

Africa Storytelling Challenge— Notable Submissions: In Paul Otieno Yonga's Words

Committed to championing scientific innovations and advancements, Yonga is affecting change in his community and throughout Africa—and this year's judges of the Africa Storytelling Challenge lauded these impressive efforts. Recognized as a runner-up in this year's contest, Yonga shares his essay submission below.

I am an infectious diseases and HIV specialist currently based at the Fountain Health Care Hospital in Eldoret city, in the North Rift part of Kenya. I am also a public health professional, with a specialty concentration on international health and clinical epidemiology. The bulk of my work involves taking care of patients with various infectious diseases, such as people living with HIV, as well as patients with TB, viral hepatitis, and other infectious diseases, as well as conducting clinical and operational research on HIV-related issues that will help in generating new knowledge that will guide our clinical and public health care of people living with HIV. My clinical and research interests are in screening and managing co-infections (viral hepatitis and TB) and co-morbidities (cardiovascular disease, renal disease, and anal dysplasia) among people living with HIV. Thus, over the past one year, I started performing high resolution anoscopy (HRA), a procedure employed to diagnose and treat highly squamous intraepithelial lesions (HSIL), lesions that are believed to be precursors to the development of anal cancer. These lesions are noted to be highly prevalent among people living with HIV, and this is based on findings from the Western world, but with non-existent data from sub-Saharan Africa. One of the biggest reasons that made me start doing HRA, the first procedure of its kind in East and Central Africa, stems from an experience that I faced two years ago, where I had an encounter with a male patient who had lived with HIV for quite a number of years and was being followed up at a HIV clinic in Nairobi. He had achieved satisfactory viral suppression through the use of anti-retroviral therapy, but unfortunately developed full-blown anal cancer, that had wiped out his finances on radiotherapy and chemotherapy and was now on palliative care since nothing much could be done at that point.

This was a painful experience for him and for his family, and for me as a health care provider, since we had focused fully on achieving viral suppression, but unfortunately had not succeeded in screening for other co-morbidities, such as screening for anal HSIL, which would have improved his quality of life further in addition to keeping his HIV viral load at undetectable levels. This prompted me to do a bit of reading on anal cancer in HIV infection, and it is during the course of my reading that I stumbled upon the use of HRA in diagnosing HPV-related anal HSIL and its role in diagnosis and treatment of HSIL before

they progress to anal cancer. To date, training in HRA is offered only in the US and Europe (UK and the Netherlands), and the training costs are quite expensive, with a steep learning curve, which explains the reason why there are few HRA providers globally (222 as per the International Anal Neoplasia Society). However, based on the suffering that the patient highlighted above went through, and the noted deficit in this kind of care in the region, the motivation to push me to acquire skills and train in HRA was high enough, and this would hopefully be the stepping stone to set up the first International Anal Neoplasia Society recognized HRA center in East and Central Africa. Thus, armed with this motivation, and my savings, I registered for the European HRA training program at the Academic Medical Center, University of Amsterdam, the Netherlands, where I spent quite a bit of time acquiring the necessary skills required for HRA. And because this procedure is not heard of in this part of the world, coupled with limited resources in the hospital where I work, that meant that I had to invest in the infrastructure required to perform this procedure. This, therefore, forced me to use my personal funds in buying a video-colposcope to aid in visualization of the lesions. I feel that this work is important because it now helps us as a country and a region to diagnose and treat anal HSIL among high risk populations, particularly people living with HIV, at an early stage before it progresses to anal cancer, thus reducing the pain associated with the disease, as well as the catastrophic costs and morbid surgeries associated with managing the cancer. Science is what drives the kind of care that we offer patients that seek our care, from the medicines that we use on them, to the medical devices that we use for therapeutic interventions on them. Thus, any development that takes place in the scientific field has to be shared if we are to make a greater impact, since it will make other scientists aware of the best practices required to improve the quality of care, and ultimately, the quality of life of patients seeking our care.

The content and views presented here are those of the individual Challenge participant.

About the Africa Storytelling Challenge

The inaugural [Champions of Science—Africa Storytelling Challenge](#) took place between May and August 2018. Open to all scientists doing innovative work in Africa, the contest drew more than 100 submissions. An independent selection committee of scientists, policymakers and science journalists reviewed the applications and selected the winners. Each winner will be awarded \$5,000 and will have the opportunity to share their stories at the 2019 American Association for the Advancement of Science (AAAS) annual meeting in Washington, D.C.