Testimony of

Norman Hearst, MD MPH

Professor of Family and Community Medicine
And of Epidemiology and Biostatistics
University of California,
San Francisco

House Foreign Affairs Committee
Subcommittee on Africa and Global Health

March 11, 2010

Good morning. It's an honor to be here. As someone who has worked with AIDS epidemiology and prevention for 25 years, I greatly appreciate this opportunity to share my thoughts about the future of PEPFAR.

In my field at least, I know that congress can work together in a constructive and bipartisan way. PEPFAR has made a tremendous difference for many individuals and countries and has done great things for the reputation of the United States in large parts of the world. Thank you.

Nevertheless, PEPFAR today is at a crossroads and faces new and difficult challenges. Some of these are results of PEPFAR's success. Others are inevitable consequences of the mathematics of the AIDS epidemic.

The last time I testified here was before the full committee during the PEPFAR reauthorization hearings. The most contentious issue then was "earmarks" for prevention: whether to require that a proportion of prevention funds go toward reducing the behaviors that spread HIV as opposed to things like condoms and HIV testing. At that time, Tom Lantos, who had been my representative and for whom I voted many times, was chairing the committee. At that time, the main emphasis of my testimony was the solid scientific evidence behind the A and B of the ABC strategy for AIDS prevention (that is, Abstinence and Be faithful) and to make clear that it wasn't just some sort of plot by the religious right.

I'm happy to say that congress came up with a reasonable compromise on this issue. While ending rigid earmarks of spending for A and B, you required that PEPFAR programs in countries with a generalized AIDS epidemic provide a justification if they spend less than half of their prevention budget on A and B. Such justifications have now been submitted by some countries, and, for the most part, they appear reasonable. The system is working. I don't know if anyone is pressuring you to revisit this compromise. If they are, I don't know what the problem is that they're trying to fix.

But today, I'm concerned that PEPFAR's prevention efforts soon will be under an even greater threat than unfortunate ideological battles about how much to spend on promoting condoms vs. encouraging people to stick to a single partner. The threat now is that prevention money may be siphoned off for treatment. As I said the last time I testified, we cannot treat our way out of this epidemic.

What has happened since? PEPFAR is treating more people. But the number entering treatment is far less than the number of people getting infected: by somewhere between a 2:1 and 5:1 margin, depending whose numbers you believe. So despite rapidly scaling up treatment, we are falling farther and farther behind.

Funding for treatment cannot keep growing exponentially. And we now have many people on treatment whose virus is developing resistance to first-line drugs. This means they will require more and more expensive alternate drugs. Remember that we are not curing anyone. The people that PEPFAR treats have a lifetime entitlement to whatever

drugs they need, unless we want to cut them off and let them die. So it will become increasingly expensive just to maintain the people we have, let alone keep adding more.

This is ironic, because we have worked so hard to encourage people to get tested and come in for treatment. We have labored to create the demand for antiretroviral treatment, and now we will inevitably find ourselves unable to satisfy that demand. Instead of being good guys for keeping millions of people alive, we seem to have set things up so that we will now become bad guys for turning people away.

What we should be learning from the current situation is the importance of prevention. What I'm afraid will happen instead is tremendous pressure to divert the minority of PEPFAR funds going for prevention to treatment so as to briefly postpone the day of reckoning when we'll have to admit we can't treat everyone. This would be a terrible mistake.

There are people who will try to convince you that treatment somehow IS prevention. They will tell you that prevention requires people to get tested and that no one will get tested unless treatment is available. They will come up with complex mathematical models based on unrealistic assumptions to justify their assertions. Don't be fooled. Prevention is prevention. Treatment is treatment. Any overlap is mostly wishful thinking in the African context.

People promoting treatment as prevention in Africa ignore how HIV spreads in generalized epidemics. A large proportion of transmission takes place in early infection, when people's viral loads and infectiousness are highest, through networks of interlocking sexual partnerships, before people would even test positive, let alone enter treatment. How could treatment possibly stop this?

Today we have many well meaning people who want desperately to believe that treatment will work for prevention. But they have very little real evidence to show that it does. Instead, they offer theoretical models about how maybe it *might* work and pretend this is evidence. The fact is that even in places like my home town of San Francisco, where we have ideal conditions for so-called "treatment as prevention," the evidence for whether it works is far weaker than people would have you believe. Yes, treatment can lower some people's viral load and make them less infectious, at least temporarily. But any benefit from this is probably overwhelmed by the negative effects of treatment on prevention: once the general public knows that effective treatment is available they worry less about AIDS and become riskier in their sexual behavior. We see this all over the world. My own research has shown this in places including Uganda and Brazil.

What *does* work for prevention? Look at Uganda, the African country where I've worked the most. In the late 1980's and early 1990's, Uganda was Africa's greatest prevention success story. This was before HIV testing was available, long before treatment was available, and even before many condoms were coming into the country. But Uganda was able to cut its HIV infection rate by two thirds, simply by convincing

people, on the average, to reduce their numbers of sexual partners. This was done with almost no foreign funding.

Now fast-forward to 2010. What's happening in Uganda? Most Ugandans have forgotten about reducing their number of partners and instead internalized the foreign donor message that prevention is really about condoms and getting tested. Furthermore, Ugandans who believe that effective AIDS treatment is available are now the very ones most likely to have multiple sexual partners. And rates of HIV are going back up again.

I'm not saying that treating people with AIDS is bad. I think it's great. If you can double funding for treatment in places like Uganda, I applaud you. But if you can't, PEPFAR needs to squarely face the reality of limits on how much treatment can be provided and certainly not to raid the prevention budget to treat a few more people. Even if you double funding, you'll just have to face the same reality a year or two later.

Facing reality is not easy. It means telling people and governments that we cannot bankroll unlimited treatment. We need to say in a clear, unapologetic way (because we have nothing to apologize for!) how much we can contribute. In Uganda and other African countries, treatment facilities are now turning away patients because the spots funded by PEPFAR and other donors are full. There was a recent cover story about this in the *Wall Street Journal*. It didn't help that Dr. Goosby was quoted as saying that PEPFAR will turn away no one who needs treatment. He may have been quoted out of context, but such statements will only breed resentment when it becomes impossible for us to make good on those words.

We are now faced with flat funding to deal with an overwhelming and growing backlog of need. When the supply of treatment no longer meets demand, we will need to be especially vigilant about how scarce, life-saving treatment is allocated. Remember that many PEPFAR priority countries have tremendous disparities between rich and poor, between men and women, between the capital city and rural areas. Many have poorly functioning governments and serious problems with corruption. We will need mechanisms to ensure that treatment funded by PEPFAR goes equitably to those who need it most. This will prove a tremendous challenge in countries where nothing else is distributed equitably.

If any of my comments seem overly critical, I apologize. PEPFAR is a great program that has done great things in a short time and about which all Americans should feel proud. But it now must grow up and recognize that it is not really an "emergency" program and that we are in this for the long haul. We must be exceedingly wary of perceived open-ended promises that we cannot keep. We must base our efforts on reality, not wishful thinking. We must reject those who tell us that treatment is prevention based on platitudes and unrealistic models. We must be clear and unapologetic about what we can and cannot do. And, above all, we must not abandon the fight just because there are no easy solutions.