

## **AIDS: exceptionalism revisited**

Speaker: *Dr Peter Piot*

Chair: *Professor Tony Barnett*

### **Professor Barnett**

Good evening, ladies and gentlemen. This is a special lecture in the Department for International Development series of lectures on HIV/AIDS and other infectious diseases and I can see whilst it is examination time we have a small but very high quality audience here. That could of course I suppose describe me really but (I have been working on my joke while we were waiting) but I am not an audience.

Anyway tonight Peter Piot, Executive Director of UNAIDS is here to talk to us and I count that as an enormous privilege because Peter as well as being an extremely celebrated public health specialist has over the last 13 years has built an extraordinary organisation UNAIDS which has done an amazing amount of good. Very few people can achieve that kind of thing so I am not going to introduce him in any detail, I am not going to go through his CV. Most of you know a great deal about him. If you don't you can look it up on the web. Peter Piot.

### **Dr Piot**

Thank you, Tony and good evening everybody. Thank you, Tony, that is the second time that you have brought me here and I must say that your work has been really a source of inspiration and several of the concepts that I will discuss and things that have become slowly accepted in terms of what we should do on AIDS is based on your work and many of the things you said were said before their time as is often the case but I guess that's the role of an academic so thank you for that. So what you have been doing has become more and more relevant as we enter a new phase in the fight against AIDS and I think the time has come for social scientists to contribute in a very operational way to what we are trying to do.

What I would like to do this evening is to review a bit of the progress we've made because I think we should not neglect what we have been doing, why that has been so. I would like to point to some of the old and new myths that are, you know, undermining basically the response to it, some of them coming particularly from this country, and then talk about a need for a long term view and how the exceptional nature of the epidemic fits into that.

In a few weeks time there will be a so called high level meeting in the UN General Assembly. Okay, that's my job, some of this is a lot of rituals in the General Assembly, but on the other hand it is that kind of political mobilisation that has really led to the results that we are seeing today and I remember in 2001 when there was retrospectively a historic meeting of the UN General Assembly, a special session on AIDS, and according to the *Economist* 5 years later this was the turning point in the global response to AIDS. At that meeting all donors except for France, all African countries, all Asian countries, were totally opposed of mentioning the word antiretroviral therapy and to have a target or a goal on treatment for people living with HIV and so in that declaration of commitment that came out of it you see only some very vague type of view and compromised language.

Today there are 3 million people – well that was of December last year, there are a bit more now – 3 million people in low and middle income countries that are on antiretroviral therapy compared to about 200,000 when we had this debate, this absurd debate all night long in the UN General Assembly. It's really unprecedented in international development and in the high

level meeting that we will have a few weeks from now the Secretary General, Ban Ki-Moon, issues a report on progress and that's one of the highlights.

Worldwide now over a quarter of pregnant women have access to services to prevent mother to child transmission of HIV. It's more than the double the proportion that we saw when I came here last time, 2 years ago. That's still very disappointing, that's very low, and it's not about sex and drugs so you would assume that this is not controversial and I will come back to that, why that is so.

Equally important there are a growing number of countries that are seeing a decline in new infections - most east African countries, southern India states, country like Cambodia, some of the Caribbean countries, not though in eastern Europe or in central Asia where HIV is spreading very fast and these declines are associated with safer sexual behaviour that we see and it is a bit the same story all over the place, delaying first sex, increasing condoms, less partners and so on, but it's not one particular thing.

So far for the good news but as all of you know there is also bad news – 2½ million new infections last year as a conservative estimate I would say and perhaps equally important is that for every 2 people who are newly put on antiretroviral therapy 5 become infected. So in other words the gap between those who are benefiting from life saving treatment and those who will need it in the future that gap is becoming wider and wider because of a fairly generalised failure of large scale effective prevention. AIDS remains the first cause of death in Africa by far, by far, before any other specific cause of death and even with 3 million people on antiretroviral therapy at least 7 million, again by conservative estimates, are in need. In other words the glass is half full nearly but those who don't have access to treatment we know for sure will die.

Now these are some of the important lessons that I feel we can draw from the last few years and new knowledge. One I would say is that it's wrong to think of AIDS as a disease of poverty, AIDS is a disease of inequality, it's not exactly the same thing. It is a disease of inequality between men and women. Gender inequality is a major driver of this epidemic in many countries of economic inequality, exacerbated often by migration, mobility, forced migration or for economic reasons. It is inequality on the base of sexual orientation and so on. Last year I published a paper in PLoS medicine with some of my colleagues and we looked at the HIV prevalence and income distribution in I think it was 16 or 17 African countries over different times over the last 15/20 years and with one exception, that was Cameroon, all other countries there the highest HIV prevalence was found in the wealthiest quartile, percent or whatever it was, quintile, of the population and both were men and women and AIDS is associated or a transmission of HIV with disposable income and this is unlike any other health problem which is affecting far more the poor. When you do the same exercise for any other health issue in the same countries it's the poor that are the most affected and that is another challenge also for the theologians of development practice. What do we do with that and how do we approach that and it is of course that way because it is based on, you know, transmission is mostly sex and because of these inequalities, gender inequality in the first place, but we know of course that the downstream impact is much greater among the poor, much greater, think just of access to treatment.

The second lesson is that over the last couple of years it has emerged that yes, AIDS is a globalised epidemic, it is the globalisation of risks, of sexual risk if you want, but it makes less and less sense to talk about the global AIDS epidemic or the pandemic. What we are

seeing are many different epidemics, each with their own characteristics, and meaning also that we need to adapt what we are doing to these particular features and with different drivers and different presentations and it is still evolving. I strongly believe that we may be up for some surprises in the future but since they are surprises we don't know what they will be but I was a few weeks ago in Moscow for a conference on AIDS in eastern Europe and central Asia, now Russia has around 1 million people living with HIV today, 10 years ago who would have thought that, it was just a few thousand. I remember when I was working in what was then called Zaire and in Kenya that South Africa we considered as a very low prevalence country for HIV and it's true. In the '80s, in South Africa, HIV was concentrated in white gay men.

