Dying of AIDS in 2018: Urgent Interventions to Curb the Fastest-Growing HIV Epidemic in the Western Pacific

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In 1993, the Medical School Hotline was founded by Satoru Izutsu PhD (former vice-dean UH JABSOM), it is a monthly column from the University of Hawai’i John A. Burns School of Medicine and is edited by Kathleen Khimm Connolly PhD; HJMPH Contributing Editor.

The Philippines has the highest growth rate of human immunodeficiency virus (HIV) infection in the western Pacific region with approximately 900 new cases per month, increasing in incidence by over 170% since 2010.¹ The virus leads to decreased CD4 T helper lymphocyte count, causing increased susceptibility to infection, a condition called acquired immunodeficiency syndrome (AIDS). The Joint United Nations Programme on HIV and AIDS (UNAIDS) estimates that only 67% of persons living with HIV in the country know their status. Fifty-five percent have CD4 count less than 200 cells/μL, at the time of diagnosis.² HIV disproportionately affects men having sex with men (MSM) who account for 86% of all cases.¹ In 2009, a study found an 11.8% HIV prevalence among MSM in Metro Manila.³

June 2018: I lost a friend to AIDS. Angelo had just turned 31. He had a lot of dreams – including a better life for his parents and younger siblings.

Angelo was first diagnosed with HIV in 2014 after his boyfriend tested positive for the virus. Living in the Philippines, a country where HIV is often equated to promiscuity and immorality, Angelo was rightfully worried. I had known him since we were teenagers and, as a friend who is in the field of HIV research, Angelo reached out to me. I was a first year Internal Medicine resident in Connecticut, about 8,400 miles away from Manila.

Angelo had a lot of questions. How will he tell his family? Is he being punished by God for being gay? Most importantly, is he going to die soon? After allaying his anxiety and explaining the importance of early treatment, he agreed to start antiretroviral therapy (ART).

Initial work-up revealed that Angelo’s CD4 count was 190 cells/μL and that he was co-infected with pulmonary tuberculosis (TB). Quadruple therapy for TB (isoniazid/ rifampicin/pyrazinamide/ethambutol) was promptly started. ART (lamivudine, tenofovir and efavirenz; LTE) was introduced a few weeks later. Angelo was feeling dizzy every morning and could not focus since ART was initiated. He went back to his treatment hub and learned that his liver tests had significantly increased. Medications were stopped and he was lost to follow-up.

Angelo spent the next four years battling depression and multiple co-infections that slowly devoured his body: cutaneous tuberculosis, oropharyngeal candidiasis, pneumocystis pneumonia, and recurrent diarrhea. Despite constant reminders and encouragement, he remained in denial and sought alternative therapies. He had lost his job, which further contributed to his depression. He had no money for transportation. The nearest HIV treatment center was two hours away from his house. He agreed to restart ART in January 2018 after episodes of blurred vision. His CD4 had dropped to 4 cells/μL. Ophthalmologic exam confirmed retinal detachment and CMV retinitis.

By June 2018, I had returned to the Philippines. I immediately called Angelo. He was complaining of shortness of breath. I advised him to go to the hospital urgently. A government vehicle brought him to the hospital with his parents. His family could not afford an ambulance, as his father makes less than $10 per day, the minimum wage in the Philippines.

On arrival, I could barely recognize the friend whom I had last seen four years ago. He had sunken eyes, temporal wasting, icteric sclerae, and dry scaly skin. He was struggling to breathe. He looked at me and—with lips trembling—he begged, “Louie, please help me.”

Angelo spent the next four weeks in the hospital. He deteriorated despite escalating antibiotics, inotropes, and ventilatory support. After three weeks on source isolation for multidrug-resistant tuberculosis and Acinetobacter baumannii pneumonia, he finally succumbed.

Angelo’s story is but one of the 2,518 people who have died from AIDS since it was first reported in the Philippines in January 1984.⁴ Although these numbers seem small, death from AIDS is likely underreported due to the stigma associated with the diagnosis. The use of euphemisms such as ‘immunocompromised condition’ in death certificates is a common practice to protect the patient’s privacy.

