

Solthis Newsletter

Issue 14 – December 2012
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Edito

The situation in Mali is serious: insecurity, an impending military operation, the social instability and the breakdown of healthcare services all contribute to the deteriorating conditions of the populations in the North. For several months now many thousands of Malians have been fleeing this area to Mauritania, Burkina Faso and Niger. Coverage of healthcare needs, which was already difficult in this region, is now seriously compromised. Our thoughts go out, of course, to all of those in need of medical care, especially those with HIV, for whom on-going treatment is vital. Mali also has problems with the funding of its programs for the fight against HIV, tuberculosis and malaria. In particular, the Global Fund has still not resumed normal payment of outstanding grants, and most activities

are blocked. For example diagnostic HIV testing have been seriously lacking in the past few months, undermining the credibility of messages recommending testing in pregnant women. Because of the war, all of this may remain hidden, in the name of a case of force majeure. Despite all this, Solthis remains and will remain present in Mali to continue its support of diagnostic and treatment programs for the local populations. Our team remains complete mobilized. The regions of Ségou and Mopti are visited regularly by our team, who are working together with local authorities to keep high quality treatment programs going. Solthis has also provided support to Bamako 2 and 3 to improve diagnostic testing and access to high quality treatment in the healthcare centers.

Treatment and support of patients and their families is also a moment of hope. These moments are even more necessary during wars and conflicts. We are absolutely determined to remain as close as possible to patients and healthcare workers, and we cannot be dissuaded. Solthis' activities in Mali are a guarantee that the care provided to those with HIV will be durable, despite the terrible conflict in the North of the country. SOLIDARITY is truly the first initial of Solthis. ■

Pr Christine Katlama
Chairman

*Universal access to treatment
by capacity building for all*

Fogue Foguito, Executive Director of the *Positive Generation*, member of the 15% Coalition

Cameroonian activist of the conflict against the AIDS, Fogue Foguito is also an activist of the right to health for all. With the Coalition 15 %, it is threatened in its country by a trial for illegal organization of manifestation.

You have been active in the Fight Against AIDS for many years. How did you become committed to this cause?

I have been politically active as long as I can remember. I inherited this from my parents and even my grandparents: my grandmother was one of first women in her village to fight against the single party; and my grandfather, was a famous nationalist known for his moral integrity. I come from a family where freedom of speech, justice and equality are sacred. We all learned very early to rebel when justice and equality were not respected. As a child, my father called me « little Sankara » (anti-imperialistic Burkinabian politician) because I was the student spokesperson.

At school, I heard about AIDS but I had no idea of the consequences of the disease. At the university [where he studied communication and law] I began militate in defense of human rights with the association Environnemental' Art: we discovered that students were being tested for HIV without them knowing it and that the university refused to give them a room. This was the beginning of the fight and Environnemental'Art became Positive-Generation (PG).

What is the role of *Positive Generation*?

The name Positive Generation comes from the students who had dreams and even then, were full of hope: we knew that we would be the HIV+ generation and that we would have to live with AIDS. But we didn't want to use the word «HIV positive» it was too stigmatizing. Our slogan was: Think positive, Be positive and Overcome.

PG welcomes members who are HIV positive and negative: there was no way we wanted to create a group of HIV+ members only. A group for patients only, that's stigmatization guaranteed! That is why we are not only active in patient networks. For example in 2003, when the American association AWARE began lobbying in Africa for laws to protect patients, PG was against it. For us, defending patient's rights means respecting the universal rights of man. And we are also careful: when you get rights, you have obligations.

I was the President of PG from 2003 - 2008. From 2008 - 2010, a Management committee presided, before Alice Djenadek was elected president. In 2010, thanks to support from the European Union (EU), PG was restructured to become more professional. Several managing bodies were created. I became the Executive Director. In terms of financial resources, there is a minimum of self-financing, which comes

from membership fees, donations and services that we do. The rest of our funding came through the partnership response to calls for proposals or joint implementation projects with partners.

The goal of PG is to help improve the living conditions of patients with HIV/AIDS and high-risk populations. We are active in Cameroon by providing psychosocial support, mobilizing the community and lobbying.

Why did you create the Treatment Access Watch (TAW) Observatory?

As a lobby we are often accused of not being "scientific" enough. Therefore we created grids to compile the information we obtained during our activities, on drug shortages, the quality of patient reception etc. Our capacity for follow-up/evaluation was very limited, so we began working with 3SH in 2009¹ and a group of doctors who wanted to study the impact of free HIV treatment. We created TAW together.

The name is inspired directly from Human Rights Watch, because it is supposed to be an international observatory. Today, only Burkina Faso starts to use it.

As expected initial results showed the disastrous state of HIV management. Of course the Minister and the CNLS contested the scientific legitimacy of these results even though we had informed them of the results ahead of time. And even if today we remain on speaking terms, they continue to take action without listening to us. For example no later than last week, we were not invited to the workshop on follow-up/evaluation that they organized. And yet they are more than happy to use our data when they are looking for funding.

TAW is kept up to date daily by our "sentinels". On Saturday we compile and analyze and on Monday we publish, and publish the results in our Newsletter.

Today the 15 % Coalition where you are an active member is being taken to court in your country. Why?

The 15% Coalition is a collective of Cameroon healthcare and human rights associations. It gets its name from the promise made by the government to contribute 15% of their GDP

to healthcare [Abuja Declaration in 2001]. On March 30 2011, the Coalition organized a demonstration in front of Parliament. Although we filed for a permit to hold a public meeting with the authorities, on the day of the protest, policemen in and out of uniform arrested us several feet from Parliament, and brought and held us at the police station under deplorable conditions because they claimed that the demonstration had been banned. Today, we are waiting for a court date. We had a court date on September 26, but the judge couldn't find the file and adjourned until December 26! The government is trying to frighten us so that we will stop speaking out. Why? There are several plausible reasons for this, but we cannot comment on them here, because we have been warned about that. We will let justice decide. One thing is certain: what we are fighting against must affect certain obscure interests because otherwise why would they go after us this way?

We have received the support of the US Embassy, from Ambassador Pepfar who is keeping a close eye on our case, as well as from several African organizations, the European Union and several French associations². We are deeply disappointed that France, which has historical ties to Cameroon, and is the country of human rights, has not taken a position on this matter. Despite the intimidation we will not give up, because the risks, even if they are significant can be overcome, and they are certainly less important than those of patients who have no treatment.

■

1. 3SH (Synergie des Sciences Sociales et Humaines) association supporting research on questions of human and social development in Africa

2. Several associations including Solthis have asked the French Ambassador to Cameroon to take measures to put pressure on Cameroon authorities to have the charges dropped.



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Eric Fleutelot, Deputy CEO international and spokesperson

Since the annual Conference on AIDS of this summer, Eric Fleutelot rises up in front of the mass media which speak more and more the « end of the AIDS ».

Can we now speak of «the end of AIDS» the way it has been announced in the media?

For several months now, the media has chosen to take a shortcut from the innovative treatments available today to reduce the epidemic and the "end of AIDS". I am outraged to hear anyone speaking of the "end of AIDS" in 2012, when 1.7 million people have died of AIDS and there were 2.2 million new infections in 2011. However you look at it, the end of AIDS is not a reality today, not in France or anywhere else in the world.

AIDS cannot be cured today. Even in the "rich" countries where access to testing, care and treatment is known to be easier than in countries with low incomes, the epidemic has not been contained. The epidemic is out of control at our door in Eastern Europe. Everywhere in Africa, progress made in the fight against HIV/AIDS is in danger. And finally, as a person living with HIV, I think that you have

to be careful of the meaning of words... A world without AIDS is also a world without any HIV+ individuals, and there are a lot of us out there that would like to stick around for a certain number of years...When you speak of the end of AIDS, it is factually false, but it's also dangerous, or at least counterproductive when we are trying to convince political authorities that they must maintain or even increase their financial and human investment in the fight.

At the same time as the progress in the fight against AIDS is seriously in danger because the leaders of both rich and poor countries are incapable of investing the sums necessary to continue, you hear people talking about an HIV success story! Are they serious? What success? The millions of deaths? In fact, if there is any success story to talk about in the fight against AIDS, it is the incredible alliance of patients, healthcare workers and research scientists who have managed to force public authorities to adapt the public response to the pandemic. But even then the fight against AIDS should not be called a success story, because it is fragile, even more so today.

What are the main challenges today in the fight against AIDS?

There are many challenges facing the fight against AIDS and they are basically the same as those that we faced several years ago. First, existing funding is insufficient and the

funding cuts of the last two years are dangerous. Indeed in the fight against AIDS, which is a disease that cannot be cured, the cost of medical management is necessarily cumulative. To give 15 million people access to treatment, the way the Member states promised at the United Nations in June 2011, more money is needed than for the 8 million existing patients. Thus more funds are necessary. The cost of disease management can only be reduced when the number of patients being treated is high enough to reduce the number of new infections, because of the preventive effect of treatment.

And this is added to the fact that the cost of treatment is still too high. Why? First, because the cost of first line treatments is increasing: guidelines recommend not using less expensive single dose combination treatments based on stavudine (140 dollars per year but with irreversible side effects). And beside this, more and more people living with HIV are

changing from first line to 2nd line treatment, because of resistant viruses, and 2nd line therapies are three to four times more expensive than first line. And what about 3rd line which can cost 100 times more? Not to mention diagnostic testing and biological and virological monitoring whose cost has not yet decreased the way treatment has. In this area, the priority must be to lobby in the market to lower the cost of viral load testing and lymphocyte count.

Thus we find ourselves in engaged in a battle without enough money to continue ongoing work and with the costs of medical treatment on the rise. In addition, we are working in countries where trained healthcare human resources are too limited. Numerically too limited to manage the 15 million people who need to be treated, and there is also a problem of efficacy: task shifting is only a solution if national programs invest in continuing education for paramedical and psychosocial personnel. And task shifting must not result in lower quality services. Moreover, healthcare professionals may be isolated, in particular from national programs and national coordination bodies (such as the CCM) which often decide on protocols and make policies to scale up access to treatment etc. without their input. Finally, healthcare workers too often find themselves working with deficient tech-

nical platforms and facing shortages in both diagnostics and treatment. All of that is terribly demotivating to the small number of human resources dedicated to the fight against HIV/AIDS.

Although considerable progress has been made in access to treatment, the same cannot be said for discrimination and stigmatization. HIV is a disease associated with significant stigmatization of HIV+ individuals, and added to this is the social marginalization of many of those who are infected because they are homosexuals, drug users, prostitutes etc. A priority for all of those involved in the fight against HIV/AIDS should be to work in an environment that respects the rights of the actors in the fight as well as of the populations at high risk of exposure to HIV. Unfortunately, this is not a top priority, in particular in countries in Sub-Saharan Africa.

Finally we cannot make the progress or obtain the victory we hope for in a united fight against HIV/AIDS without the renewed commitment of political leaders. In the past, political leaders led the fight against HIV/AIDS, but this is no longer true. Today it is more frequently in the hands of technocrats, who may be competent, but whose political commitment is different. To mobilize people against HIV/AIDS, society must be mobilized, and in particular political, artistic, community and religious leaders who must show the way and defend the values of this fight.

«We wonder why they are going after us in this way»

«To talk about the end of HIV/AIDS, is false»



➔ **Especially in African countries?**

We need to take a step back from all the progress we've made in the field, where the fight against HIV/AIDS has changed the destinies of millions of families. We need to look at what we've done and ask ourselves a few questions! We have often helped build vertical services for people living with HIV/AIDS. There is no need to blame ourselves because there was no other solution in countries where the healthcare systems were inexistent. However today with all the progress that has been made, it is going to become important to increase support of capacity building in the healthcare systems and to gradually integrate other healthcare topics, especially those that affect people living with HIV, or high-risk populations. In this way, it is urgent to include the management of sexual and reproductive health in HIV/AIDS programs. Even if it seems obvious, programs that integrate the fight against tuberculosis should be ramped up, because this is the primary opportunistic infection in people living with HIV throughout Africa. It is not normal for a patient to have to consult in one department for HIV and in another for tuberculosis. Departments should be created where the patient is the center of focus and receives all the care and treatment s/he needs. This would be more efficient for the patient and more economical for the healthcare system. The management of coinfections and comorbidities, which are increasingly frequent, must also be integrated into programs. In fact, the medical services of tomorrow should be based on a more human model of patient management, which is more global and cen-

tered on the patient and his/her family. More than anything, it should be based on the idea that things must be done with people, rather than for people. Decompartmentalization of the actors in the fight against HIV/AIDS is another solution to strengthen the healthcare systems. Associations, which do a remarkable job, sometimes compensate for the gaps in the healthcare system. But this should not mean that public structures lose interest in the fight against AIDS. In the same way, hospitals that are specialized in HIV management must also integrate the global approach to patient management, which has been shown to be effective, either by working with associations or by developing psychosocial support services.