We don't know how AIDS will evolve. It is probable that we will see in many countries a continuing spread with lesser efficiency but take for example countries where injecting drug users are the driver of the epidemic. You see a peak and then a slowing down of new infections which makes perfect sense but since there are far more people having sex than people who are shooting drugs even with less efficient transmission, be it male to male or men to women or women to men sex, that at the end it may result in a huge number of infections if you take a long term view.

We are seeing also all over Asia, where we have looked at it from China to Malaysia to Indonesia, also India, more and more is epidemics of HIV in men in sex with men. It's not easy to have representative samples but it reminds me really of the early 80s in some of the western countries and you know a provincial town in China that can mean 4 million people then multiply by X per cent of men having sex with men and what that could result in is quite a substantive number of new infections and hardly anything is done about that.

Third, what we are seeing is a continuing familiarisation of the epidemic. What was first described as a problem in white middle class gay men, you know, you remember for those of you who are old enough, 1981, this was the first report on AIDS, Tony you are not one of them, but now half of all the people living with HIV are women but in Africa it is over 60% but again, just coming back from eastern Europe, we've got now a country like Russia or Ukraine, there are over 40% of all new infections, all new diagnosis, let's put it that way, are in women and the question is, is this just to use that term 'feminisation' or is this the beginning of generalisation of the epidemic, we don't know. It seems that most of the women who are diagnosed, newly diagnosed with HIV, have a history of injecting drug user, are a sex partner of an injecting drug user, but that seems to be less and less the case. So we are constantly learning and I think that the...what Tony, you and Alan Whiteside first described as a long wave event I think is a notion now that is becoming more and more acceptable.

Now how did all this progress happen, this unprecedented happen? I would say it's a fortunate convergence of good politics and good science. There is the activism, both in some of the affected countries and in the countries like here, high income countries. This political leadership - I think again it goes back to the turning points in 2001 when there was on the one hand a summit of the then organisation of African Unity, now African Union, in Abuja, hosted by President Obasanjo, where 45 heads of state of Africa came together and really breaking the silence and taboo. Suddenly there was the political space in countries and then the special session in the UN General Assembly. The fact that President Bush created in 2003 this initiative on AIDS relief, whatever we may think of other aspects of the policies, but that was an act of leadership and has had a major impact, the creation of the Global Fund and so on.

I think also the fact that affordable antiretroviral therapy became available was a major, major element here, politically speaking, because here suddenly a solution "was offered" for the decision maker and something that could be counted, how many people on treatment, and that is particularly important in US Congress and in organisations like DFID who want to count how many people. HIV prevention is more difficult to count because you basically need to count non-events, something that did not happen, and our methodologies are not so well developed for that and may never be really ideal. So suddenly there was the perception that AIDS had become a problem with a solution and you don't find leaders who are willing to associate themselves with a cause without a solution so even if we all know that treatment is not going to stop this epidemic it was a very important element in the mobilisation of it.

Lastly I would say a favourable international funding climate. Official development assistance had gone down for many years in the '90s and in, you know, 2001 and so on it started to go up again. Now the last 2 years it went down again. So in other words the pie became bigger so it was relatively easier to fund something new like the AIDS Response. So I think it is not an overstatement to say that the results we are seeing today are in unprecedented phenomenon in international development and among all the millennium development goals, and fighting AIDS is No. 6, I think we will see many countries fully achieving them.

It shows also the power of what, to use an old fashioned word, international solidarity because all this is the result of local action but also global or international support and it happened without fixing all the underlying problems. One of the reasons that there was so much scepticism about the possibility of introducing treatment for people with HIV in developing countries is that the health systems are inadequate, there is a shortage of health care workers and so on. There is a whole list, you know, each of us can make a list of at least 50 reasons why this is not going to work and the very same reasons that we were discussing 5, 6 years ago why this is not possible are still there and yet it has happened. It shows again if there is a movement without the resources it is possible but now we've got to go beyond that.

Looking back at how we thought about the future is always an interesting exercise. What did we think about how AIDS would look like today? Were we right, were we wrong and what did we underestimate, what did we overestimate? I think we collectively really underestimated how in our modern times how an infectious disease can take on a global epidemic proportions. Regardless of which scenario you take and what kind of estimates and whether you are very conservative or not it is just amazing how in a few decades, which is nothing from a historic perspective, how tens of millions of people can become infected across the globe. It's another story of globalisation often and of the networks that exist in the world but say there were 50-60 million people have become infected since the early '80s. All these 60 million people are connected with each other one way or another, had sex with each other, sharing needles, got a blood transfusion from somebody or their mother had it, that's it, there are no other ways. Just try to think it would take a lot of computer power to model that but that's what has happened.

We also underestimated, and that is something completely different, but the power of international solidarity to counter such a global disaster that we have these results. We underestimated that we could make progress on access to a fairly complex treatment, to chronic treatment in resource for environments but we also underestimated the importance of the stigma, the discrimination that is still associated with HIV, the importance of culture, of

the social environment for our programmes of gender inequalities and at the same time the resistance to go beyond medical classic public health approaches and finally I think I certainly underestimated the fragility of political commitment because we have been seeing reverses of gains made in the '90s and the beginning of the century. For example, Uganda had a very strong leadership on AIDS in the 1990s, Thailand had one also, and it went away and the result was an increase in new infections.