Programs in the Philippines have focused primarily on the ABCs of HIV prevention: Abstinence from sex, Being faithful, and Consistent condom use. Free condoms are available at various social hygiene clinics and could also be purchased from pharmacies. However, the stigma of using condoms in a predominantly Catholic country like the Philippines remains prevalent. Among heterosexuals, condoms are perceived primarily as a birth control measure rather than a barrier against sexually-transmitted infections (STIs). Purchasing condoms,
especially in small towns where majority of people know each other, can be embarrassing and is associated with pre-marital sex or infidelity. Among MSM, low condom use was attributed to trust in one’s partner (34.4%), decreased pleasure (32%), and unavailability (23.4%).

The first urgent intervention to curb the HIV epidemic in the Philippines is to overcome stigma by integrating sexual health and gender sensitivity in school curriculums. The Department of Education plans to include comprehensive sexuality education in response to the increasing incidence of HIV, teen pregnancy, and sexual violence. For this program to be successful, teachers and guidance counsellors must also undergo training to ensure that classes are delivered in an age-appropriate and culturally-sensitive manner.

The second urgent intervention is the integration of HIV testing and counselling in primary healthcare settings. Although HIV testing is available for free in various social hygiene and HIV clinics nationwide, the stigma associated with being seen in these clinics deters people from getting tested. Encouraging HIV testing as part of routine healthcare maintenance in primary care clinics would facilitate early detection and serve as an opportunity for HIV and STI education.

There are more than 7,000 islands and over 100 languages in the Philippines. This serves as a major barrier in providing HIV services especially to those who live outside major cities. An untapped workforce that can be mobilized to improve access to HIV services in rural areas are the barangay (community) healthcare workers (BHWs). There are more than 100,000 BHWs in the Philippines. BHWs are residents of their respective municipalities who usually don’t have formal medical education but are trained by the Department of Health to provide basic primary care services, such as blood pressure monitoring and directly-observed TB treatment. Training the BHWs in HIV counselling and testing will help improve HIV awareness, especially within rural areas in the country.

Third, pre-exposure prophylaxis (PrEP) must be made accessible nationwide as part of comprehensive HIV prevention programs. PrEP, a daily pill that contains the antiretrovirals emtricitabine and tenofovir, has been shown to be highly effective in preventing HIV transmission. PrEP currently has limited availability in the Philippines. Primary care physicians must be educated on how to prescribe and monitor patients on PrEP. The use of PrEP must be coupled with counselling and education on STI prevention.

The fourth intervention is to institute integrase strand transfer inhibitors as first-line medications for HIV. To date, LTE is the only fixed-dose combination available and integrase inhibitors are reserved for drug-resistant cases. The UNAIDS estimates that only 32% of Filipinos living with HIV are on ART and only 82% remain on ART 12 months after starting treatment. Clinical trials have shown that 53% of patients on efavirenz reported central nervous system symptoms. Like Angela, many Filipinos complain of bothersome side effects from LTE. Although the side effects of efavirenz can be mitigated by lowering its dose or switching to rilpivirine, this increases pill burden. A meta-analysis has shown that higher pill burden is associated with both lower ART adherence and worse viral suppression.

A new co-formulated tablet of tenofovir/lamivudine/dolutegravir (TLD) has been rolled out in several low- and middle-income countries (LMICs) for a median price of $75/patient/year, which is estimated by the World Health Organization (WHO) to be 10–15% less expensive than current efavirenz formulations in LMICs. A dolutegravir-based regimen has lower total costs, lower rates of treatment failure, and provide better clinical outcomes overall. The safety of dolutegravir in pregnancy needs to be further studied; however, the Philippines would continue to benefit from DTG, as the majority of HIV infections are among men. Furthermore, the better side effect profile of TLD is expected to improve ART adherence, translating to a greater proportion of patients with undetectable viral load (lower community viral load), preventing further HIV transmission.

