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Opinion

Epilepsy, AIDS pose medical dilemma in developing world

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Like most physicians working in Africa, I looked forward to the day that antiretroviral medications -- drugs that are used to treat infections caused by retroviruses, such as HIV -- would be available to my patients.

I spend much of my time caring for people with epilepsy. Unfortunately, many of these patients also are HIV positive. The dilemma: The medications available for treating epilepsy should not be used in combination with the only AIDS treatments available. Why? The epilepsy drugs seriously weaken the AIDS drugs and have the strong potential to make the HIV virus resistant to this treatment in other patients.

One of my patients at my sparsely furnished office in Mazabuka, Zambia, uses phenobarbitone to control her epileptic seizures. It has been a lifesaver.

Since beginning treatment, the seizures rarely occur. Her life has transformed. She has been able to move back into the family home. The other villagers smile and laugh with her again. She and her husband are expecting their first child after the harvest.

As part of her prenatal care, my patient discovered that she carried the HIV virus. What I contemplate is the reality that the two medications she has come to collect, phenobarbitone and Triomune, should not be prescribed together. When taken with phenobarbitone, one of the three anti-AIDS drugs contained in Triomune is maintained at too low a concentration in the body to effectively suppress the HIV virus. This provides the virus an opportunity to develop resistance to an entire class of known as protease inhibitors.

The public health implications of this combination reach far beyond the borders of Zambia.

At less than $5 per person per year, phenobarbitone is the only anticonvulsant that the Zambian public health sector can afford. Triomune is substantially more expensive at nearly $200 annually, but the second line antiretroviral agent that could be used with phenobarbitone costs almost $500 a year.

There are 4.6 million people who require antiretroviral treatment in Africa. Although exact figures are not available, as many as 42 million people in the developing world suffer from epilepsy. The overlap between these groups is not trivial. We see them almost daily in our Epilepsy Clinic.

But what to do for my patient and her baby? The HIV Clinic here has only Triomune to protect her and her unborn child from the ravages of HIV/AIDS.

Do I safeguard the public good and withhold the epilepsy medication that has so transformed her life? If I do, how long before she is readmitted for seizure-related burns or injuries? Or shall I provide the treatments I have and await the time when Triomune will no longer be effective?

I choose to care for the patient in front of me. As my patient begins her long walk home, I worry about the impact of my decision on her HIV care. And I ruminate on my future, hypothetical patients who will find themselves with a form of HIV that won't respond to key treatments.

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