What we overestimated I think was the pace of the spread of the epidemic in Asia where I also thought that we would see much faster a generalisation of the epidemic outside those who are most at risk. That in most cases has not happened. It may still happen, in the long term we don't know, but that hasn't happened. I also thought, perhaps naively so, that once there would be universal access to treatment like in this country or in my country, Belgium, that stigma, discrimination would be eliminated because we have now a treatable condition, that has not happened whatsoever.

We overestimated our capacity to come up with technological solutions, still no vaccine. I remember that several conferences ago there was talk about eliminating the virus from our body so in other words a cure. We're not there yet. The search for the magic technological solution and silver bullets has really not materialised. And I think we also overestimated the sustainability of prevention efforts. We see all over western Europe increase of new infections in gay men, men who have sex with men.

Now before turning to the future let me reflect a bit on some myths, current myths around AIDS, as they all have the potential to derail the current positive trajectory. There were many I could think of when I was preparing this talk but I will limit it to 6.

The first one is the health system's myth. The myth that if we just, if we only strengthen health systems this will solve everything, including AIDS. Since I am in this job I get so many letters and emails – 'Dr Piot, if only you would do' and then you can fill in whatever you prefer then this epidemic would go away, if only, and I think this is one myth. Of course our systems need to be strengthened where they are not there and that would be good for many, many aspects and it is essential for the sustainability of, for example, access to treatment that we have well-functioning health services everywhere and a healthy workforce that's there, but if we would wait until we have well-functioning health systems I think that would mean millions of more deaths. Just imagine what would have happened if we would have waited to fix our systems before starting rolling out antiretroviral therapy. It would mean probably at least 2 million deaths. This is what would be on the conscious of the people who say just first fix health systems, millions of deaths. They would be in the cemetery by now.

But AIDS has revealed the weaknesses, something that has been there for many years. I mean I worked in the '70s in central Africa and I was already the only doctor in hundreds of kilometres in surrounding. There were no nurses, there were no doctors, the health system was not functioning. So why haven't we acted earlier? It was gross neglect by the governments of these countries and by the donors not to invest in capacity and one part of it is health systems. So we need really, we need that, particularly in the long term we need strong health systems that can ensure just from the AIDS perspective and there are many other perspective, can ensure sustainable quality antiretroviral treatment. We need them to prevent mother to child transmission of HIV because it is there where it will happen.

When it comes to HIV prevention, except from mother to child transmission, most of that happens outside health systems, health services. Injecting drug users, sex workers, young people, men who have sex with men and so on, they will not go and they will not be reached and HIV prevention is in the first place about social change and about community mobilisation.

So I think we need to stop this stupid debate whether we need either strengthening health systems or put the money in AIDS, we just need both, and bad health care workers, because they died from AIDS, are not going to strengthen much of the health system. We need to make sure that people stay alive and after two decades of sector wide approaches to strengthen health systems it's actually a shame that all the effort was on process, nothing on outcome, nothing on results for people.

H8, this is a group of the executive heads of 8 multilateral organisations - the Gates Foundation, WHO, the World Bank, Unicef, UNFPA, all these acronyms, UNAIDS, GAVI and the Global Fund, we come together regularly and we agree among ourselves we are going to ban from our vocabulary the words vertical and horizontal because they reflect 20th century approaches. Dealing with AIDS you can only do in a horizontal way because it goes across sectors and I saw it in Ethiopia last month where the major funding for health...outside funding for even building new health centres, for training health care workers, is coming from AIDS money. That's not the most rational way to do it I know but that's an illustration just as in Rwanda where AIDS has not only revealed the problems but also has helped to solve problems.

The second myth is that too much money is going to AIDS myth. This has been a recurrent one and I think will come up and resurface like it did last week in the *British Medical Journal* and lets look at the facts. The first fact is that dealing with AIDS, fighting AIDS, is actually under funded not over funded, and last year about \$10 billion was spent in lower and middle income countries. The need is about, last year it was about \$17 billion, and that need is going up. Secondly, it is a relative thing – all development areas, all health areas are under funded, that is true, and we should not ignore that. Thirdly, investments in AIDS are going to remain essential in those countries that are heavily affected by AIDS in order to achieve economic and social development. So cutting lets say on AIDS programmes will mean in the end that the bill will get bigger and bigger. One of the lessons of AIDS is the old slogan 'act now or pay later'. Why am I saying that? The more people become infected because of lack of effective prevention programmes the higher the bill for treatment, the higher the bill for loss of productivity. So there is only one way out and that is to increase overall spending and that donor countries, such as the UK, respect the commitments that were made to spend .7% of GDP on international development.

A third myth is that it is time to normalise AIDS, that AIDS is just like any other disease. I would call that the medical myth and that's a dream, it should be, ideally that's where we should get to, but it's far too soon, far too soon except for a few things. One we need to make sure that indeed, as I mentioned when we talked about the health systems myth, that treatment of AIDS should be as part of a normal system. I don't know about the UK here but in my own country 10 years ago if you needed antiretroviral treatment you would go to a specialist clinic. Today you go to your general practitioner and the general practitioner takes care of you unless and until you develop some complications and then you go to the infectious disease specialist or an AIDS clinic. So we need to normalise that, we need to normalise mother to child transmission prevention and everything that requires.