What role should associations play in meeting this challenge?

If we can be satisfied with existing progress it is only because we were constantly told that it was not possible for poor populations in poor countries to have access to high quality care and sometimes difficult treatment regimens, while our colleagues in these countries, supported by international solidarity and NGO's from 'rich' countries have proven that it is possible. But today, the fight against AIDS is in danger. The feeling of urgency is no longer there, even though mortality and the incidence of HIV remain high. The epidemic will never really recede until people everywhere are mobilized again. This is a huge challenge because it more or less means doing twice as much in 4 or 5 years as we have already done in the past twelve years. It is an exciting challenge. It will give families affected by HIV/AIDS hope for a new destiny. It will show that no-

thing is inevitable about this story, but that on the contrary, by continuing to want change, which is sometimes considered utopic even though it is close enough to touch, we can make a durable change in our societies. ■



The goal of Sidaction is to fight against AIDS by supporting programs of scientific and medical research as well as training, prevention and mutual help programs to improve the quality of life, care and support of people with HIV infection and/or their families in France and the developing countries.

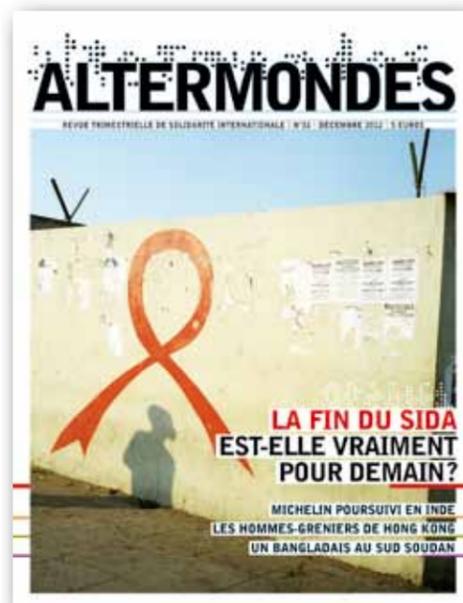
Collaboration with the review for international solidarity ALTERMONDES for a special report on AIDS.

Solthis as well as Sidaction, Aides, Solidarité Sida, ACT UP and other associations for the fight against AIDS, helped prepare a special dossier in ALTERMONDES whose December issue was dedicated to HIV/AIDS. ALTERMONDES is specifically dedicated to questions of international solidarity, sustainable development and human rights while giving voice to members of civil society in the developing countries.

"The end of AIDS, it's possible, it's coming tomorrow" can be heard everywhere and made headlines in the media during the international HIV/AIDS conference in Washington last July. After thirty years of a ruthless and exceptional fight, the international community finally has the means to end the epidemic. And yet a terrible question remains: will they give themselves the means?

In this issue, ALTERMONDES presents articles from associations, activists, and experts who confirm that yes, AIDS can be ended, but only under certain conditions.

Price of the review: 5 euros - www.altermondes.org



Viral Load and Resistances

Importance of monitoring resistances to antiretroviral therapies in resource-limited countries

Resistance to ARVs: surveillance and biological monitoring more than ever essential

Expected increase in resistance to ARV in resource-limited countries

Increased access to antiretroviral therapies (ARV) in resource-limited countries means that more than 8 million patients with HIV were receiving treatment at the end of 2011, which multiplied by 26 the number of people being treated compared to 2003¹.

However, one of the expected consequences of this improved antiretroviral coverage in the developing countries, like in the developed countries at the end of the 1990's after tritherapies were introduced, is an increase in resistance to ARV, in particular transmitted resistance. Indeed the rate of resistance to ARV is strongly associated with how long a population has had access to ARV and the rate of coverage of ARV in a specific geographic area, as shown by the prevalence of resistance around the world²:

- 12.9 % in North America,
- 10.9 % overall in Europe (including 10-12% in France [3]),
- 6.3 % in South America,
- only 4.7% in Africa.

WHO Strategy of follow-up and recent data on resistance

In preparation for the expected increase in resistance in the developing countries, and to ensure the long term efficacy of ARV treatment, WHO has developed a strategy for the prevention and monitoring of resistances based on:

- Monitoring early warning indicators (EWI), factors associated with the emergence of resistance in active patient files, which are being monitored in pilot centers where antiretroviral treatment is being administered⁴.
- "Sentinel", studies or investigations to monitor resistance transmitted to newly infected patients or primary resistance, and acquired resistances in patients being treated by ARV or secondary resistance.

However the methodology of these viral resistance studies must be rigorous and they are influenced by numerous difficulties that limit both their implementation and interpretation. Even if the number of studies is still insufficient and certain countries have never performed any studies on resistance at all, in particular in Central and Western Africa, the landscape of resistance is now increasingly clear.

The tendency reported in the most recent WHO report on resistance to ARV in July 2012¹, and several recent studies in particular

concerning Solthis' activities in Africa are described here.

Prevalence of primary resistance

A meta analysis of studies in the scientific literature by WHO performed in countries with low or middle incomes shows that the global rate of primary resistance has progressively increased in the past few years to reach a peak in 2009 with a prevalence of 6.6% (95% CI 5.1-8.3%) all classes of ARV combined (Table 1).

In the same way, if only studies that were performed according to WHO guidelines are analyzed, 32% of those performed between

2007-2010 conclude that the prevalence of resistance to ARV is moderate, compared to only 18 % between 2004-2006, confirming the overall tendency. In Africa, 18 countries performed this type of study including 6 in Central or Western Africa (Table 2). None of these ever showed a prevalence of more than 15%.

If we focus specifically on the studies performed in Africa, the overall prevalence of resistance to non nucleoside reverse transcriptase inhibitors (NNRTIs) the key family in first line therapies, went from 1% (CI 95% : 0.3%-2.1%) in 2003 to 6.4% (CI 95% : 1.3%-17.5%), which is more disturbing. This is ➔

Primary (or transmitted) resistance to ARV describes any phenotypic or genotypic resistance in the HIV virus when a treatment-naïve patient is first infected with the virus.

Methodology of studies on primary resistance¹⁰.

- Selection criteria of patients must be rigorous. This means including patients who have not had prior exposure to ARV and were recently infected by HIV: patients under 25 years old, presenting, if possible with biological proof of recent HIV infection (seroconversion), while excluding if possible those with a CD4 count of less than 500, in advanced stages of the disease (WHO 3 or 4) or women with a risk of prior exposure to ARV during pregnancy.
- The size of the study population should be as large as possible to reduce the confidence interval associated with observed prevalence to a minimum.

Difficulties and limitations

- It is difficult to respect the selection criteria in a situation where most patients are diagnosed and treated late.
- The cost of drug-resistance genotyping is high, nearly 150 euros per patient. Thus most studies are performed in populations limited to 100 patients, resulting in large confidence intervals that can bias interpretation of results.
- Moreover very few laboratories in the developing countries have the equipment necessary to study drug resistances.

WHO guidelines

- Because of cost restrictions, the WHO working group on drug resistance developed a so called "sequential sampling" method¹¹ making it possible to reduce the number of patients necessary to include in primary resistance studies to a maximum of 47.
- This method classifies resistance to each class of ARV into 3 levels corresponding to their prevalence rate: low (< 5 %), moderate (between 5% -15%) or high (>15%).
- WHO recommends performing this type of study every 2 years.

→ further supported by the results in treatment-naïve patients in Mali, with mutations associated with resistance to etravirine (Y181), a potent NNRTI that is usually recommended as second line therapy⁵ (Table 3).

More specifically, there are no studies performed according to WHO guidelines in countries where Solthis has programs. One independent study was performed jointly in 2009 in Guinea and Niger [6], which documented the prevalence of primary resistance in these two countries. The estimated prevalences were 8.6% (95% CI 2.91-14.29%) in Guinea and 6.5% (95% CI 1.50-11.50%) in Niger.

In Mali, at least two studies have been published on primary resistance in the past few years. One performed in 2008 in 101 treatment-naïve patients from Bamako [7] estimated

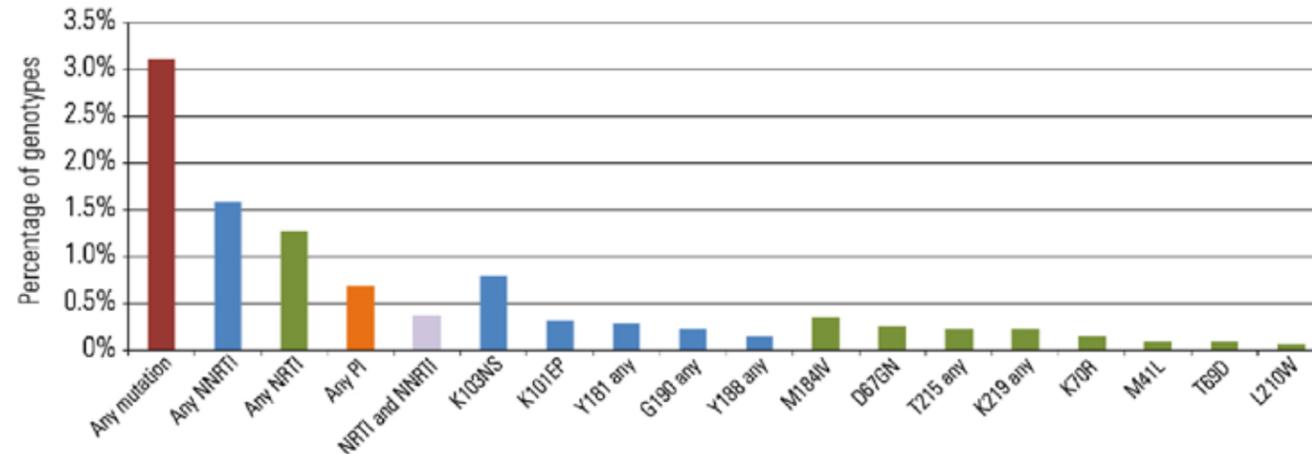
Table 1. Estimated prevalence of HIV drug resistance among ARV-naïve individuals from the published literature, 2003–2010

	% with at least one drug resistance mutation (95% confidence interval)								P-value ^a
	2003	2004	2005	2006	2007	2008	2009	2010	
Any	3.6 (2.3-5.2)	4.5 (2.3-7.3)	1.9 (0.9-3.3)	2.5 (1.2-4.1)	3.1 (1.6-5.0)	4.9 (3.6-6.3)	6.6 (5.1-8.3)	2.1 (0.1-5.8)	0.03
NRTI	2.0 (0.9-3.4)	2.3 (1.0-4.0)	0.7 (0.1-1.5)	0.9 (0.1-2.2)	1.2 (0.4-2.4)	1.9 (1.1-2.9)	2.0 (0.8-3.5)	0.0 (0.0-1.4)	0.46
NNRTI	0.9 (0.2-2.0)	1.0 (0.2-2.1)	1.1 (0.4-2.0)	1.2 (0.3-2.7)	1.2 (0.5-2.2)	1.8 (1.3-2.4)	3.3 (2.3-4.4)	0.9 (0.0-4.8)	<0.001
PI	0.3 (0.0-1.0)	0.9 (0.2-2.0)	0.0 (0.0-0.1)	0.0 (0.0-0.3)	0.2 (0.0-0.6)	0.7 (0.3-1.4)	0.9 (0.2-1.9)	0.0 (0.0-1.4)	0.48