PrEP and integrase inhibitors have only been approved by the US FDA in the past decade and are slowly being introduced to LMICs. Because of this, there is a gap in knowledge and practice among Filipino physicians in prescribing these medications. ‘Treatment as Prevention’ and the benefits of decreasing the community viral load are newer concepts that need to be disseminated among healthcare providers. The importance of early detection and HIV as a chronic manageable disease must be emphasized in medical and nursing curriculums. In July 2018, the World Health Organization included dolutegravir as first-line medication for patients initiating ART. Stakeholders and HIV specialists must convene to revise the Philippine Antiretroviral Treatment Guidelines for it to be at par with international guidelines and cope with the increasing HIV incidence, rising nucleoside reverse transcriptase inhibitor resistance, and shift towards the CRF01_AE subtype in the country.

Fifth, mental health and substance abuse must be addressed using evidence-based interventions. Alcohol and recreational drugs are associated with lower condom use and increased risk of HIV transmission. Although sharing needles among injecting drug users (IDUs) account only for 4.0% of the HIV cases in the Philippines, estimating the real magnitude of substance abuse among Filipinos remains problematic because of fear of discrimination and criminal prosecution. Extrajudicial executions of suspected drug users have also been reported and has caught international attention.

In 2010, an outbreak of HIV and hepatitis C occurred in Cebu City, one of the largest cities in the Philippines. Over 50% of IDUs were found to be infected with HIV and 93% co-infected with hepatitis C. Furthermore, consistent condom use among IDUs was reported to be only at 15%. Needle exchange programs (NEPs) are community-based programs that provide access to sterile needles and syringes and provide an avenue for safe disposal of used needles and syringes. NEPs have been shown to effectively reduce HIV transmission in both high-income and LMICs.

The Philippine Department of Health Epidemiology Bureau in 2016 acknowledged that sterile needles are needed to avert another HIV and hepatitis C outbreak among IDUs. However, an official communication from the Dangerous Drugs Board
(DDB) of the Philippines issued in May 2017 stated that needle and syringe exchange programs cannot be implemented in the country, as the Comprehensive Dangerous Drugs Act of 2002 (Republic Act 9165) prohibits the possession of equipment, instrument, apparatus, and other drug paraphernalia for dangerous drugs.\textsuperscript{12} The root cause of substance abuse among Filipinos is intricate and includes poverty, domestic abuse, stigma, and discrimination. The Philippine government should reconsider NEPs or provide alternative humane evidence-based interventions to help people struggling with addiction.

Lastly, international cooperation and capacity-building is warranted. As part of my advocacy to improve HIV research and healthcare delivery in the Philippines, I coordinated the visit to the Philippines of Dr. Cecilia Shikuma and Dr. Lishomwa Ndhlouvo, my mentors at the John A. Burns School of Medicine (JABSOM), University of Hawai‘i at Manoa. A pilot study on immune activation and neuroAIDS has been launched at the Philippine General Hospital through a joint funding from the Philippine Department of Science and Technology and JABSOM’s Hawai‘i Center for AIDS. Local physicians and personnel were trained on laboratory techniques and neuropsychiatric testing. Grants are underway to further expand training and research that are geared towards HIV cure and improving HIV care in the country.

Stigma reduction must start among healthcare providers. In November 2018, I was invited to deliver a lecture on HIV among nursing students and clinical instructors in Mindanao, one of the largest islands outside of Manila. A questionnaire revealed that misconceptions on HIV exist even among nursing students, with only 25% having heard about PrEP. Continued collaboration and volunteerism are needed to support local efforts in promoting HIV awareness, especially among healthcare providers.

The Philippines has recently made progress towards access to healthcare and HIV services with the recent approval of the Universal Healthcare Law (Senate Bill 1986), Philippine Mental Health Law (RA 11036), and strengthening of the Philippine AIDS Prevention and Control Act of 1998 (RA 11166).\textsuperscript{20,22} The Sexual Orientation and Gender Identity and Expression (SOGIE) Bill, which aims to reduce gender discrimination and inequality, was passed by Congress of the Philippines in September 2017 but needs Senate vote to become a law.\textsuperscript{23} These legislations would only be meaningful with proper implementation and require appropriate budget allocation towards healthcare.

The HIV crisis in the Philippines is a national emergency. Sexual health education, increased awareness among healthcare providers, national access to PrEP and integrase inhibitors, harm reduction, legislative changes, and international cooperation are needed to urgently curb the epidemic that is affecting the lives of many young Filipinos.

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