But we also need to normalise the human rights of people with HIV. We need to normalise the fact that somebody with HIV can travel anywhere in the world. I mean I just came from New York this morning and if you are living with HIV you can be denied access to the United States just as to about 60 other countries in the world. That is unheard of again, and this is for short term travel, I am not talking about immigration or whatever, just if you want to go shopping, apparently people do that, just go to New York, or see a friend or go to a meeting, that should be normalised, but normalisation which would mean that we stop addressing specific AIDS issues and concerns for people at higher risk or vulnerable populations. As mentioned before I think that would be a catastrophe. It would mean really an out of control epidemic and it would mean that we don't deal with the big issues, that we will not deal with sex education for children, that we will not deal with the requirements of sexual minorities, that there will not be harm reduction programmes, a very controversial issue, injecting drug users and so on.

Fourth myth, and that is that prevention doesn't work. Okay, I agree AIDS is a big problem but you know there are two schools there. You have let's say the heart scientist and saying there's not really, as long as we don't have a vaccine forget it, behaviour interventions don't work in general, forgetting that we have had massive results of behaviour interventions on many things, smoking cessation, seat belts, drinking certain things, I mean that's from Coca Cola to other things, that's the result of behavioural change induced by marketing. The big difference of course being that there is no substitute for sex so it's not smoking cessation, that's the wrong comparison, but it means that if we are thinking it through, if we use the right approaches, it is possible and we have empirical evidence that prevention is working, but this is also a bit of an academic myth in the sense that prevention experts spend their time trying to identify what exactly, you know, can be attributed to that change, that is very difficult because we people, we are bit more complex than just one thing.

The fifth myth is the silver bullet myth. We have an example of that - for those of you who read the *Science* magazine last week there was an article and that also said if only, you know, we circumcise all men and then we are going to reduce so called concurrent partnerships, we will stop this epidemic, again ignoring a wealth of experience of studies, of evidence, that you need really a mix of interventions. Combination prevention is of the same order necessary as combination treatment but I guess we have all a deep need and urge for the silver bullet. So this will probably continue but I say now that anything with the word 'only' in doesn't work for AIDS be it abstinence only or whatever comes up.

The sixth myth, I am going to briefly mention, is the myth that AIDS has been dealt with. We have some results that's recognised so it's a complacency myth. I have had that reply meeting with some of the top political leaders in the world who feel very good that there are results and we should feel good about that and I think now I can move to the next problem or my predecessor was very high on AIDS but, you know, I need for my visibility and whatever, you know, and deep human urge, I would like to work on something else. AIDS has not been dealt with. We see an increase everywhere, in the west as I mentioned, we have seen in Uganda an increase, and the truth is that if we were to decrease efforts now most of the investments that have been done and the billions of dollars or pounds that have been spent on it will be lost. We are doomed to continue with our efforts until the bitter end. So when we plan for the future we must take into account all these myths because they can have a really negative effect on it.

So let me now move to the future, to the need for a long term view, long term action as we are entering this new phase, this new phase that we are having because we are having results. So what are the key questions that we need to resolve? The first one is something that keeps modellers busy is the big question how will the epidemic evolve? Particularly questions about, on the one hand, potential for so called generalisation outside those at highest risk, particularly in Asia where over half of the world's population is living. Also knowing that there is a lot of social change going on all over the world, positive social change, negative social change, social change in the sense of more conservatism if you want in terms of fundamentalism, or also in terms of more risk for HIV. There is definitely a sexual revolution going on for women in many parts of Asia, starting in Japan where this is now very well documented, where today young women have as many sex partners on the average as men. It is very disturbing for men but it's a fact. I was in Japan these were some of the reactions but it's true. So what will that mean on a large scale? What will happen in the hyper-endemic countries in southern Africa? We don't really know at the moment but that is something, it's a big unknown.

The second question is what about the politics and the leadership? The history of AIDS is one of good politics and bad politics. When there were good politics we made progress. The most striking example I would say is on harm reduction and injecting drug use. Those countries that are still not going for needle exchange, needle access, or methadone substitution therapy and so on, I have seen sky rocketing epidemics in injecting drug users and that is sometimes within the same country like in the United States. Some states, some cities are doing it and others are not, it's an unfortunate natural experiment, but it adds to the wealth of evidence. China, about 3 years ago nearly, made a spectacular policy conversion and decided to go all stops out for harm reduction and now there are over 500 methadone clinics and needle exchange programmes. The oldest still is alive or is not dead yet and the new is already alive in the sense that you have in one city, if you are lucky you are arrested and you have drugs, you go to the methadone centre, and if you have bad luck you end up in a detox centre. So the two systems are still there but policy changes have happened.

Bad politics – the fact that a lot of money was allocated by US Congress on abstinence only programmes. Where we have, which is not often the case, but we have scientific evidence that it doesn't work. We rarely have evidence that something does not work but in this case we do have evidence. That is a waste of tax payers money to use American terminology.

So how will this political leadership evolve over time and my view is that we need to make sure that it doesn't depend on individual leadership but that it is institutionalised. Again talking about the US, at the moment there is a debate about the reauthorisation of the funding for the America AIDS programme, PEPFAR, and there is basically a bi-partisan agreement between the Democrats and the Republicans for about \$50 billion over the next 5 years. \$50 billion, that's quite a lot of money, including 9 billion for tuberculosis and malaria. So institutionalising it among the elected representatives of the people but also be it in churches, in organisations of all kinds.

Thirdly, the big question for the future is how will we pay for all this in the long run? If we start thinking of AIDS response with a decade as a unit and not a fiscal year and just thinking of treatment as we know is for life but prevention is also for life and it is for generations. We can't deal with this epidemic on the base of a fiscal year so how are we going to do that? Maybe a few points – first as I said before the need is only going to grow. Even if by some miracle no transmission of HIV would happen as of this very moment more and more people



will need treatment, that's the most expensive part. Secondly, the sources of funding at the moment are quite diverse but not enough diverse. One third of the \$10 billion comes from domestic budgets of low and middle income countries and countries like Thailand, like Brazil, India, even South Africa, are paying for most of their AIDS work from their domestic budgets either directly or through a loan from the World Bank as is the case in India and I think actually that it's not healthy that a country who depend on foreign aid for the daily survival of hundreds and thousands of its citizens, you can wonder what...there may be political scientists here, but what does that mean, are you still a sovereign country if you have a few hundred thousands of your citizens whose daily survival depends on a vote in US Congress or a budget decision in DFID? That's very worrisome. On the other hand the poorest countries don't have a choice. For many years they will depend on foreign aid for this kind of treatment particularly.