Table 2. WHO surveys of transmitted HIV drug resistance with results classifiable for at least one drug class

WHO Region	Subregion	Country	Geographical area	Year of implementation	Population	NNRTI	NRTI	PI
Africa	Western/central	Burkina Faso	Bobo Dioulasso	2005	Pregnant women	<5%	<5%	<5%
Africa	Western/central	Burkina Faso	Ouagadougou	2009	Pregnant women	5-15%	5-15%	<5%
Africa	Western/central	Cameroon	Douala	2006	Pregnant women	<5%	5-15%	<5%
Africa	Western/central	Cameroon	Yaoundé	2006	Pregnant women	5-15%	<5%	<5%
Africa	Western/central	Chad	NDjamena	2006	Pregnant women	<5%	<5%	<5%
Africa	Western/central	Cote d'Ivoire	Abidjan	2006	Pregnant women	<5%	<5%	<5%
Africa	Western/central	Ghana	Manya Krobo	2006	Pregnant women	<5%	<5%	<5%
Africa	Western/central	Senegal	Dakar	2007	Voluntary counselling and testing attendees	<5%	<5%	<5%

Tableau 3. Prevalence of drug resistance mutations in individuals included in WHO transmitted HIV drug resistance surveys, 2004–2010



1. WHO HIV Drug resistance report 2012
 2. Frenzt D, Boucher CA, van de Vijver DA. Temporal changes in the epidemiology of transmission of drug-resistant HIV-1 across the world. *AIDS Reviews*, 2012, 14 :17–27.
 3. Chaix ML, Descamps D, Wirlden M, Bocket L, Delaugerre C, Tamalet C, Schneider V, Izopet J, Masquelier B, Rouzioux C, Meyer L, Costagliola D ; ANRS AC11 Resistance Group ; Cohort PRIMO ANRS CO 6 ; FHDH ANRS CO4 Study Groups. Stable frequency of HIV-1 transmitted drug resistance in patients at the time of primary infection over 1996-2006 in France. *AIDS*. 2009 Mar 27 ;23(6) :717-24.
 4. (Cf. Lettre de Solthis n°11, p 16-17).
 5. Maïga AI, et coll. Resistance-associated mutations to etravirine (TMC-125) in antiretroviral naïve patients infected with non-B HIV-1 subtypes. *Antimicrob Agents Chemother*. 2010 Feb ;54(2) :728-33.

6. Charpentier C. and al. High prevalence of antiretroviral drug resistance among HIV-1-untreated patients in Guinea-Conakry and in Niger. *Antivir Ther*. 2011 ;16(3) :429-33.
 7. Haidara A, Chamberland A, Sylla M, Aboubacrine SA, Cissé M, Traore HA, Maïga MY, Tounkara A, Nguyen VK, Tremblay C. High level of primary drug resistance in Mali. *HIV Med*. 2010 Jul 1 ;11(6) :404-11. Epub 2010 Feb 8.
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sectional survey for use in low resource settings. *Antivir Ther* 2008 ; 13 Suppl 2 :37-48.
 11. Dagnra, A.Y., et al., High prevalence of HIV-1 drug resistance among patients on first-line antiretroviral treatment in Lome, Togo. *J Int AIDS Soc*. 14 : p. 30.
 12. Van Oosterhout JJ, Brown L, Weigel R, Kumwenda JJ, Mzinganjira D, Saunkila N, Mhango B, Hartung T, Phiri S, Hosseinipour MC. Diagnosis of antiretroviral therapy failure in Malawi: poor performance of clinical and immunological WHO criteria. *Trop Med Int Health* 2009 ; 14(8) :856-61. Epub 2009 Jun 22.
 13. Reynolds SJ, and al. Failure of immunologic criteria to appropriately identify antiretroviral treatment failure in Uganda. *AIDS* 2009 ; 23(6) :697-700.
 14. Mee P, Fielding KL, Charalambous S, Churchyard GJ, Grant AD. Evaluation of the WHO criteria for antiretroviral treatment failure among adults in South Africa. *AIDS* 2008 ; 22(15) :1971-7.

ted the prevalence of overall primary resistance to be 9.9% [95% CI 6.9-12.9%], mainly to NNRTI. The second study in 54 patients in the Segou region showed a more moderate overall prevalence of primary resistance of 7.9% [8]. Although the precision of all of these studies is limited by the small size of the study populations or the patient characteristics, they still confirm that the prevalence of primary resistance is gradually increasing to a “moderate” level.

Prevalence of secondary resistance

Because of the more complicated methodology, there are fewer published studies on secondary resistance. There are two specific major difficulties: the large number of patients included in studies who are no longer being followed-up after one year: nearly 25%; and the difficulty of scientifically confirming therapeutic failure on a virological basis, when access to viral load testing is nearly inexistent. Thus the WHO report only retained 9 independent studies on acquired resistance including 4,248 patients in 8 countries with 4 in Western Africa.

Among the 573 patients with a treatment failure (or 13% of included patients), 60% presented with resistance to at least one class of drugs (NRTI: 55% ; NNRTI: 46%) of ARV. The remaining 40% have no resistance to ARV and treatment failure is due to other causes.

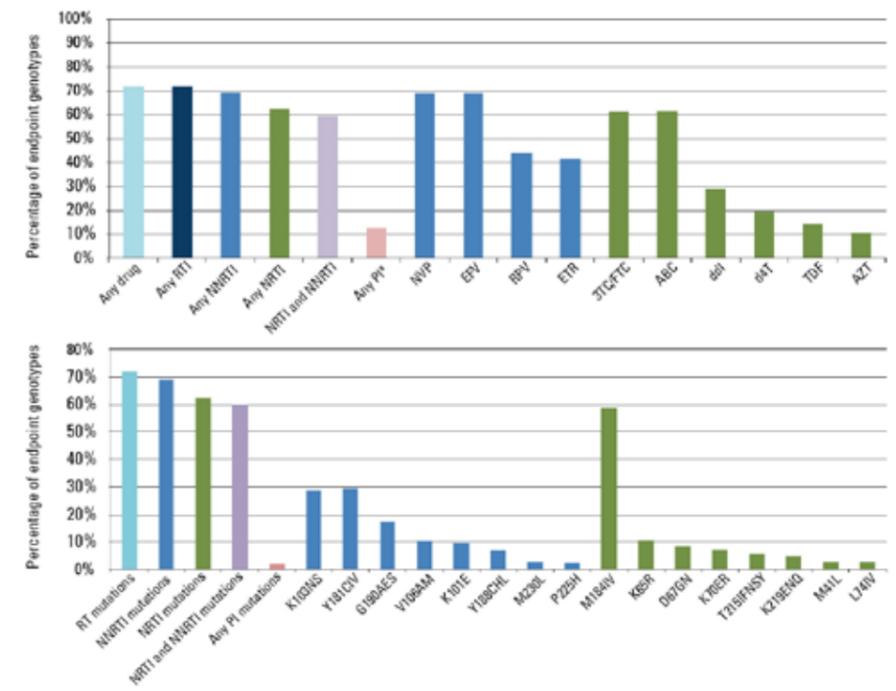
Most studies on secondary resistance performed with the WHO label were performed in Africa, but none in Western Africa. Once again, more than one quarter of the patients who began treatment were no longer being followed a year later, for whatever cause: lost to follow-up (12.4%), transferred (6.1%) or simply deceased (7.2%). Moreover, the very small percentage of patients who spontaneously switched at 1 year confirmed the difficulty of identifying therapeutic failure when viral load testing is unavailable.

Overall the rate of treatment success in patients receiving ARV and still being followed at one year was 76.6%. A resistance mutation was only found in 70% of the patients with treatment failures, which shows that a good percentage of patients begin second line therapy who should not.

Even more disturbing data have been reported in certain isolated studies.

For example a recently published study in 2008 in Togo [9] showed that the virological failure rate at one year was more than 30% in a cohort of 188 patients with resistance to NNRTI in 80%. Once again certain profiles of resistance are especially disturbing for usually recommended second line treatments, such as the K65R mutation, which creates resistance to tenofovir, or resistance to etravirine. And yet the failure rate in therapeutic trials and prospective studies performed with clinical and virological follow-up were comparable to those found in the developed countries; nearly 10-15% at 12 months. Thus, →

Table 4. HIV drug resistance among people experiencing treatment failure at 12 months, by drug and drug class



Secondary (or acquired) resistance is the resistance that develops in patients due to selective pressure from his/her ARV treatment.

On-treatment resistance to ARV appear in case of residual viral replication or viral load rebound which may be caused by many factors: the presence of existing mutations which limit the efficacy of first line treatment, suboptimal dosages or drug interactions which reduce concentrations of ARV in the blood, poor observance or other causes that prevent treatment from being taken regularly.

Methodology of secondary resistance studies

- Studies on secondary resistance are performed by definition in patients receiving ARV, in prospective studies or in occasional transversal cohorts. Usually the variable studied is the proportion of patients with a therapeutic failure and resistance to ARV after 12 months of treatment.

Difficulties

- These studies have the same cost constraints as studies on primary resistance, which influence the size of the study populations and thus the precision of estimates. A minimum of 130 patients who have begun ARV treatment and have a resistance genotype prior to beginning ARV treatment must be included.
- Moreover, the main difficulty is the poor quality of treatment follow-up in centers in resource limited countries as well as the difficulty of diagnosing therapeutic failure, which is still rarely based on viral load testing, even though it is known to be more reliable than the clinical and immunological criteria proposed by WHO¹²⁻¹⁴.

easy access to viral load testing probably improves the diagnosis of virological failures and makes it possible to change to second line therapy early, limiting the accumulation of resistances that may negatively affect the efficacy of second line therapy.

In conclusion although monitoring of transmitted and acquired resistance to ARV is not easy in resource-limited countries such as Afri-

ca, it is indispensable. Even though ARV have been available in certain areas for the past ten years, information remains limited but clearly shows that the rate of resistance is increasing, in particular to NNRTI and NRTI, key molecules in first line therapies. We must increase our understanding of resistance, in particular on-treatment acquired resistance; but we must especially improve follow-up in patients on treatment by providing access to the most ef-

fective biological tool: viral load testing. Even if different strategies are possible, all of the actors working in the field of HIV seem to agree to this approach, such as UNITAID, which is developing several approaches for the developing countries. ■

Dr Rémi Lefrançois
Scientific Coordinator

The expert's point of view – Pr Vincent Calvez, Department of Virology, Pitié-Salpêtrière Hospital (University Paris VI)

Why are primary and secondary resistance studies needed?

First with HIV, as with all infectious diseases, regular epidemiological follow-up is necessary to identify viral resistance to the anti-infective agents used. These are good practices in medicine and just because it is in Western Africa, does not mean they should not be followed.

Second, in the fight against HIV, investigation of primary and secondary resistance is essential. However, if a priority had to be given to the two types of studies, studies on secondary resistance are probably more important. Why? Because primary resistance is very difficult to study in Africa where patients are diagnosed late. These studies analyze the resistance of viruses that infected a person 4 or 5 years ago. WHO has tried to establish a strategy based on a study of 50 patients under very complex conditions, in which resistance was measured at a very early stage. To my knowledge, very few countries have managed to perform this type of study and very often, they have not been reproduced.

My team performed a study for several years in Mali in patients with severe immune deficiencies but who were going to begin treatment, which was very interesting from a clinical point of view. It is just as important to understand the virus that infected a person 3 or 4 years ago that is going to be treated as to understand the actual circulating virus. I would also say that the figures produced by these studies are "baseline figures". They correspond to the virus that infected people 3/4 years ago, which are viruses that are generally less resistant than those circulating several years later.

The rate of resistances seems to be increasing in the developing countries. Is this expected and are these figures alarming?

● When we began studies in Mali in 2002 there were zero primary resistances. Since then the rate has increased. In my opinion, we could reach rates of 10 - 15%. It was there-

fore incorrect to believe that the same thing would not happen in Africa that happened elsewhere just because treatment begins directly with tritherapy. It is impossible to know today if the rate of primary resistance will increase further.

