HIV Tests in Mozambique

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My name is Jordan McOwen. I've been working in global public health for about 15 years.

I've served as a monitoring and evaluation officer for projects. I've been an epidemiologist. I've done that directly for NGOs based in Seattle and globally. I've worked for USAID directly and consulted for government agencies and then have done a couple of stints with the CDC. And currently work with CDC in Mozambique.

Yes, so a kind of a success story of monitoring and evaluation, I'll talk about in the context of the global PEPFAR program and my work with PEPFAR Mozambique. So this is HIV and AIDS response funded by the US government, implemented by the CDC and USAID globally in about 15 to 20 countries, depending upon the year my work has been in Haiti and in Mozambique, Kenya and Tanzania. This example is in Mozambique.

So the role that I was in was as a monitoring and evaluation advisor to USAID. So we had a portfolio of about, say 15 projects, some of them focused on treatments and some of them focused on prevention. And then we worked within an interagency space, that had probably 60 projects total. So as an interagency as the, the US government there in Mozambique and as USAID as an organization as an agency, I helped provide guidance and structure around the monitoring and evaluation of these projects. And one of the areas that I saw success, over the time that I was there as well as the time before me, and after me, was monitoring and keeping track of the testing portfolios within the different organizations that we supported.

So one of the indicators that we track is the number of HIV tests that are completed, and then amongst those tests, the number of positive test results and the number of negative test results. We consider the number of positive tests, divided by the total test as the positive rate or the *positivity rate*. Sometimes that's referred to as the *yield.* So, we want to be very efficient with tests because there's cost implications to them and we keep track of the *yield of positive tests over time, by geography, by the implementing organizations*, to see who's being effective with their programmatic approaches and who can maybe use some support and gain insight from other organizations or from kind of best practices.

The success story that I'm going to share is how that yield changed over time and how our ability to measure that allowed us to be more effective over time. And the overall structure of our overall goal with testing is to identify 95% of the people living with HIV to allow them and allow us to know their status so that we can get them enrolled on treatment. And then by doing that, prevent other infections from occurring if they're stable on treatment.

So that being our overall goal that we think about the start of PEPFAR and of HIV response programs in the early 2000s, we had a very low percentage of people that knew their status. And in that context, we saw the primary modalities being voluntary counseling and testing being quite effective and efficient in terms of the yield because conceptually people that, at that point in time, that had awareness of their status. Sorry, excuse me, awareness of the need to be tested, awareness of their risk and presented to the health facility, they would have a higher likelihood of being positive than those that maybe didn't and were coming in with with the flu or with you know fever or something else going on. So early on we saw that voluntary counseling and testing had a very high yield and it was quite effective and efficient at identifying those those first proportion of people have HIV and allowing them to access, treatment. Over time, the yield for that voluntary counseling and testing went down and we realized, I'm not sure what the percentage was of the knowledge of their HIV status. But at some point, it became clear that as awareness grew individuals were going for testing repetitively, which is appropriate. If they had risk and there would never be a condition that would prevent them from being tested if they want to be tested and the support there is for the health facilities.

But the concept is that maybe there's pragmatic things that we can do through the partners into the health facilities and the clinicians to shift the volume of testing towards other modalities that are producing higher yields. So what we saw is that in the middle of the kind of epidemic of giving you that 95% target we saw the yield and provider initiated testing take a peak and can be quite high. So there was three or four years where we really pushed that one. This is when I was at USAID back in 2012. We pushed our partners to focus on the modality of provider initiated counseling and testing and that was quite effective for a couple of years, we saw that yield, you know, in the 6 to 7% range where in the community, which was always pretty low, it's an important aspect for testing, but it was always a bit low, and involuntary counseling and testing the yield was more around, you know 1% 2% 3% which is not not quite as high as as as provider initiated testing in this context.

So essentially we use the monitoring data and our ability to collect that yield. To focus the work on provider initiative testing at some point, then we saw that that rate goes down and as we got closer to say 70% or 80% of the people living with HIV in Mozambique, knowing their status. Which is kind of in the range that is now those yields are quite low. And we're doing a lot of tests that are negative. We always want to have test availability for those that want to be tested, but we also want to focus on how we can be the most effective and efficient with those, resources, that the funding for the prevention and the testing portfolio.

So what ended up happening a couple years ago was we realized that there's a new modality that we could introduce which is termed index based testing. The programmatic approach to that is when you identify a person living with HIV. And they're willing to give information. You allow them to identify their contacts, their family members, their friends, their social contacts or sexual contacts, anybody that might be at risk from within their network. And somebody would be invited to have that person come into the clinic and receive a test. Or in appropriate circumstances there would be a healthcare worker that would go to the community, for testing

on site. That modality ended up being very, very effective at identifying this last 20 to 30% even 10% of people living with HIV that don't know their status. Because it's targeted and the yields were in the 20% to 30% range. Now, when we started that the volume of those tests were quite low. You know that most people were still being identified through other modalities. So, there had to be a real big push from the donor organizations and from the supporting organizations down to the health facilities and the community organizations that were doing that work the index based testing to support them to focus on that to fund them to do that right the training and the structure to do that.

And that's where we're at now, currently where most of the testing, most of the positives...We're trying to focus on index based testing because it's quite effective at identifying that last, you know, 15 to 20% of people living with HIV in Mozambique and that that overall scenario kind of played out in other countries as well to my knowledge.

And we couldn't have done that without proper monitoring and evaluation of that data coming in, quarterly, we were collecting it quarterly at that time. And we have to make those shifts every six months or every year we have developed a new strategy around that. And without that data we couldn't have made those transitions and been as effective as, as I think that we were.