So for middle income countries I believe that it should be possible to go for full funding, domestic funding, perhaps except in southern Africa. Countries like Botswana, like Swaziland, who unfortunately are excluded from the most favourable conditions for foreign aid because they are above a certain cut off and are therefore a low or high, middle income country, and I think there we need to review the rules, we need to rewrite the rules. AIDS has rewritten the rules of many things. We need to rewrite the rules also for international development assistance. You can't just use a mechanical cut off for those countries who are becoming undeveloped because of AIDS. Botswana being the case, a country that is very well managed but unfortunately has this enormous AIDS burden.

We also need to look not only at the size of the funding and also where it would come from but also where is it going to? Is it always used for the best purpose and where it can make the biggest impact and the answer is no. For example in UNAIDS we are doing so called spending accounts for AIDS in countries and to see where is the money going. I know in Latin America most of the epidemic, with a few exceptions in countries, is among men who have sex with men and with the exception of Mexico and Peru there is hardly any money going to programmes for men who have sex with men. So a lot of money is spent but not where the epidemic is.

Lastly, we need to make sure we can buy more for the same amount of money. So in other words drive down the unit cost, the most obvious example being the cost of drugs, but it's also how we do business. Some studies I have found, for example in Russia, the unit cost to counsel one person, counselling and testing and so on, that the difference between the most expensive centre and the cheapest is about 1000 difference. Some of this has to do with scale but some of it also with how it's funded.

Fourth question is will we be able to keep up the pace on treatment? As I said there are still such great needs and as I mentioned the introduction of antiretroviral therapy has revolutionised how we deal with this. Here I believe really that we need to rethink completely what we are doing, invest more in capacity, building needs, the health systems, the workforce, and think far better about how we are going to deal with the unavoidable resistance development issue.

In Brazil over the last 2 years the average cost of treatment has doubled and that is because second line drugs are so more expensive, even in Brazil, which has negotiated quite good prices for its antiretrovirals and it is producing some of them themselves. Now some of these second line drugs are more expensive regardless who makes them but we haven't had the

same type of generic competition, the same type of negotiations that, I did a lot of that myself, that we have for first line and that we have to look at also, while at the same time making sure there are new drugs in the pipeline, that we don't kill innovation.

Fifth – will we have significantly reduced the number of new infections? We must do much better on prevention as I said a few times. There are some results but it's not the same movement that we see for access to treatment. So for me the first challenge is actually building that constituency, building a movement, an activist movement on prevention. Last year there have been marches organised by the Treatment Action Campaign in South Africa, which is now the mother of all activists in the world, for prevention, asking for sex education in schools, asking for condoms in schools and so on, but that's more the exception than the rule. So that is going to be really important but how to do that is not so easy and that's a problem that we find across social issues, not just in AIDS.

We will also have to do better in knowing exactly where the epidemic is, what is going on, so where to concentrate our efforts, because what we often do in programmes is reflect where the epidemic was 10 years ago, not where it is now, and it is changing.

Thirdly, I mentioned the importance of ensuring there are good politics and I would say finally that devoting far more attention to social change and there are many, many other questions, I won't go into detail. We don't know what science and technology will bring but I think what is sure now, today, after last year's debacles on vaccine research, is that there will be no vaccine in the foreseeable future and we are now back to the drawing board.

So a huge number of ifs and uncertainties around the future and that's why I think the last Belgian who got the Nobel Prize got it because he demonstrated you can't predict the future, it's not a joke - Prigogine who was the father of chaos theory. But we can create a future. If we act today we can change it and so that brings me to the end of my presentation and is exceptionalism still something that is true, is valid for AIDS? The answer is yes – not only because it's impact is tremendous but as I mentioned it behaves unlike any other health problem in terms of who it effects in the socio-economic categories. We have the stigma. You can go to any country in the world if you have diabetes but not if you have HIV. I also think that the boundaries between an infectious disease and a chronic disease are being blurred with AIDS particularly now that the treatment is there but even without that and the fact that it affects young adults so definitely it's still there.

What are now the implications of various elements I brought on? One, the fact that we have results; two, that the epidemic is still evolving; three, that we need a long term view and four, that is still an exceptional phenomenon. I think the first implication is really that we must change the way we approach this epidemic and in everything we do, in every plan, every programme, we must take this long term perspective, not only deal with the problem of today. Now that is easier said than done. I try to do that and every Sunday evening I think about my week and I said I want to be strategic and that we act according to the core business of the organisation and so on and by Wednesday I have completely diverted from the good intention because of the crisis of the day but still we need to keep an eye on the best possible outcome in the long term. It doesn't mean long term view, it doesn't mean that we wait until 10/20 years from now to act on it, now we have to make sure that what we do has the best possible outcome meaning for example that we need to pay more attention to prevention also and thinking through the capacity issues.

Secondly, that for decades to come, decades, we will need to sustain AIDS efforts and expand them. Any decrease will mean not only loss of lives but also of previous investments in economic terms. Thirdly, we need to expand the constituencies and the people who are involved in the work, going beyond the AIDS activists and those who are working on AIDS, like me, and as I mentioned this means that for programmes, social scientists, but also people who know something about management and implementing programmes.