Data on secondary resistance are also very alarming. According to several studies, the rate of virological failure is approximately 15%. That is fairly normal and these results can even be considered good. The problem is the lost to follow-up cohort. Certain studies have a high rate of lost to follow-up, which should be interpreted with caution, because this is difficult to evaluate correctly. Patients who escape from first line combinations develop numerous resistance mutations: 15% in the first year and 10% the next year. So after 2-3 years 25 - 30% of these patients have significant resistance to first line therapies. These results are predictable. But what is very alarming are the treatment failures from second line therapies with protease inhibitors (PI). Indeed the genetic barrier to resistance of boosted PI is considered to be very high. However this is only true under optimal conditions of follow-up and observance, which are difficult to conform to in these countries. As a result the rate of resistance to PI after second line therapy is very high as shown by the results of the study by A. Maïga in Mali. Even with a molecule such as lopinavir, which is a potent antiviral drug, the rate of resistance increases under poor conditions of use.

How can the rate of secondary resistances be reduced?

● Ideally viral load testing should be generalized as much as possible. It is important to remember that once the patient is being treated, spending money on measuring the CD4 count is useless, it is more important to make sure that viremia is undetectable.

● First line treatment strategies must also be reconsidered. At the CROI, Pr Nathan Clumeck presented a randomized trial performed in the Congo which compared first line treatment with 2 NRTI + 1 NNRTI versus

2 NRTI + 1 PI. The results show the same virological response rate in both arms. On the other hand, with first line PI the virological response is higher than with NNRTI. NRTI are very effective in countries in which patient follow-up is adequate because they are well tolerated and inexpensive with a long half-life. Thus, shouldn't the treatment strategy be changed? Obviously this is a complex discussion that should take into account the price of treatment... Several types of guidelines are needed: for countries with generalized access to viral load, for those with partial access and for those who only have clinical criteria.

What strategies seem to be best adapted to improve access to viral load? ?

In terms of access strategies, I do not have one single approach. Several approaches must be taken depending upon the type of hospital:

- Commercial kits have several advantages: they are easy to use, automated (no need for complex formulas) and cost effective. A well-equipped reference laboratory could test 15000 patients per year. The price must be negotiated although it decreases regularly.
- Generic kits ("Open platform"). Their use is more complex and requires extensive training for technicians.
- Points-of-care (portable viral load testing). These are obviously very interesting for patients in outlying regions. But these have not yet been extensively developed.

These strategies could be complementary and not opposed. ■

New strategies sustained by UNITAID

In 2009, for the first time, UNITAID published a request for proposals to develop access to biological testing devices (CD4 count, viral load and PCR for early diagnosis in newborns) in low income countries. What are the goals of this request for proposals?

In response to a real need in the regions of resource limited countries, the Board of Directors of UNITAID has decided to support projects associated with CD4 counts, as well as viral load testing and early PCR diagnostics in infants, nearer to treatment centers. Indeed:

- Only 9% of patients have access to viral load testing in the outlying regions of limited resource countries
- The cost of viral load testing is very high: 100 000 - 225 000 dollars for a machine and 10 -70 dollars for a test;

The use of these devices is complex and requires both a specialized infrastructure and specifically trained technicians.

This commitment to support innovative diagnostic technologies is the fruit of a long process of expert research begun in 2009. In 2011, UNITAID obtained several general analyses including one on the diagnosis of HIV/AIDS: Diagnostic Technology Landscape¹⁵. These reports describe/plan on the development and imminent marketing of simple, effective accessible diagnostic tools- closer to treatment centers. With its request for proposals, UNITAID hopes to play a role in influencing the market of biological monitoring tools in order to increase access to a large line of innovative products.

Several strategies have been chosen in the developing countries, including open platforms - OPP ERA - which are supported by Solthis. Can you explain the main principles of each of these?

In 2012, the Board of Directors of UNITAID approved 3 new projects on complementary innovative strategies:

1. Clinton Health Access Initiative and UNICEF. The Board of UNITAID granted 20 million dollars to this project, whose goal is to accelerate access to innovative biological follow-up tools for HIV/AIDS at the treatment centers (CD4, viral load and Early diagnosis in infants) in Ethiopia, Kenya, Malawi, Mozambique, Uganda, Tanzania and Zimbabwe. The intervention of UNITAID in this market should increase the demand, lower the prices of products and introduce a large line of innovative products by simplifying the rules for acquisition and work with developers. These actions will increase the number of clients



Zambia, 2011

who have access to essential diagnostics and increase the number of healthcare centers where these devices are available.

2. Médecins Sans Frontières (MSF). The MSF project received 28.7 million dollars of funding from UNITAID. The goal is to make CD4 counts available at the treatment centers and to develop viral load testing in decentralized healthcare centers.

Seven countries are concerned by this project: South Africa, Lesotho, Malawi, Mozambique, Uganda, Swaziland and Zimbabwe. This project shows the feasibility and cost-effectiveness, of viral load and CD4 counting in isolated, rural areas to create a market for these products.

According to MSF, more than 200 000 patients are going to benefit from viral load testing during the three years of the project. MSF estimated that 16 000 patients will change from 1st line treatment to 2nd line treatment after diagnosis of a virological failure.

3. France Expertise Internationale Opp-Era:

The goal is to improve access to viral load testing in four target countries (Burundi, Cameroon, Ivory Coast and Guinea). By promoting the OPP (Open Polyvalent Platform) model, the goal of the first phase is to change the market dynamics of viral load technologies to improve follow-up of patients with HIV at a reduced price and on a larger scale in target countries. UNITAID has granted a maximum of 2.4 million dollars to implement phase 1 of the project. ■



About UNITAID

UNITAID uses innovative approaches to increase access to treatments and diagnostics for HIV/AIDS, malaria and tuberculosis in low-income countries. It is the first global health initiative to work through market interventions to make life-saving products better and more affordable. The bulk of UNITAID's resources come from a small levy on airline tickets in several countries, while the rest is provided primarily by multi-year contributions from governments. This long-term and predictable stream of funding allows UNITAID to provide incentives for manufacturers to supply quality public health products at a reduced price and bring new formulations to market.

Eradication or remission of HIV: What hope for tomorrow?

In July 2012 at the World Aids Conference the world of research dared to pronounce the word "cure" as they launched the International AIDS Society Program: Towards an HIV Cure. The hopes of the scientific community are now focused on « reservoirs ». An update on the progress of treatment and on new directions in research.

A decade ago, the HIV/AIDS epidemic was one of the greatest threats to human health. Today, 35 million people live with this disease including two thirds in sub-Saharan Africa. It has killed 25 million people since the first cases were identified in 1981, and 2.7 million people continue to be infected every year. The arrival of antiretroviral (ARV) therapy transformed the prognosis of HIV with a massive reduction in mortality as well as in the comorbidities associated with HIV.

Antiretroviral treatment: an undeniable revolution

The development of new drugs that are more and more effective, increasingly well tolerated and simple to take on a daily basis has resulted in a therapeutic success rate of nearly 90% in patients receiving ARV treatment. In the past few years the indications for treatment of HIV have been extended: from the clinically symptomatic stage to a non-symptomatic stage with clear immune deficiency and fewer than 350 CD4/mm³. Little by little, these indications have been extended to be closer to the moment when the diagnosis of infection is confirmed.

At present in certain countries such as France, ARV treatment is recommended from 500 CD4/mm³. Recently the International Aids Society (IAS) and the North American health-care authorities (Department of Health and Human Services - DHSS) have recommended initiating ARV treatment whatever the number of CD4 for several reasons:

- Treatment reduces morbidity-mortality associated with HIV. The biological progression of the disease can be controlled and deterioration of the immune system can be prevented, which is also responsible for several secondary comorbidities not directly linked to HIV such as the development of cancers and an increased cardiovascular risk.

- Treatment massively reduces (>90%) the risk of transmission from HIV+ individuals on treatment to HIV- individuals.

Although ARV treatment has progressed considerably and has become more effective, simpler to administer, (with effective tritherapies now available in one pill once a day) better tolerated, and more widely distributed worldwide, in 2011:

- existing treatment cannot eradicate HIV from the cells that harbor it (these are called reservoirs);

- if treatment is stopped, HIV starts replicating again, that is, the virus multiplies from its reservoir cells;

- ARVs are associated with co-morbidities, especially as patients age such as metabolic disorders due to protease inhibitors or certain non-nucleoside reverse transcriptase inhibitors (NNRTIs) (efavirenz), bone disorders, cardiovascular risk...;

- ARVs are expensive: approximately 1000 euros per month in the developed countries and 100-500 euros in the undeveloped countries. The necessity of taking this treatment for life explains why the financial burden of ARV has begun to affect health-care economies throughout the world;
- ARVs are only administered to 6 million people worldwide today which only represents 40% of the patients in need. Extending the indications would require an even greater effort.

Research on the eradication or remission of HIV: a major challenge. Why can't existing treatments eradicate HIV?

Three main hypotheses explain why ARV cannot eradicate HIV.

- viral integration, latency and persistence in reservoir cells which occurs early in the infection, which is not controlled by ARV, and which can begin replicating again as soon as treatment is stopped;

- persistent low levels of viral replication whose causes are still not well known, but which may include irregular or insufficient absorption and circulation of treatment in deep tissue and in lymphoid tissue;

- immune activation and persistent inflammation despite maximum control of viral replication, favoring the production of a low levels of viral replication.

What is the viral reservoir?

During the viral cycle, the virus that has penetrated the cell integrates into the nucleus and remains quiescent, silent, and perfectly hidden from the immune system and from ARV. The main cells that are infected are CD4



lymphocytes and monocytes/macrophages, which are key cells in the immune system. CD4 memory T cells are the most highly infected and are the principle reservoir. Viral persistence is linked to the fact that these cells have a lifespan lasting from several days to several months and preserve the capacity to proliferate while still producing the virus as soon as they are infected. This reservoir is found throughout the entire organism because CD4 memory T cells are constantly circulating in the lymph glands, the spleen and lymphoid tissues, which are also associated with the mucous glands, while macrophages reside in non-lymphoid tissue. The size of the reservoir can be estimated in each patient by quantifying the number of infected cells in the blood by measuring HIV-DNA.

Thanks to cohort studies the viral reservoir process has been described during the disease. The highest DNA levels were found in primary infection, and the lowest in Elite Controllers. Treatment begun during primary infection reduces the reservoir to very low levels. Thus the reservoir represents the quantity of virus the organism must control. The earlier the infection is treated the greater the reduction in the viral reservoir.

Functional cure of HIV infection or eradication of HIV?

For all the reasons mentioned above, clinical research has focused on eradicating the infection, or more realistically in the past few years, there has been renewed interest in the scientific community in the idea of HIV remission.

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The term "HIV cure" refers to two entities:

1. Eradication of HIV is defined as the disappearance of all infectious viral particles and the elimination of all latent infected cells in chronically infected patients. The only example of this at present is the "patient in Berlin" in whom no virus or infected cells could be detected after chemotherapy for leukemia and two bone grafts from a donor whose immune cells were deficient in the CCR5 receptor. The case of this patient is fundamental for the proof of concept of a cure. On the other hand the procedure used cannot be reproduced on a large scale due to the high risks associated with the treatment.

