XVII International AIDS Conference
Mexico City Notebook
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LARRY: Jon Cohen from *Science* magazine thanks for joining us.

JON COHEN: Thanks a lot Larry, glad to be here.

LARRY: So, let us start with today. Last couple days, including today, we have been hearing a lot about when to treat, new guidelines from IAS USA about when to treat and some of the advantages of treating early. What is going on here?

JON COHEN: It is a funny thing that here we are in 2008 and even in wealthy countries, there is no clear idea about when the best time to start someone on treatment is. In poor countries, there are guidelines that, say from the World Health Organization, start people when their CD4 cells drop to 200 or below. A normal person has let us say 600 to 1,200 and on average, you lose about 50 a year when you are infected.

There are new guidelines from the IAS suggesting that we should start people sooner when they are at 350 or below. The evidence shows that when you start people at 350, they live longer, they do better. It makes a lot of sense and in many poor countries when you have a cutoff of 200, it does not mean that people show up at 199, those show up when they get sick with 50 CD4 cells left. And there is abundant evidence that they do not fair as well, they do not respond as well to the drugs. They do not live as long.

So, the equation is, well, you want of course, people to live as long as possible, to respond to the drugs but when

you are treating millions of people and you raise the bar there to 350, as an AIDS activist Greg DuVall [misspelled?] said today, this could wreak havoc on these health care systems that are already struggling to keep up with that 200 cutoff.

LARRY: And what this actually there has been a lot of talk today as well about the relationship between the HIV epidemic and health systems in countries being overburdened. And you hear two things, that AIDS has put a burden on these health systems but it is also the funding going to the epidemic is also a helped improve the systems.

JON COHEN: Yes, I think that today, once again the health care argument clearly tilts toward people here arguing that AIDS funding is building health care systems and to wait for health care systems to be ready to handle HIV is unconscionable. That is the other side of the coin, what, everybody is supposed to sit around and say well, everything is not perfect. And the way that people have gone into this is, we have to throw everything at this because it is a war with people dying, you have got to save them.

So, I do not think here, in this huge conference hall, there are very many people who feel like AIDS is harming health care systems.

LARRY: What about the financial implications? Already we have millions of people not getting access to drugs. If you change these guidelines and say that more people should be getting them, it is going to cost more right?

JON COHEN: It is going to cost more and there was no real hard number sort of discussion about that today but there is an awareness that it will cost more. Everything in this field, it is so new sometimes when the ideas come forward. People do not have time to really cost things out and plan it the way you might plan a business. They are trying to keep people alive.

LARRY: How has the nature of the debate over funding changed a bit? I mean in the beginning it was really a crisis emergency mentality. Now there seems to be a realization that if you are going to put people on treatment and the treatment works, they are going to be on it for the rest of their lives.

JON COHEN: Yes and there is also a greater realization about— it has changed because it is not about prices, it is about sustainability. How are we going to do this for years and years on end? There was a lot of talk today about sustainability and one of the main issues with sustaining the response is people who go onto cocktails of drugs at some people are going to need to switch.

For the first 2 million people who went onto antiretroviral drugs in this massive rollout that has occurred, the World Health Organization calculates that 97-percent of them are on first line treatment, which is much, much cheaper, maybe tenfold cheaper than second line treatment.

LARRY: These are often generics, the first line drugs now?

JON COHEN: Generics, yes. So, there is a tenfold difference. That is a lot of money. Well, Brazil, which started universal access in 1996, there was a woman here from Brazil who presented today about this, 25-percent of their people, 190 treated people, 25-percent are now on second line treatment and it is hurting Brazil and Brazil is worried about how much money they are spending on the drugs.

LARRY: So, are we going to start to see a return to some of the intellectual property cabin rights we— [interposing]

JON COHEN: Yes, that issue came up again today and Ellen T'Hoen from Medicines on Frontier, Doctors Without Borders was discussing this. The patent issue has always been at the center of this debate but there has been one other thing at the center of this debate and it has been India. India was not constrained by patent issues because it was outside of the World Trade Organization rules until 2005.

So, now India is going to be forced to observe the same patents that everyone else is and as Ellen T'Hoen was saying, do not kid yourselves, if we do not have the ability for India to make generics, we do not have a bargaining tool with Big Pharma for them to lower their prices for the drugs that they are making and that changes the whole equation.