Fourth is that where we can integrate the work on AIDS we must do it because it may be cheaper. For example access to treatment, as long as its ring fenced treatment for the funding, A good example is Mexico and another one is in Thailand where there is now nearly universal health insurance and access to health care but the government in the case of both Thailand and Mexico said okay, there are certain entitlements and one of them is access to antiretroviral therapy, in that sense it was protected, so you've got both worlds together. But where it would be counter productive to integrate we should resist it and that is what everything it has to do with prevention, particularly prevention of sexual transmission, the whole issue of stigma, prevention on injecting drug users, because if we integrate that I know what will happen. We will go the easy road and we won't tackle the difficult issues around sex and drugs.

Fifth is that we need to invest far more in capacity. What does that mean? It is not only health care workers and health systems it is also community capacity. It's the capacity to negotiate prices and so on and lastly, we must consequently allocate resources to AIDS. I know that DFID, the UK is actually developing a new strategy around AIDS so I hope that the UK will also, like the US, will continue to set an example by committing to a specific spending target. Why is that important? It is a matter of accountability and it's also a matter that, a commitment that this is not an issue that you can deal with fiscal year by fiscal year. Three years ago the UK hosted the Gleneagles G8 summit, some commitments were made, universal access to treatment, and then afterwards the General Assembly to HIV prevention. So there is an engagement at the highest political level and that must be honoured.

All this means shifting gear, not doing less on AIDS, but doing more and making sure the response to AIDS is at the heart of development practice, not outside, that it will continue to transform development practice, continues to challenge the conventional way we are doing business, but also from the AIDS side to say so. We must learn the lessons from those who have been working on long term development issues because now we have to come together. Thanks for listening.

**Question [not close to microphone]**

I was wondering if you could say a few words about whether it might be time to routinise testing. So certainly VCT, in terms of voluntary counselling and testing, made sense in the early phases of the epidemic when there were no ways of managing the disease but what we have seen since is that countries like <?? – 58.17> or Botswana have moved from VCT to routinised testing to a <?? – 58.22> version. Now do you think that makes sense? Is that maybe the case that these countries are exceptional? Does it make sense in those countries but not in others? Or have they made a mistake? Are they caught up in your myth three that we shouldn't normalise certainly in this case?

**Question**

What do you see are the key challenges of paediatric HIV treatment?

### **Question**

[Nick Partridge from Terrence Higgins Trust] Peter I am really pleased to hear your very realistic focus on the challenges on prevention that you face and I speak as one of those white middle class gay men that do remember 1981 and I am still here and I would appreciate your comments because you mentioned right at the beginning of your talk that you were concerned about some element of the response to HIV here in Britain and certainly one is very clear to us and that's the reduction in funding for prevention work across the board, the lack of political focus and commitment to creating even the basics of sex education in schools in the UK being compulsory and well taught, through to a continued decline in the investment of HIV prevention work for those most affected in this country, gay men, and African communities. So I would appreciate your comments on how we can see a move to understanding that prevention is the new rocket science? If the development of drugs was the rocket science of the 1990s the development of sustainable behaviour change, the programmes that people really buy into, isn't that the rocket science of the '00's?

### **Question**

[My name is Raphael, I'm a medical student and also part of the Stop AIDS campaign] We have been working quite hard on the UK strategy that you have been talking about and relating to the specific funding target that you mentioned as well. What can we do in the climate where there isn't the finances that were available before, where there is a greater focus on health systems as you mentioned? What can we do to persuade DFID and to make sure there is a spending target and if there isn't one how do we react and what are the consequences of that?

### **Dr Piot**

As they say in the UN, thank you for your questions. No, they are all very good questions and on routine testing – UNAIDS and WHO we have changed policies basically, I think it was a couple of years ago, particularly for the countries you mentioned, hyper-endemic countries as we now call them, where we felt that a far more liberal offer of testing was important and it has resulted in some countries in a far greater identification and earlier identification of people living with HIV and therefore can be offered treatment.

There are several schools though. I mean also in South Africa, within Treatment Action Campaign, there are those who say test everybody and then there are those who are more on the other side and say we always need consent. We are kind of fairly pragmatic but when it comes to countries like China, Russia and so on, they are dead against this kind of approach, and the reason being that the stigma, the consequences of testing us can be so negative that the harm that is being done is much greater than the benefit in most cases but in the case of the countries that you mentioned, we are fully supportive of it as long as certain conditions are being safeguarded, for example the confidentiality, that there is always the option of opting out, but we have changed, I have changed also, my mind, from that perspective.

On paediatric treatment – yes, the coverage of treatment for children is much lower than for adults in the world and many challenges. One, diagnosis in the children is much more difficult. The price for antiretrovirals for children, up to recently, was much higher than for adults even if the dose actually is much lower but the market is smaller. Thirdly, often there were no paediatric formulations and you had to crush a tablet and all that. I think it is slowly changing now. We have been working quite hard on this and step by step and that is particularly led by Unicef in our case and we are trying to also integrate as much as we can with other childhood diseases but it remains a formidable challenge. I think that in the future

we should concentrate quite hard on that issue in highly affected countries because I think there it could make the biggest difference.

Nick, on your reduction in HIV prevention funding – it is a phenomenon all over western Europe and we are seeing what the consequences are there. I was surprised to hear there is still the issue of sex education in school. I mean that's again one of...I mean I am an optimist otherwise I wouldn't be in this job but what sometimes is discouraging is that we have exactly the same discussions today than 20 or 30 years ago before there was even HIV and one of them being meaningful sex education. I like your soundbite – prevention is the new rocket science – I think we probably have to involve and include now far more the people themselves and then also I would say marketing specialists and so on, if you can sell washing powder, there are 15 brands, why would I go for X and not for Y.