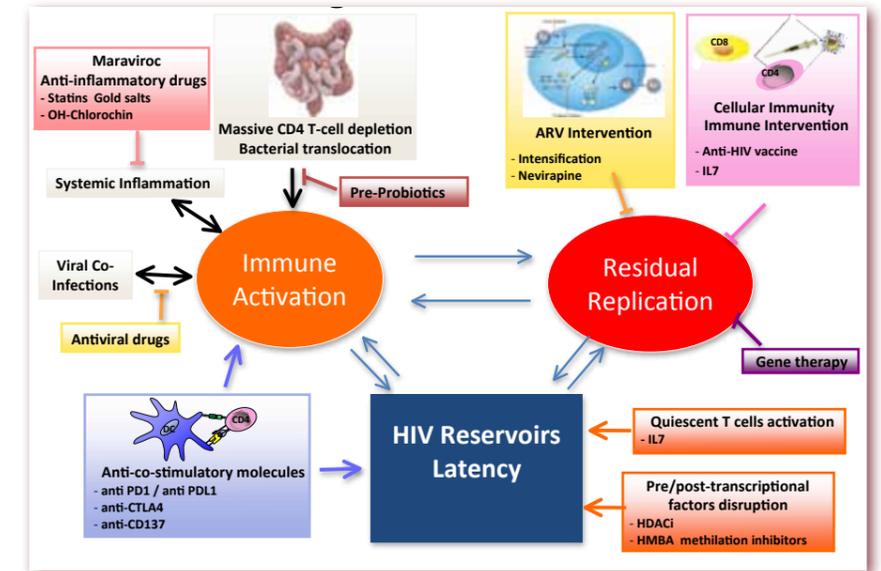
2. The term remission or "Functional Cure" is based on the well known notion in oncology describing a disease that is in remission, or without clinical signs, which does not progress, but in which the HIV has not disappeared either. The virus persists in the organism at a very low rate of replication (less than 400 copies/ml) with no clinically significant effects after ARV treatment is discontinued. Two patient populations fall into this category:

- patients called Elite Controllers who have an undetectable RNA viral load in plasma without treatment. This population is rare (0.3 - 0.5% of the HIV+ population) and has a specific genetic profile with over representation of HLA-B27 and B57 and a low DNA reservoir;

- another group recently described patients with a profile that corresponds more to the idea of disease remission, Post Treatment Controllers. The VISCONTI study described 15 patients who were chronically infected with HIV, treated for 3 months or more after a primary infection for a median of 5 years, in whom interruption of ARV treatment did not result in renewed viral replication, after a median of 75 months. These patients are characterized by an excellent immune response with a median CD4 count of 845 CD4/mm³, a CD4/CD8 of 1.49, a nadir CD4 of 505 mm³, a very small HIV-DNA reservoir (approximately 1.5 log₁₀ per million cells). Moreover, these patients do not have the same favorable genetic profile as Elite Controllers. Other studies have confirmed the possibility of going without treatment for several months and without replication in patients treated very early with a small reservoir.

How can the HIV reservoir be reduced?

There are three areas of research based on the multifactorial mechanisms involved in the process. These approaches should be combined. Basic research studies are still needed.



Potential strategies to reduce HIV reservoirs

1. Targeting residual replication.

The sources of persistent HIV-1 viremia in patients on treatment have not yet been completely determined, but could be the result of cycles during residual viral replication and/or of reactivation of viral expression in latent infected cells. Several factors could be the cause: insufficient absorption of antiretrovirals in the deep tissues and non-optimal penetration in infected cells, homeostatic proliferation of CD4 memory T lymphocytes (also resulting in the proliferation of infected cells), a proinflammatory environment, the very high density of T CD4 cells or the presence of mature dendritic cells that favor cell to cell HIV transmission.

2. On the contrary, inhibiting cell activation and residual inflammation to inhibit residual replication

The results of the first trials with anti-inflammatories such as statins or hydroxychloroquine were not conclusive. The use of stronger anti-inflammatories, or even immunosuppressive drugs is being considered.

3. Attacking virus latency

There are several possible approaches.

- Activate latent cells to promote viral expression so that it can be secondarily controlled by ARV. There are several activation pathways of the cell such as JAK-STAT activated by IL-7 or activation of the NF-κB pathway via prostaglandin or TNF-α.

- Wake up the latent virus

Latency is maintained by various mechanisms: either by blockage of the signalization cascades described above or by epigenetic mechanisms protecting chromatin such as histone methylation or desacetylation of

DNA (HDAC). The use of these activators is nevertheless complex and potentially dangerous because they are non-specific for the virus. In other words these activators could reveal a cancerogenic process. Several HDAC inhibitors are or were being evaluated: valproic acid was shown to be ineffective, while vorinostat (SAHA) seems more promising.

Conclusion

Basic research to identify the mechanisms, find molecules that can knock the virus out of the organism and clinical research to test them have all become a necessity in the fight against HIV. This very ambitious goal is even more difficult because for the moment, there is no way to knock out a retrovirus that has integrated the nucleus of a cell. And yet it is only with the same sort of scientific, clinical and political investment that was necessary to develop antiretroviral tritherapies, that we will one day be able to respond – positively or negatively – to the inevitable question asked by HIV+ patients: "Doctor when will I get rid of the virus?" The question of treating reservoirs does not only concern patients in the developed countries. It is easy to imagine that this type of treatment will be at least as useful in the developing countries, by drastically reducing costs and the duration of treatment and by reversing the risk of progression of the epidemic.

New Treatments - AIDS 2012

The 2012 Annual World Aids Conference was held from July 19-22. Organized by the International Aids Society, the meeting was held in the USA for the first time in 19 years since the ban preventing HIV positive individuals from entering the country was lifted. Etienne Guillard, who was present at the Conference has selected the main informations on new treatments presented there.



In Adults – new integrase inhibitors and booster

Numerous studies were performed on the main available ARV molecules. Complementary data were presented in adults in particular for the class of integrase inhibitors.

Thus the 5 year results on raltegravir in the STARTMRK and BENCHMRK studies confirmed the very good efficacy and tolerability profile of this molecule both in treatment-naïve patients and patients with resistances to three classes of drugs^{1,2}.

Moreover, the results of 96 weeks of elvitegravir³ confirmed those for 48 weeks: the non-inferiority of raltegravir, evaluated according to virological (48% vs 45%) and immunological results (205 vs 195 CD4/mm³), as well as good tolerance to daily administration of the drug. An important presentation of the SPRING 2 study⁴ compared dolutegravir to raltegravir at 48 weeks. These results showed the non-inferiority of dolutegravir, both for virological success (88% vs 85%), immunological response (increase in CD4 from 230/mm³ in each arm) and the tolerance profile. Nevertheless dolutegravir has the advantage of being taken once a day.

Finally new results confirmed the interest of cobicistat as a booster. The administration of atazanavir+cobicistat was shown to be non-inferior and with a similar tolerance profile and efficacy to the atazanavir+ritonavir regimen⁵.

At the end of August 2012, two molecules mentioned received marketing approval from the Food and Drug Administration (FDA) in the United States in the QUAD (Stribild®: tenofovir + emtricitabine + elvitegravir + cobicistat)⁶.

Pediatrics - new treatments in the pipeline

One of the major challenges at present is to obtain new treatments adapted to children. A South African team presented a study

showing that neuropathies in 1/4 children⁷ were due to the limited therapeutic options in this population. The use of mostly stavudine-based treatment (D4T) at present is a reminder of how important it is to develop novel pediatric therapeutics for resources limited countries.

The FDA has extended the indications for a certain number of ARV to children based on recent results: tenofovir, raltegravir, darunavir, fosamprenavir⁸. AIDS 2012 was an occasion to present new data on this topic, in particular on integrase inhibitors, for example preliminary results from the IMPAACT 1093 study on the use of dolutegravir in adolescents⁹. Although the results are preliminary and were performed in a limited number of subjects, they showed the similar pharmacokinetic profile between adults and adolescents with a daily dose of 50mg, good tolerance and virological efficacy with at least a one log decrease in viral load in all subjects after 4 weeks (median 2.8 log).

The results of the CHAPAS2 study on lopinavir/r microgranules were presented¹¹ during the satellite session of the International AIDS Society-Industry Liaison Forum (IAS-ILF) and Drugs for Neglected Diseases initiative (DNDi)¹⁰. This form is interesting (even if it is not perfect) because of the palatability. On the basis of these results DNDi and the CIPLA laboratory announced the development of a combination of 4 ARV in 1 packet of microgranules with zidovudine/lamivudine (AZT/3TC) or abacavir/lamivudine (ABC/3TC) and lopinavir/ritonavir (LPV/RTV)¹².

At the same time, although identifying new pediatric ARV forms is essential to improving management in children, these many new forms make purchasing and stock management more difficult. The team from the Clinton Foundation presented its work in collaboration with WHO and UNICEF to rationalize the lists of pediatric ARV in several African

countries^{13,14}. The goal of this study is to prevent fragmentation of the market into small quantities to allow more rapid purchases at more interesting prices and to limit the risk of shortages and losses.

Tuberculosis - new treatments

There was important news on antituberculosis treatment with new molecules and therapeutic regimens. These results were particularly encouraging because of the presence of multi-drug resistant tuberculosis (TB) in numerous countries.

Thus one new molecule PA-824, was administered in an original regimen with moxifloxacin and pyrazinamide in a randomized 14-day study¹⁵. Antibacterial activity with this regimen was greater than in the other treatment arms, an eliminated 99% of the tuberculosis bacilli with relatively good tolerance. Moreover, this regimen was effective in multi-drug resistant and extremely resistant TB. Finally, initial results suggest that drug interactions will be less important than with usual antituberculosis treatments.

Sutezoilid (PNU-100480) was presented in the late breaker session¹⁶. Its use for 14 days in 25 patients resulted in a significant reduction in the number of tuberculosis bacilli in sputum with a good tolerance profile. The lack of effect of this molecule on cytochrome P450 3A4 suggests that it will cause fewer drug interactions. Moreover, the use of isoniazide as preventive treatment (IPT) in a randomized double blind placebo study in South Africa for 12 months confirmed the efficacy of this molecule. The incidence of TB went from 3.6 (CI 95%: 2.8-4.7) to 2.3 (CI 95%: 1.6-3.1) in the IPT arm for 100 patient years (p=0.026)¹⁷. Based on the results obtained with IPT, Family Health International (FHI) took advantage of the conference to present on line courses on its use¹⁸. The i-TECH course on this subject should also be mentioned¹⁹.

Cryptococcus – what type of testing and what treatment?

Several sessions discussed cryptococcus, in particular a satellite session on the experience in South Africa on scaling up the diagnos-

tic testing, prevention and management of cryptococcus²⁰. The strategy was based on systematic testing in all high-risk patients (CD4<100/mm³) with rapid test strip testing the detection of the Cryptococcus antigen (CRAG lateral flow assay, a method that has been validated by the FDA²¹) and preventive treatment with fluconazole 400mg taken once a day (algorithm – table).

This integration of routine screening is similar to what was done in Uganda and published a little earlier this year²², and which showed that this strategy is very cost effective, representing for Uganda 1.57 dollars per DALY (Disability-Adjusted Life Year).

The question of which treatment is best adapted to low-income countries is recurrent. Fluconazole 1200 mg is the most frequently prescribed regimen. A poster from a Ugandan team²³ presented a cost-effective analysis of different treatments, in particular for treatment induction. This study, published since on PLoS²⁴, showed that induction of treatment with amphotericine B for 7 days then fluconazole 1200 mg is the most cost-effective regimen, as shown in the figure above. Nevertheless amphotericine B is fairly expensive. Also this implies a commitment from international funding agencies so that it will become part of free treatment programs.²⁵

Drug interactions – care must be taken with concomitant administration of ARV and antimalarial drugs

Non nucleoside reverse transcriptase inhibi-

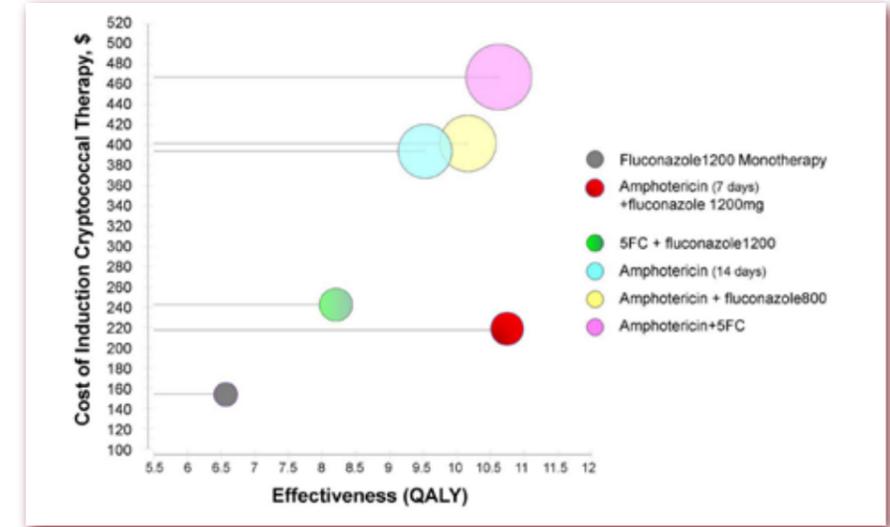


Figure 2. Cost effectiveness of cryptococcal induction therapies

tors and protease inhibitors are the cause of numerous drug interactions because of their effect on cytochromes P450. One satellite session²⁶ organized by the HIV drug interaction team²⁷ discussed the main drug interactions. Although information on antituberculosis drugs is well documented and generally takes into account therapeutic regimens adapted to simultaneous HIV/TB treatment, this is less true for antimalarial drugs. One presentation during this session and a poster²⁸ showed that these interactions were significant and

clinically observable with antimalarial drugs. With the combinations of AZT+3TC+efavirenz (EFV) and artemether/lumefantrine, concentrations of artemether, dihydroArtemether and lumefantrine were reduced by 77%, 75% and 55% respectively. The combination with protease inhibitors was just as critical with a significant increase in plasma concentrations of up to 4 times for quinine and 386% for lumefantrine (risks of potential toxicity). On the other hand there was a decrease of 43% for artemether.