LARRY: Speaking of India, there was also some talk today of India's prevention, initiative Abahan and some of its successes—

JON COHEN: Yes, well, everyday people have been talking about Abahan at the meeting. Abahan is a massive prevention campaign, very well funded, and they run it like a business. So, they did some cost analysis, comparisons of what Abahan can do verses others and they do it much more cheaply.

And as one researcher said, McDonald's counts how many hamburgers they sell and Abahan counts how many people they are treating and actually follows up and really does a good job of it.

And the sentiment here that is coming out is, public health specialists have been running all this and they do not know much about business and doing things on a grand scale and we have to start thinking more in that business mentality of accountability and monitoring and changing things when they are not working.

LARRY: Changing topics a little bit, back to more geeky science, which I know you like to talk about. There is some talk about a new technique to identify highly infectious people, people very early on in the stage of infection and if we can identify them, we can potentially help stop some of the spread of the disease.

JON COHEN: Yes, we know from several studies that in the first few months after someone gets infected, their immune system has not really fully kicked in. The virus is high. They are highly infectious people. In one study they infected 44-percent of the people in the study. You think about the

fact that people live for 10, 12 years with HIV. That is a huge proportion of infection happening in the first few months.

So, what if you could identify those people, they do not have HIV antibodies. Their immune system has not even made antibodies so they are not even going to be [inaudible] in normal screening. Well, one way to do it is to use a very sensitive test that looks for HIV genetic material for the RNA and it is an extensive test. You cannot do it on a thousand people.

So, what they have done is they pulled the blood of a thousand people and bare with me, it is a little technical, they pull the blood of a thousand people, they have a thousand test tubes and then they line up 10 test tubes and they put drops of a 100 people into test tube one, drops of the next 100 it test tube two. Then, they do that DNA/RNA test on the 10 test tubes.

Let us say nine of the test tubes are all negative, you throw them away. Now, you have got one test tube with a 100 people in it. You know who they are because you have got those other test tubes back here. You take 10 more test tubes of 10 and you test those 10, throw away nine of those. You have got 10 people left, you can find the one, maybe even two people who are in that stage of what is called acute infection.

So, they have just presented a study here today about doing this in Malawi and South Africa, in developing countries and they did it primarily in sexually transmitted infection

clinics and they found that 1.1-percent of the people that they screened this way were acutely infected. That is a lot of people. And then they contacted their partners if they could and tried to bring them into the study and they are going to follow up and study these people.

But, I think it is a very clever prevention strategy because outside of the realm of what most people are thinking about when they think prevention and that is precisely what is needed because in this new world of cocktail prevention where more is more, that is more.

LARRY: This is our last report here from Mexico City. Looking back on the week, what has really resonated most this week do you think?

JON COHEN: Well, as I anticipated in the beginning, it was prevention, prevention, prevention, prevention. And it was the marriage of treatment and prevention. As one researcher said, they have been at the altar a long time, let us get them married. And they got married this week, there was a ceremony, they were married.

Everybody finally realizes that when activists now go into the street, they are not simply going to be chanting "treatment now", they are going to be chanting "treatment and prevention now" because we know that treated people are less likely to spread and that is prevention.

The prevention people also realize that they are linked to the treatment people in ways like we discussed yesterday,

this idea of pre-exposure prophylaxis, uninfected people taking drugs to prevent infection. That is a very promising research study right now. Well, what is it? Is it treatment? Is it prevention? It is both and that is the new way of thinking, that is what really came to the front and center this week.

LARRY: In looking ahead to Vienna, do you expect sort of more research, more effort going into that marriage, into the joint treatment and prevention statutes?

JON COHEN: There were not a lot of answers here to be frank—

LARRY: They started to ask the questions—

JON COHEN: Yes and the data are going to come in between now and then. We are going to know whether many of these ideas that were discussed here actually work or actually fail. This conference, this is the 12th one I have been to. It had fewer presentations that actually had results where people could say we did this big study and we learned this big finding. It is not what this conference was but the next one well could be.

LARRY: Assuming you are back there for the 13th, we will see you.

JON COHEN: Thanks so much Larry.

LARRY: Okay, thanks Jon.

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