But about a month ago I co-hosted a meeting at <?? – 1.05.58> with about 40 young people and they were self-organising and coming up and very critical about HIV prevention programmes and said you need to use, we are going text and chat and so on, and at the moment that is being used mostly to make the sexual connections if you want but not for making them safe and there is just one example that I was thinking of, in Kenya, this is with PEPFAR and some youth groups, they are now starting to use also the youth culture for HIV prevention and I think that's what we need everywhere. I mean if in the '80s gay communities were so successful it's because prevention was done by the gay communities and there were no, or in most cases no national programmes and all that. In the UK here there was a strong support, the government, but that's different.

On the AIDS strategy, UK strategy, DFID, what can we do and what if there is no target – I think here I have to opt out a little bit but we have to do everything we can to make the case in essence because DFID has been a major player in the response to AIDS in many countries. They spend serious money on it and we have always applauded that and I think that now there can be no way back, you know, and my concern is that if there is no spending target what will be the, hard to say, how do you call that in English, to hold organisations accountable? That is really important but I think it's the British people who have to deal with the British politics.

### **Question**

I have spent quite a long time in Mozambique. The Minister of Health there said there is a big problem with AIDS exceptionalism. They say well we need a whole lot more focus on many, many other diseases, we have like 10/20 other disease epidemics, even beyond the focus of the Global Fund. What is the solution to this?

### **Question**

[I am Alexis and I am a Masters student here at the LSE]. You spoke earlier about the feminisation of AIDS and I was wondering if you could speak towards some of the more female geared health technologies and development now as the potential to help combat this whether through political leadership or resource allocation and looking at maybe some of the challenges of the acceptability in the market and the potential you see for that?

### **Question**

[Geoff Garner, Imperial College] Peter, it seems to me that a large part of the development of the antiretroviral treatments was the driving force from the market to create the drugs and I am wondering whether you think there are any potential mechanisms that the international

community could use to create markets that could promote prevention, interventions, and development of a better prevention tool?

### **Question**

There has been a lot of talk about why prevention is failing but we know how to dramatically reduce vertical transmission. Why hasn't that been in your thoughts and why that hasn't been addressed? Also can I just ask for a point of clarification on the first question about testing, you said that one of the reasons that you wouldn't encourage routine testing in China and Russia was because of stigma and the negative impacts of stigma. Could you elaborate a little on that because do you mean institutional and systematic stigma and comment on that in relation to the negative aspects of not knowing your status if you are positive.

### **Dr Piot**

Mozambique – is one of the few countries in Africa where there is still a major expansion of the HIV epidemic and is an example, also, of a country where we have seen a shift in leadership on AIDS and it is true that Mozambique is struggling with many problems, many in the health sector, and I think we have to recognise that. It is one of the lowest per capita ratios for health care workers and so on, that's all true. Let me compare it with Ethiopia – equally a very poor country and so on – in Ethiopia the government says okay, we don't care what the source of funding is, these are our priorities and if the money is given because of AIDS or because of anything else we will make sure that part of that is being used to build capacity, to train or whatever, and I think that is the solution.

A country should not be being dictated by donors, what to do, but that requires that there is a strong government, I am not saying a dictatorship, but strong government that knows what its priorities are and that was developed with the people and I am quite well aware of these discussions but I think that rather than to, as I sometimes hear, to complain about these things, just to find the best solution and for example, in the case of Mozambique, to use AIDS money as was done elsewhere to strengthen laboratories, to make sure that there is an information system so you can have a lot of positive side effects that will be beneficial. I know that's an easy answer and I know the situation is extremely complex because it is also linked with institutional politics where a ministry of health can be frustrated because there is a national AIDS council, as the case of Mozambique, which is chaired I think by the Prime Minister, and where there is then rivalry and so on, so it is also about control sometimes.

On the feminisation – a really important issue also – there is intensive research going on to develop a microbicide, a product that women can put in the vagina so that during heterosexual intercourse HIV can be eliminated or killed so there is no infection taking place. Up to now all attempts have failed but I am a strong believer in it because the concept is so simple, it is so straightforward, it must work, and the market would be enormous. The good news is that there are also companies that are quite engaged in it, it's not only academic researchers, and I think we just have to continue to find out until we find a product.

The big problem is the following, is that the, how do you say that in English, it's not the active product but the cream or whatever, the vehicle or whatever, that that cannot be toxic. So I have always said why don't you work with L'Oreal or one of the cosmetic companies because the first thing there is that it doesn't do any harm and is being used by millions, if not billions, of people, but it has to be absolutely no harm when you put it in the vagina because several of the studies found that those women who were using it had a high risk of HIV infection but for me I think is a very practical, a different challenge than making a vaccine.

With a vaccine we are back to the drawing board as they say, we have no clue what we are looking for, what is actually the <?? – 1.15.29> infection. So I think we should have one, I don't know when, and then the matter will be to make sure it is affordable and I think there they will make marketing mechanisms that will work.

Geoff, yeah, the market is still the driving force in developing new antiretrovirals, even today. In a sense if AIDS had only occurred in Africa, lets say, I am not sure we would have these antiretrovirals but there is a guaranteed market of people living with HIV today in high income countries which makes a serious incentive for any pharmaceutical company to work on it and we need that, we need that innovation. I think markets creating for prevention for technological products, yes, that I can see. Again a company like Johnson & Johnson is now working on microbicides, for example, and that's because they see a market incentive but for behavioural social interventions I am not so sure and I think there we need, the public sector will be absolutely essential. What I think the most about is can we create something that is more of a movement and where are the constituencies and I don't know the answer really.