Because of the importance of these interactions and the prescription context in Africa, it is urgent to draft guidelines to help healthcare professionals manage these situations. ■

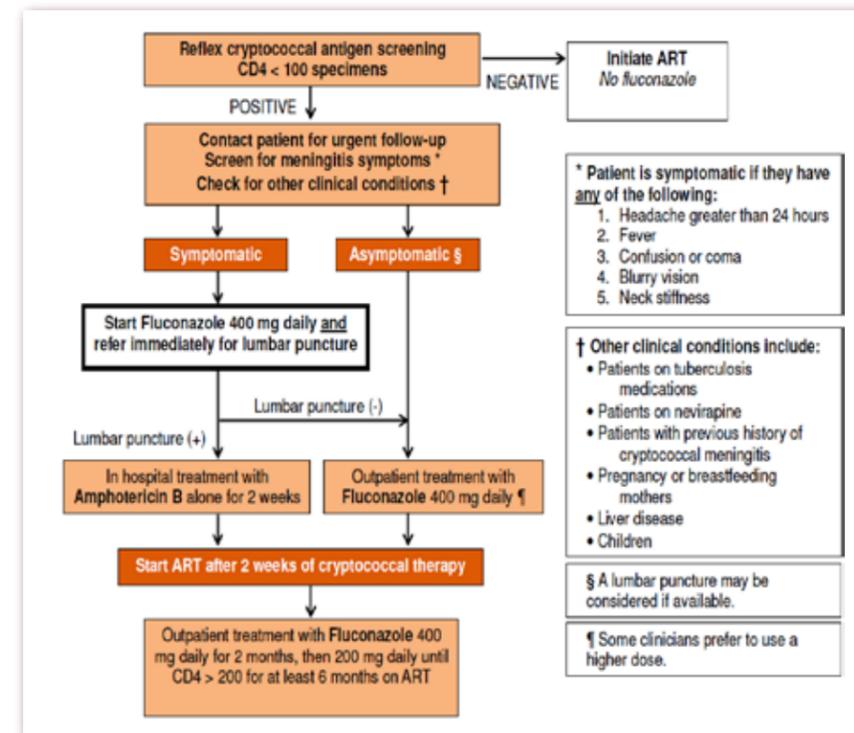


Figure 1. Algorithm for CRAG screening upon entry into HIV care

20. Satellite session TUSA08
21. <http://www.immy.com/>
22. Rajasingham R. et al. Integrating Cryptococcal Antigen Screening and Pre-Emptive Treatment into Routine HIV Care JAIDS : 15 April 2012 - Volume 59 - Issue 5 - p e85-e91
23. Poster Exhibition WEPE028.
24. Rajasingham R et al. Cryptococcal Meningitis Treatment Strategies in Resource-Limited Settings: A Cost-Effectiveness Analysis. (2012) PLoS Med 9(9): e1001316. doi:10.1371/journal.pmed.1001316
25. <http://preventcrypto.org/>
26. Satellite session SUSA34
27. <http://www.hiv-druginteractions.org/>
28. Poster Exhibition TUPE054

1. Poster abstract LBPE19.
2. Poster abstract TUPE025.
3. Oral abstract TUAB0105
4. Late breaker oral presentation THLB004.
5. Oral abstract TUAB0103.
6. <http://www.fda.gov/ForConsumers/ByAudience/ForPatientAdvocates/HIVandAIDSActivities/ucm317204.htm>
7. Oral abstract MOAB0205.
8. Lettre de Solthis - n°13 - Juin 2012

9. Oral abstract TUAB0203.
10. International AIDS Society-Industry Liaison Forum (IAS-ILF) and Drugs for Neglected Diseases initiative (DNDi), Catching children before they fall : addressing the urgent drug development needs of children living with HIV.
11. Oral late breaker LB_08 - http://regist2.virology-education.com/2012/4/HIVped/docs/21_Keishanyu.pdf
12. DNDi and Cipla, DNDi and Cipla to develop 4-in-1 pediatric antiretroviral drug combination, press release, Washington DC ;

Geneva ; Mumbai, July 20, 2012
13. Satellite session SUSA61
14. Poster Exhibition THPE673
15. Oral Abstract MOAB0305
16. Oral Abstract THLB002.
17. Abstract THLB003.
18. <http://www.fhi360.org/training/en/ipt/index.html>
19. <http://www.tbpreventiontoolkit.org/>

Capacity building : Understanding Solthis support in situ

For two years, the support provided by Solthis teams to healthcare centers, which is one of the association's key intervention strategies, has been thoroughly assessed. Structuring the approach, reflecting upon methodologies, and experimentation are ongoing : spotlight on the intervention in Guinea.

Since it was created in 2003, Solthis' goal has been capacity building for the healthcare systems in the countries where it intervenes, so that they can provide high quality, accessible and sustainable treatment to people living with HIV/AIDS. Based on the principle of non-substitution, Solthis supports local capacity building through training, material support, organization of patient treatment programs and help drafting national HIV policies.

Because the technical assistance offered by Solthis coincided with the arrival of antiretroviral tritherapies in Africa, the initial goals for capacity building were obvious: training healthcare personnel to provide pluridisciplinary management of HIV/AIDS to patients in treatment facilities. However the constant growth in the number of patients creates organizational problems, which is an obstacle to high quality patient management.

The challenge today is not only to continue capacity building for healthcare personnel, but also to provide support for other complex issues of patient management in order to limit the number of lost to follow-up patients, or prevent mis-quantification of needs. Based on the realities in the field, Solthis teams are dedicated to improving the organization of task shifting of specialized human resources, reorganizing the patient treatment program, consultation times, the use of consultation rooms and improving archiving of files and data collection...

At the same time the substantive work performed by Solthis to improve pedagogical methods has shown the crucial importance of post-training follow-up and of continuous support in between training sessions if real change is to be made in healthcare practices. It has also shown that it is increasingly important to improve measurement of change in professional practices and in the quality of management in the centers receiving support from Solthis.

To improve its support of change, Solthis has decided to adopt a structured approach in the treatment centers and has proposed a methodology to its field teams which is based on two major theories:

- Change Management theory, which is not specific to health but which focuses upon the appropriation of the goals of change by participants,
- Methods to improve the quality of care developed for hospital management in the developed countries and adapted by Anglo Saxon NGOs for the management of HIV/

AIDS in low-income countries. Solthis has been developing this methodology for two years by offering various tools to teams in the field who have been experimenting with them and adapting them to their specific context.

The experience in Guinea

Solthis has been working in Guinea since 2008 on national level and in the centers in the regions of Conakry and Boké. In 2012 Solthis began a process of restructuring its support in the centers with the healthcare teams and the intermediary authorities based on quality improvement. This included 9 healthcare centers (4 in Conakry and 5 in the Boké region).

Phase 1 Analysing

After having determined needs during regular visits in the field, Solthis organized meetings for a participative diagnosis in each treatment center with all of the actors involved in the management of HIV/AIDS.

Each of the actors presented their department's activities and the difficulties encountered which were generally associated with the following aspects:

- organizational: lack of communication on patient follow-up, availability of supplies,
- material: out of date locales, lack of space making confidentiality during counseling difficult ;
- skills: availability and skill of human resources in the healthcare facilities.

The directors of the different facilities presented ideas for improvement to the regional and

national authorities during a regional feedback workshop. Healthcare center directors presented problems that concerned the national level (complexity of the supply network, shortages) to National HIV Program managers.

A road map listing the commitment of the different actors was drafted during this meeting, and was contractualized in a three party partnership protocol. A table of indicators for follow-up and improving performance, created from routine data collected by the centers, was an integral part of the protocol.

Phase 2: Implementation

Besides their routine activities, the healthcare teams added "new" activities to the road map to achieve the solutions they had identified. For example it was decided that pharmacists would present a report on supplies during each team meeting to improve communication between prescribing physicians and pharmacists. Regional authorities confirmed their intention to include HIV in their monitoring activities and to take an active role in reporting back HIV data. Some of them suggested that retroinformation on 6 month monitoring results be provided to the teams during that on site team meetings. The activities proposed by Solthis fall in the areas of expertise, organization and material. To improve management of HIV-Tuberculosis co-infection, for example, training programs were organized: laboratory technicians were trained on diagnostic testing good practices, healthcare professionals were made aware of the importance of testing in patients with tuberculosis and prescribing physicians were informed of the national guidelines on the

Sophie Calmettes
Director of Operations
Charlotte Dézé
Capacity Building Manager
Hannah Youss
Quality project Leader Guinea

management of co-infection. Certain services received material or underwent renovations, and during the first team meetings, the participating departments discussed the data presented in their activity reports (the number of patients who were co-infected but receiving treatment, for example). To ensure improvement in individual skills, Solthis is developing a post-training follow-up for healthcare professionals. This is based on self-evaluation and regular follow-up of the trainers, with the help of a framework to evaluate the acquisition and implementation of the operational goals that were worked on during training sessions.

Phase 3: Follow-up/Study

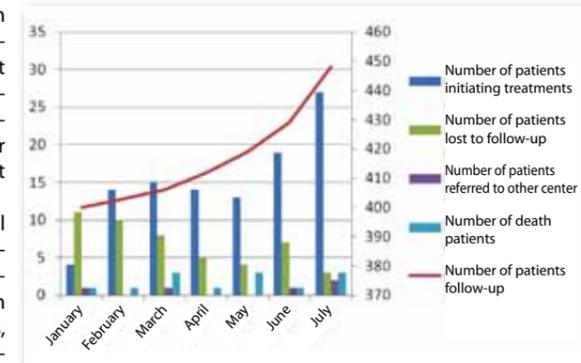
Indicators of activities and results, most of which had already been obtained during routine data collection, were used to evaluate progress in the performance of each treatment center. The novelty of this approach to quality improvement is the development of graphic tools to facilitate visualization and analysis by healthcare teams and authorities, so that the data could be used as a decisional aid (see graphics).

Phase 4: Evaluation/Action

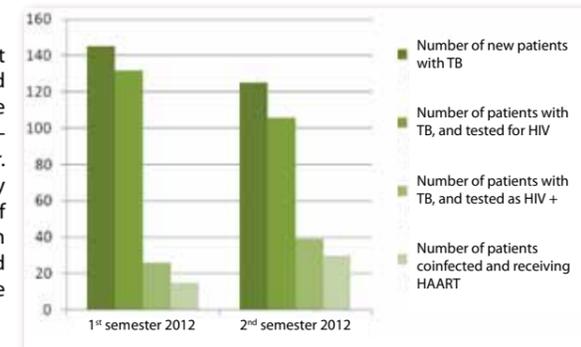
Between now and the end of 2012, the collected data will be analyzed on a center by center basis then presented during intercenter meetings, with national authorities, so that experiences can be exchanged and good practices can be strengthened. A second cycle of quality improvement will be begun, with mutually agreed targets for each center. This will mean choosing and analyzing specific quality indicators with the healthcare teams: do diagnostic testing practices respect quality standards? Do patients begin ARV treatment according to national protocols? Do they remain in the patient treatment programs?

What is the conclusion after one experimental year?

