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CME & POST-TEST

Globalization and the Surge of Dengue

also:

- Two Views
- Improving Care for Refugee and Low English Proficiency Patients in Rochester, New York
- Infectious Diseases in the News
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Focus:

Global Health

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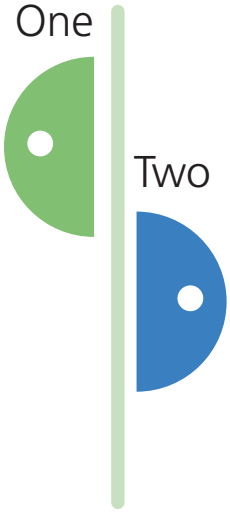
VIEW ONE
GETTING TO ZERO: AN UPDATE ON ADVANCEMENTS IN HIV PREVENTION

By Andrew Goodman, MD, and Meera Shah, MD, MS



In September of 2000 the World Health Organization agreed to a set of Millennium Development Goals, among them the goal of halting and reversing the spread of HIV/AIDS by 2015. This past December, on the most recent World AIDS Day, WHO celebrated achieving this goal well ahead of the 2015 deadline. The global incidence of new HIV infection has been decreasing since peaking in the late 1990's and the number of AIDS deaths globally has been decreasing since peaking in 2004.[1]

With these achievements, the United Nations has agreed on the ambitious goal of ending AIDS globally by 2030. Development of a specific strategic plan is currently underway. Reaching this goal will involve strengthening global infrastructures for widespread implementation of HIV testing and treatment. Bringing an end to AIDS will also involve implementation of prevention strategies.[1] Among these are newer applications for antiretroviral therapies, including treatment as prevention (TasP), prevention of mother-to-child transmission (PMTCT), post exposure prophylaxis (PEP), and pre-exposure prophylaxis (PrEP).

Conclusions from the HIV Prevention Trials Network (HTPN) 052 study, published in 2011, created excitement in the possibilities of TasP as a public health intervention for decreasing HIV transmission. This study compared the number of HIV transmissions occurring between serodisconcordant heterosexual couples when antiretroviral therapy was started at entry into the study, versus waiting for CD4 cell count decline below 350 (standard care in many countries at the time). Early initiation of antiretroviral therapy was found to decrease HIV transmission by a relative risk reduction of 96%. Mathematical modeling has suggested that achieving high levels of HIV suppression with treatment could decrease transmission so significantly, as to effectively end the AIDS epidemic.[2]

The WHO is currently updating its HIV treatment guidelines and published an early-release guideline update this past September in order to fast track new recommendations based on recent evidence. Among these newer recommendations was the treatment of HIV for all positive persons regardless of CD4 count. This change in recommendation was based on new evidence showing decreases in morbidity and mortality with early initiation of antiretroviral therapy and decreased risk of HIV transmission.[3]

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VIEW TWO
MEDICAL EDUCATION IN THE THIRD WORLD – A PERSONAL ACCOUNT

By Sheila Ramanathan, DO

I do not have HIV. While that may not mean much to most people, after spending my final family medicine residency rotation in Uganda the significance of that statement is defining to me. It certainly doesn't come cheap when the price you pay is peace of mind. Not having that certainty took its toll on me throughout 3 months of HIV tests, with increasing peaks of anxiety before returning to a baseline of uneasy hope. Backbreaking poverty is a hard thing to comprehend, and even more so when you are in a country where the leading cause of death is still HIV-related illness.[1]

My hand shook slightly, carefully angling the chest tube into the spongy skin that is produced by rampant Kaposi's sarcoma. I was on my hematology-oncology rotation treating an AIDS patient with a pleural effusion, and while I've read about and seen pictures in textbooks of the skin tumor commonly seen in untreated HIV patients, this was my first time seeing it up close and personal. In the United States, HIV rarely progresses that far before it's caught and treated thanks in part to the strong educational and advocacy work set in place after HIV/AIDS was first recognized. You must remember, however, that this was Uganda where the average lifespan is only fifty-one years.

The patient was leaning against an oxygen tank on a pallet covering a small portion of the floor. There were twenty-five available beds, though there were thirty-seven patients on that ward, leaving many to claim what little space was left over. I squatted down attempting to angle the chest tube properly - the wide eyes of my patient adding to my unsteadiness.

Procedures are becoming a lost art among physicians as diagnostic testing continues to improve by leaps and bounds. When I was an intern and a patient required IV access for her antibiotic therapy, I was told that it was "unsafe" for me to attempt to place an external jugular line. Instead, I woke my locum tenens attending who attempted to place a line in the subclavian vein and ultimately failed, causing the patient to miss her dose of medication. Procedural medicine is no longer considered a vital part of a medical resident's training, but rather a nice thing to learn how to do. Attending physicians would frequently explain to me that I would need to "See one procedure, Do one procedure, and Teach one procedure", as the tried and true maxim goes. Thus, despite having met the

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causes.[1] Although the work seems daunting, an AIDS free generation would be well worth the effort.

Endnotes

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