Why has mother to child transmission of HIV not been more successful, more widespread? I was totally wrong on that. Maybe 9 years ago when it was discovered that you could use, in that case, AZT, to prevent that transmission, I thought here we've got a classic public health intervention. You know, you test a pregnant mother, those who are HIV positive, you give this to her or the baby or whatever and here we go and it's not about sex and drugs and everybody wants to save the babies and it hasn't happened and I think it illustrates several points.

One is that the dire strait of how many women in the developing world are when they are pregnant and when they are giving birth, I mean lets not forget there are half a million women every year who die in childbirth, it's enormous, and there is no excuse for that. Secondly, also the overburden of services, maternal and health services and adding anything there is sometimes just too much.

Thirdly, the stigma issue, women would be tested but don't come back for the test and bad management where it takes a week or 2 weeks to have your test result. Now this can only work if you give the test result immediately while, you know, if you can have that in 10 minutes, and so we need now what has been done in some countries a far more comprehensive approach and there are several countries where it is working. In Botswana for example over 90% of pregnant women in need are now being covered by this kind of programme and I can't remember the figures for other countries but it is some 50/60% so it is possible. That's one of the areas that I feel strongly that we should team up with people who are into health systems strengthening because that is a very good indicator just as maternal mortality is an indicator of whether your system functions or not.

Clarification on testing – we have seen that in quite few countries that the social exclusion, the rejection and the discrimination when somebody is HIV positive and the abusers, losing your job and so on, going far beyond even free movement, are enormous and I think you need a decent human rights framework before I believe you can introduce on a wide scale this kind of testing but in Russia, certainly in the old Soviet Union, I can't remember the number but the HIV tests done per year was just enormous, it didn't do a thing against the epidemic, you know, and that was wide spread testing was kind of not accompanied by any education or so. That is now changing but I think you can't isolate a medical intervention from what's going on in society. That actually was my point.

**Professor Barnett**

I think it was 32 million.

**Dr Piot**

A year or something like that, yeah.

**Question**

[Inaudible]

**Question**

[My name is Philippa and I work for an NGO called Tearfund] Dr Piot, my question is I wonder if you could speak to, what you feel that the role of civil society is in this long term view and particularly a sustainable response in light of donor funding preferences which are going towards direct budget support, multilateral programmes and with a health intervention focus?

**Dr Piot**

On the spending where the epidemic is – what we are trying to do is help countries and even sub-regions in countries to better understand the epidemic, what we slogan as 'know your epidemic' and then act on that epidemic, and we don't always have the tools for that we find but we have really been working a lot on this and so going to a response that is far more valid in the local realities rather than a blueprint that is good for the world. What is our role in that? I think it is mostly one of convening and a technical support and so on.

On the feminisation, for me it's a descriptive term and I haven't thought of it that way. What I would say is that what I think is totally counterproductive and what I have detected even in some of our own publications is presenting women as kind of passive sexual beings and when the woman is HIV it's because she was raped or whatever, I mean which of course happens a lot and particularly when you look at the epidemic in southern Africa but it is really not ... the discourse can be very counterproductive. I agree with that and so if there is another way of describing it it's fine with me, I don't know how to do it, but it is a phenomenon. Even for eastern Europe I had not internalised how every year the percentage of women among, particularly new infections, is going up and understanding it is also extremely important, that's part of the, you know, knowing your epidemic, but then the operational implications may be totally different, may not mean working with women but could also be working with men.

The question from the lady from the Tearfund – well donor behaviour is very different. In the US the government agencies they only support NGOs or lets say non-governmental organisations but there are all kinds and no money goes to the government. In Europe it is sometimes the other extreme and I think both are kind of absurd because in terms of a response to, not only to AIDS, but for development in general, I mean we talked about gender for example, women's empowerment and so on, I mean you need a legal framework, you need government action, but you need civil society groups and I frankly cannot imagine a response to AIDS that is effective without civil society groups particularly when we go into groups of, you know, where the epidemic is in many countries, where the government has no credibility or is even oppressing. I mean homosexuality is a crime in several countries and so on. So I would say that there it is important to invest in the capacity of civil society locally, that would be ... I mean what the HIV/AIDS Alliance, a bit of a PR there for you, but I mean



what your core business is and I think that is in the long term extremely important but we should not neglect also the capacity of governments or the public sector. It needs both. You know theology is not only in religion that you find it, you find it in development as well. Thank you.

**Professor Barnett**

I would like to thank DFID once again for sponsoring this series of lectures specifically in terms of what you have said about targets and goals and the uncertainties about DFID's position but DFID has actually funded this series of lectures in one form or another for 8 years and we have another 2 or 3 years funding to go so we do need to be aware of that.

Secondly, I would like to thank some people who are very important in putting on these lectures and that is the events people and the stewards who behind the scenes get this whole system organised so that you get your seats, the thing starts on time and everything is switched on.

I would like to thank the audience because the audience is...I know a lot of you here actually and I hope to meet more of you. It's a fantastic audience for a fantastic speaker. Peter is standing down from UNAIDS at the end of this year and we have had a fantastic privilege this evening of somebody who probably has the best overview of HIV/AIDS epidemic in the world. He has 15 years experience. He has been managing on a day to day basis. He has led the organisation in a most extraordinary charismatic and at the same time low key way. He carries with him his ideals, as you will see, and there are quite critical statements contained within this speech. I asked you to be controversial and you have been actually quite controversial. Thank you very much for that.

**Dr Piot**

Really?

**Professor Barnett**

You didn't notice? Next year when you have stopped being in charge of UNAIDS you can be even more controversial but it has been a remarkable lecture and I would like to thank you very much.