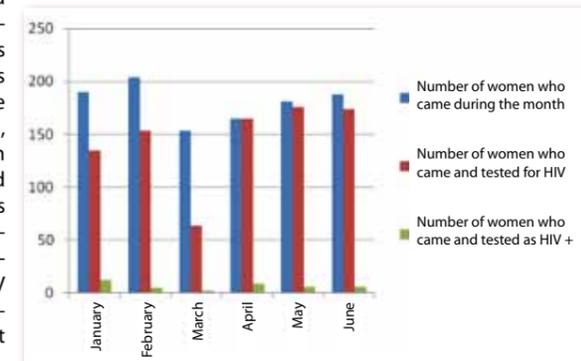
1. The healthcare teams and the authorities were enthusiastic about the participative approach, but care must be taken not to spend all the time discussing the difficulties encountered. So that the participants do not lose interest, the challenge is to focus discussions on possible improvements. In this way training sessions can be a time for participants to project themselves positively into change, based on standards of good practices, which generally renews motivation.



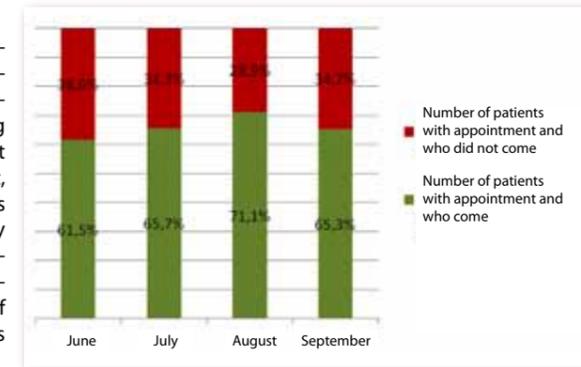
Follow up of active patient files receiving ARV



Follow-up of management of HIV/TB



Follow up and testing of HIV in Postnatal consultation



Attendance at pharmacy appointments

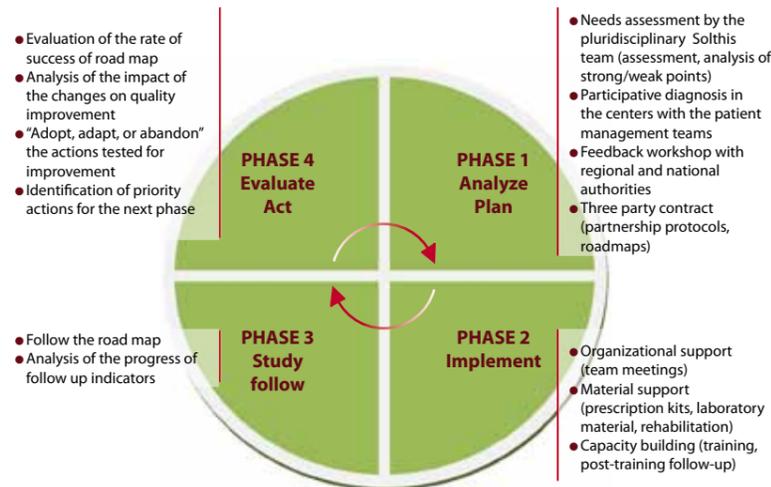
2. The goal to complete a "pilot" of our approach to structure on-site support in nine centers was ambitious and took more time than planned. It was necessary to take into account the time necessary to appropriate this approach by the partners, but also by Solthis teams. However, this also showed that the difficulties encountered were not always inherent to the approach, and made it possible to begin identifying the "keys to success" for this approach.

3. The assessment tools were shown to be effective (assessment sheet, exercises in participative analysis) but the most difficult phase is clearly follow-up of the process. This is where the emphasis must now be placed: on strengthening follow-up and appropriation of the new process by the healthcare teams (with specific work with a "focal point" who is responsible for follow-up of the approach in each center), on varying the methods of retro-information to the teams and their performance, on improving post-training follow-up methods, and on monitoring the participation of authorities in charge of supervising the centers.

In 2013 we should be able to measure the impact of this approach on the management of HIV in the participating centers. However, a very positive response has already been observed, thanks to improved communication in the healthcare teams, their reflections on their activities, and the participation of treatment center directors and local authorities. These three factors help give meaning to daily practices and are an important source of motivation for healthcare professionals.

Tools :

- Capacity building manual
- Grid for the different thematic reviews
- Guide to participative diagnosis and guides to leading various sequences of the analysis
- Road map
- Partnership protocols
- Post-training evaluation grid and self evaluation – Training modules on clinical mentoring.



The Global Fund: at the heart of the reform

The Board of the Global Fund will meet on November 14 and 15 to validate major changes in the functioning of the Global Fund. Update on the main issues at stake.

For a year now the Global Fund to fight AIDS, tuberculosis and malaria has been in a state of major upheaval. Confronted by both the world financial crisis and the crisis of confidence because of revelations of fraud in certain recipient countries, the Global Fund has begun a process of profound reform in view of its new Strategy 2012 – 2016. This reform is built around two main axes: reorganization of the Executive Secretariat and changing the funding model of the Global Fund.

Reorganization of the Secretariat

A larger «Grant Management» division

The basic principle of the Global Fund reform is to refocus the organization on grant management to improve the efficacy and reactivity of the Secretariat in this area. This will to improve grant management grew from the complete reorganization of the Secretariat¹ which benefited grant management and whose staff has now grown by 39% by shifting internal resources. In this new division, the geographical regions have been redefined with 5 departments:

- 3 regions with «high impact» countries which include the 20 countries representing 70% of the global burden disease (Nigeria, Democratic Republic of Congo, South Africa, etc.)
 - 2 regions with the remaining countries
- The countries where Solthis work – Guinea, Sierra Leone, Mali and Niger – are part of the “Africa” department, which is directed by Lelio Marmora.
- A sixth department “Grant Management Support” is in charge of supporting other departments on questions of risk management,

quality assurance, Local Fund Agents (LFA), Country Coordination Mechanisms (CCM), or grant renewals.

Moreover “Country teams”² have been created in each of the geographic departments. Each team includes:

- a portfolio manager, whose decisional power has been increased, assisted by one or several program managers,
- technical assistants who work on questions of supplies, follow-up/evaluation and financial and administrative management.

The main change is that these assistants are now an integral part of grant management. Although in theory strengthening grant management should make it possible to manage grants more effectively, especially by simplifying communication among Global Fund staff members, the effects have yet to be materialized in the field. For example, there are still important delays at the Secretariat level in revising contract agreements, approving reports and transferring payments.

A new Executive Director

Whether this reform becomes truly operational also depend upon the next Global Fund Director. The mandate of the present General Director, Gabriel Jaramillo³ finishes at the end of the year, and the process of finding a successor has begun. The Board has created a committee to draw up a short list (gender equal) of a maximum of 4 candidates, and interviews are being held to determine this list. The future Global Fund Director will be elected by the Board from this list at the next Board meeting.

The new funding model

The last Global Fund Board meeting, which was held on September 13 and 14 in Geneva, began defining the basic tenets of the new funding model by confirming two principles about the distribution of grants among the countries and the process of filing proposals by the countries. These decisions are based, in particular, on the work of the Strategy, Investment and Impact Committee (SIIC), which is one of 3 committees created by the Board to reform the system of governance (Financial and Operational Results Committee and the Audit and Ethics Committee) where the French delegation is a member.

First certainty: available funds will be allocated to bands of countries

Most available funds will not be granted anymore on a case-by-case basis. Instead, predefined budgets will be granted to bands of countries in order to privilege funding the countries with the greatest disease burden and the fewest resources. The remaining funds could be granted on a case-by-case basis to reward the best proposals or to fund the implementation of specific strategies. Thus, this reform confirms that funding for groups of countries will be capped. How these caps will be defined (by country or by group) and when the recipient countries will be informed (before or after grant proposals have been received) still remain to be defined. Although the goal of these caps is to simplify the process of managing available funds, much criticism has been heard from civil society because this approach goes against the founding principles of the Global Fund, which was based on funding according to the needs expressed by each country, and this could result in underestimated grants [4]. In addition limiting demands may prevent progress to universal access, which necessitates to increase the overall volume of funding.

Second certainty: the end of rounds of funding

The process of rounds of funding is definitively over. Instead, the Global Fund would like to use a more flexible model, which will allow countries to file proposals for continuous funding. Instead of a complete proposal which needs to be drafted by the CCM, the countries must now submit a shorter concept note based on the country's national strategy, which will then serve as a basis for a continuing dialogue with the Technical Review Panel (TRP) and the Secretariat until a complete proposal development and, in the end, a grant

agreement. Once again the goal is to accelerate and simplify the process, but there is some fear that this new model turns into a very complicated process, as suggested by the figure below.

Rather than creating a consensus, these decisions are the subject of intense debate among the different delegations. For example, the Secretariat and most of the international funding agencies support the idea of a cap for each country that would be transmitted to the countries before they submit their funding requests. On the other hand, NGO delegations and the Communities support the idea of a distribution of funds among countries from the same group, from a maximum predefined budget, after they have simultaneous sent their grant requests so that countries can design proposals inclusive of all their needs. The Board meeting in September finally decided in favor of a compromise between the two positions, with the creation of two types of funding:

- a source of regular but capped funding,
- a separate source of funding to reward the countries with the best results or the best interventions (“incentive funding”).

Numerous details must still be clarified before this new funding model will be finally adopted at the next Board meeting in November 2012, to begin implementation in 2013. Many NGO are afraid that the next Board meeting recant on the second source of uncapped funding.

While waiting for the new funding model: 1.6 billion dollars of “early funding” are available. While waiting for the new funding model to become official, the Global Fund has 1.6 billion dollars available to be distributed. While approximately 600 million dollars will be used for the Transitory Funding Mechanism, which partially replaced Round 11 (which was cancelled for lack of funds), there is still 1 billion dollars of “early funding” to be

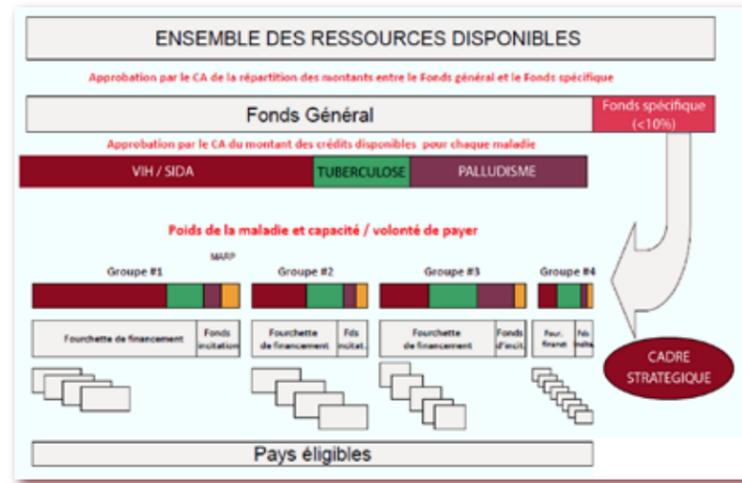


Figure 2. New model of financing for the Global Fund: schema for resource allocation

allocated. Once again negotiations are tense on how these funds should be spent: while the Global Fund would like to privilege funding of specific “high impact” interventions (for example passing to option B+ for PMTCT) numerous actors in the field, including Solthis, defend the use of these funds to top up existing grants- which in many countries do not cover all existing needs, even to purchase medical products.

Remaining questions

Essential decisions will be made on the new funding model during the next Board meeting on November 13 and 14 in Geneva. In the meantime certain grants remain purely and simply stuck in the field. According to the Secretariat, these “stuck grants” represent 10% of active grants (51/519). There are programs that have still not received payment three months after signature of the grant agreement, or have not received payments for at least 6 months for ongoing grants. A total of 681 million dollars is waiting to be distributed. The Global fund has analyzed the different factors that account for this situation: slow negotiations with the countries, failure of the

countries to satisfy specific conditions, problems with local LFA or ongoing investigations by the Office of the Inspector General (OIG). As a result the grants in Mali, Niger and Guinea have been blocked since the OIG investigation while the reports of these investigations have still not been published (this has been going on for two years in Mali). To deal with these situations, the division of grant management has placed these grants on a watch list and a specific action plan has been drafted

for each of them. If this initiative seems to head in the right direction, we are still waiting for the results to materialize on the field while the persistence of the bottlenecks lead to major structural damages for the program of involved countries (testing interruption, letting staff go...) and put into questions the progress they have made towards universal access. This situation emphasizes how urgent it is to achieve organizational reform of the Global Fund, but also show the remaining grey areas, especially in relation to crucial unanswered questions such as the prerogatives and the status of the OIG, the role of the LFA and more generally, the policy of the Global Fund in relation to risk management.

