the United States are available. The criteria for initiation of therapy include a CD4+ T cell count of less than 250 cells/mm<sup>3</sup> or presence of an AIDS-defining illness. Evolution of disease is tracked through quarterly CD4+ T cell counts, and the program is beginning to offer viral load testing. Patients receive antibiotic prophylactic therapy based on T cell count thresholds. Viral resistance testing is not available.

Vertical transmission from mother to newborn is a major emphasis of HIV care and prevention. Free HIV screening tests are offered to all pregnant women. According to the most recent 2007-2008 hospital statistics, 76% of known HIV-positive women received nevirapine at the time of delivery, with 12% already on triple therapy. Almost 85% of deliveries were performed through Cesarean section, a policy perhaps implemented because viral loads at delivery are so rarely known in HIV-positive women. Newborns born to known HIV-positive women receive nevirapine following birth and for 6 weeks post-delivery. Commercial milk formula is provided for 6 months to prevent transmission through breast milk. With these measure in place, the rate of vertical transmission at the hospital was 3.85% according to the 2007-2008 hospital data (2). In comparison, rates of transmission from mother to child in untreated nonbreastfeeding populations range from 14% to 32% in industrialized countries and from 25% to 48% among breastfeeding populations in resource-poor settings (3).

I was very impressed by many physicians and other



health care workers that I interacted with during my stay in the Dominican Republic. A small handful of physicians had devoted a large part, if not all, of their clinical practice to HIV care. I met HIV workers who repeatedly gave their own money to patients who didn't have enough to feed themselves or their families - not a trivial act in a hospital where many employees, including physicians, had not been paid for months due to budget shortfalls. Also, I saw no overt discrimination in HIV outpatient clinics against patients based on race, nationality, or sexual orientation or identity.

Unfortunately, there appeared to be a chasm between health care workers who focused on HIV care and many hospital employees involved in other specialty care. One of the heads of emergency medicine refused to personally care for known HIV patients. He may have had a legal right to refuse care to such patients, but most of us would find this unethical and not rational based on the minimal associated risk. Another doctor who performed outpatient surgery wanted the right to screen all patients for HIV before operating on them.


I was also concerned by the care of pregnant HIV-positive women before and during cesarean sections. Obstetricians at the hospital were reputed to perform the last cesarean sections of the day on known HIV-positive women. The operation was described fairly graphically by several of the women as akin to slash-grab-and-patch, with the obstetricians evidently trying to postpone and then limit their exposure to HIV-positive patients despite appropriate safety gear and precautions. I went to see one of the deliveries, staying in the obstetrics ward with an HIV-positive woman scheduled for a cesarean section that day. As the hours passed, a number of the OB-GYN residents repeatedly told me that they were only waiting for some supplies from another part of the hospital before beginning, all the while performing other cesarean deliveries. I finally left at 7pm that evening. The patient, having been waiting at the ward since 7am, was finally operated on at 11:30pm.

What was responsible for this variation in HIV care among hospital staff? I knew HIV care workers whose lives had been personally touched by HIV, and this was perhaps the case with other HIV care employees. Such individual experience is sure to foster empathy and compassion. Having a career focus in HIV is also logically associated with a greater objective understanding of HIV modes and risks of transmission. Analogously, you would expect a primary care provider to be more abreast of guidelines for cholesterol or diabetes screening than, say, an orthopedic surgeon. It is hard to gauge this knowledge divide, although I did observe medical students and other health professionals referencing the same textbooks used by United States health professionals, either in English or translated into Spanish.

I suspect that much of this treatment gap has historical and cultural influences. Given the relative scarcity of antiretroviral therapy in the Dominican Republic until recent years, contracting HIV is probably still viewed by many health care providers as a "death sentence". Looking more locally, especially during the early years of the HIV pandemic when treatment options were limited, there were many high-profile cases of U.S. health care providers refusing to care for known HIV-positive patients.

Another problem appeared to be lack of dialogue. Many health care professionals and other Dominicans seemed to avoid talking openly or candidly about HIV. This only served to perpetuate stereotypes, misinformation, and the stigma associated with disease. In the United States, figures like Magic Johnson did a lot to dispel preconceived notions about HIV-infected individuals, stimulated real discussion, and changed the perception of HIV for many to one of a chronic disease that can be effectively managed.

Regarding education and dialogue, I also identified room for improvement in patient education relating to HIV modes of transmission. Among HIV-positive patients whom I interacted with, several did not



know that it was unsafe not to use condoms if they had sex with another HIV-positive individual. Other HIV-positive patients admitted to not using condoms even with their HIV-negative partners. Among HIV-negative patients, some thought that HIV could be transmitted through saliva or even through touching the skin of an infected individual.

So what can we as doctors-in-training do to make a difference when we engage in international HIV work? Having spent several months doing overseas clinical work in South America and the Caribbean, I understand that exposure to foreign hospitals and clinics can be a dizzying experience, with language barriers, cultural differences, and disparate technologies, medical resources, and standards of practice. There are, however, several ways that we can make a positive difference, even on a brief clinical rotation. The following is a list of some ideas, based on my experiences:

1) Conduct primary research. A fellow student and I began a survey at the Santiago hospital to gauge understanding of modes of HIV transmission in individuals with and without HIV infection. We hope that results of this study will guide hospital HIV workers in focusing their HIV prevention and education efforts.

2) Give a presentation to hospital personnel on HIV care. Even if you are not an expert in HIV management, you can focus much of your presentation on humanistic and psychosocial issues, working to eliminate the stigma associated with HIV infection and promoting equal and humane treatment of HIV-positive patients. Having an open discussion and exchange is much more likely to reach providers than a simple handout.

3) Donate medical supplies. A classmate and I brought over several suitcases of medical supplies donated by MedWish International, a Cleveland-based charitable organization. While in the United States we often take supplies like sterile gloves, gauze, and suture for granted, the donation of such items can be a great help in resource-poor areas of the world.

4) Spend time with your HIV-infected patients. Lastly, take the opportunity to reinforce or advance your patient's understanding of disease and show that you value them as fellow human beings.

### About the Author

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