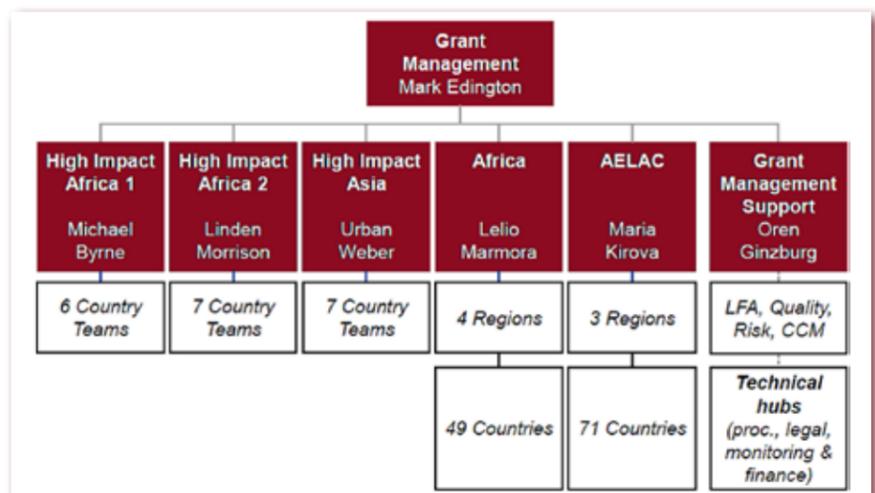


Figure 1. Global Fund 2012

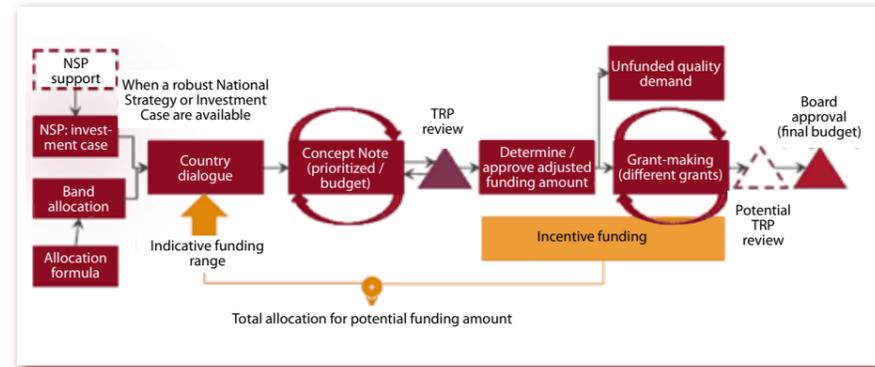


Figure 3. Process of funding grants – Global Fund 2012

1. The Global Fund Secretariat manages the grant portfolio, including screening proposals submitted, issuing instructions to disburse money to grant recipients and implementing performance-based funding of grants. More generally, the Secretariat is tasked with executing Board policies; resource mobilization; providing strategic, policy, financial, legal and administrative support; and overseeing monitoring and evaluation. It is based in Geneva and has no staff located outside its headquarters.

2. On the same subject see Newsletter # 10. Interview with Joanne Carter

3. Also see Newsletter # 13. Interview with Gabriel Jaramillo

4. See the interassociative press release « Monsieur Jaramillo : les plafonds vont écraser le Fonds mondial ! »

Girls, teenage girls, woman: obtaining the right to health for ALL !

Besides the biological and physiological differences between men and women, there are culturally-based differences due to gender relationships, which change depending on the period and the context. In all regions of the world, these differences are marked by power hierarchy in favor of men and by inequalities against women.

Inequalities in power and in the control of resources affect women's access to social and health services physically (access to transport, freedom of movement), financially (payment for care) and socio-culturally (discrimination of young girls in healthcare and counseling centers, difficult access to information, inability to decide to consult), especially in developing countries (DC). The risk factors associated with gender inequalities exist at every stage of life (Figure). Gender inequalities and violence are especially visible in the areas of sexual and reproductive health, with significant consequences on maternal and infant health which are not sufficiently taken into account.

Alarming figures

Low recognition of the status of women and girls, gender and power inequalities, and prejudicial socio-cultural norms are a dangerous mixture for women's and girls' health in DC.

- Sexual abuse and violence: often goes unpunished. This concerns more than 30% of the girls under the age of 18 and it occurs 2 to 3 times more often in girls than in boys^{1,2}.
- Early marriages and pregnancies: in western and central Africa, even when the legal age of marriage is 18 years old, 45% of the girls of that age are already married, compared to fewer than 5% of the boys⁵. Worldwide, early pregnancy - which is the primary cause of mortality in adolescents - involves 14 million

adolescents between 15 - 19 years old and 2 million under the age of 15^{1,3,5}.

- Maternity and birth control: many women must face increased medical risks due to births occurring too close together because they cannot decide whether to use birth control (even if they supposedly have the right to). In western Africa only 9% of couples use some type of modern birth control (pill, injection, implant, condoms) and 20 - 30% of women face unmet-needs for family planning^{1,5}.
- STD and the feminization of AIDS: in Africa 75% of new HIV/AIDS infections in the 15-24 year old age group involve girls. Even when they know how to prevent STD, and can obtain these means, girls and women cannot negotiate using them during sexual relations^{1,5}.

Fighting the causes of the problem

Under these conditions the fight for women's health must not be limited to programs that reduce maternal and infant mortality/morbidity and that are only active for obstetrical and neonatal care, or that only target women on the demand side. Activities and services that respond to the specific needs of teenagers (who are barely affected by existing programs, and who are underrepresented in the healthcare centers), actions targeting men and community leaders on the topics of family planning, the rights of teenagers and women, and on sexuality in general are essential if social norms are to change and if there is to be more equality between men and women on decisions about sexuality and reproduction. More generally, taking a gender-focused approach, that takes into account the relationship of power between men and women, in any health programs, and in any activities promoting women's and girls' rights will, along with

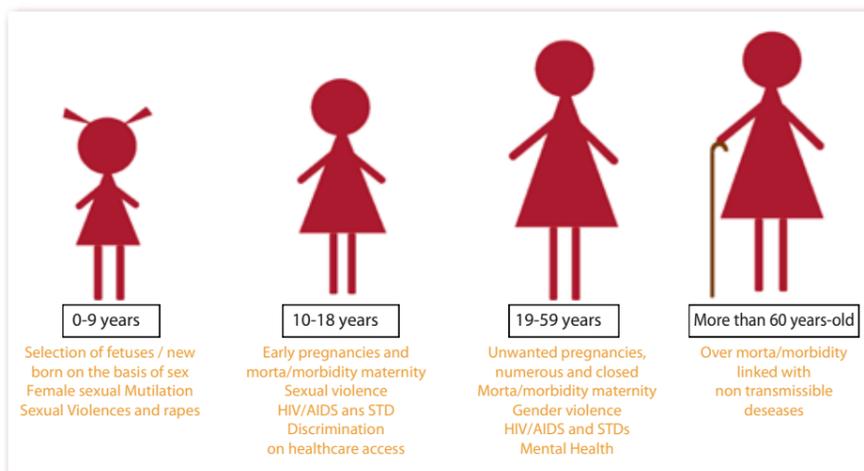
any actions which goal is to reinforce the autonomy of women and girls, help improving durably mother-infant health programs and the status of women and girls. Limiting women's health to maternal and infant health maintains the unequal status of women and limits the results of health programs.

Turning rights into reality

Legal frameworks, national programs (law on sexual health and reproduction, strategy for reproductive health in children and adolescents, strategy to promote women's rights) as well as international or regional texts (Maputo Protocol, Convention for the elimination of all forms of discrimination against women, International Convention on children's rights) which are in effect in most countries, provide a framework and a foundation to be used to lobby or take action in the field so that, existing women's and girls' rights can be effectively applied.

Although in the past few decades this topic has become more visible, changes in the field are slower to come. We must continue to defend the cause of women's and girls' rights at the International Conference on Population and Development (ICPD + 20) and above all, in the post MDG's agenda. ■

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5. Statistics WHO, World Bank, UNICEF, UNFPA



Risk factors for the health of the women at every stage of the cycle of life in developing countries

— New projects, new partners —



INTERVIDA – MALI: Health Education

The NGO INTERVIDA provided 36.000€ of co-funding for the project « Education for Health » which was begun in the Ségou région by Solthis (La Lettre de Solthis n°13). The goal of this project is to improve access to diagnostic testing and treatment in the Ségou region. This is based on activities to raise awareness in high-risk groups (men having sex with men, sex workers, seasonal workers, military men etc), opinion leaders (religions, political and journalists) and teachers. Present in Mali since 2002, INTERVIDA is a developmental NGO which supports vulnerable populations, mainly women and children to promote access to education and high quality care.

UNITAID – GUINEA - Open Polyvalent Platforms (OPP-ERA)

The OPP-ERA project sponsored by the consortium of French partners: FEI, GIP ESTHER, ANRS, Sidaction and Solthis was approved by UNITAID. The goal of this project is to improve access to HIV viral load testing and to the early diagnosis of HIV infection in newborns by opening the market of viral load measurement technologies to competition from new suppliers. A pool of laboratories will be equipped with Open Polyvalent Platforms – OPP in the 4 countries targeted for the project (Burundi, Cameroon, Ivory Coast and Guinea). Solthis is managing project implementation in Guinea. The beginning of the project is planned for 2013.

— Agenda 2013 —

CROI, 20th Conference on Retroviruses and Opportunistic Infections – 3-6 March in Atlanta (United States)

AFRAVIH, Workshop on clinical research methodology - 25-28 March in Grand Bassam (Ivory Cost)

Institut Pasteur, 30 years of HIV science – 21-23 May in Paris (France)

IAS, 7th Conference on HIV Pathogenesis, Treatment and Prevention - 30 June - 3 July in Kuala Lumpur (Malaysia)

Solthis : 10 years
19-20 september in Paris (France)

ICASA, 17th International Conference on AIDS and STIs in Africa - 7-11 December Durban (South Africa)



INITIATIVE 5%
SIDA, TUBERCULOSE, PALUDISME

Initiative 5 % - MADAGASCAR - Virology workshop in Antananarivo

Its partners in Madagascar have asked Solthis to provide technical assistance to Canal 1 of Initiative 5% to « Support the CNLS in optimizing therapeutic management and capacity building for supply procurement and management of HIV stock ». Dr Franck Lamontagne (Medical Coordinator) and Etienne Guillard (Pharmacy Manager) of Solthis completed a first mission from October 16 – 29. Besides evaluating needs, three days of workshops were organized on the virological specificities of HIV in Madagascar, in association with the CNLS and the Minister of Health. Dr Marie-Laure Chaix (Necker Hospital, Paris) and Dr Jean-Paul Viard (Hôtel-Dieu Hospital, Paris) experts from the Solthis Scientific Committee also participated in these workshops. On the first day, the results of a collaborative study between CHU Necker, Solthis and the LNR on the virological profile of people infected with HIV were presented and their influence on prevention and the national therapeutic strategy were discussed. The next two days were dedicated to specifically managing therapeutic failure in the Malian epidemic with individual reporting of results to doctors. Approximately 50 Malian institutional healthcare managers and doctors participated in the three days of workshops.

NIGER, GUINEA – Project for capacity building in healthcare systems

The project by Solthis and its Guinean and Nigerian partners was preselected by the steering committee for Canal 2 of Initiative 5% coordinated by France Expertise Internationale (FEI) in response to the call for projects on the theme «Capacity building in healthcare systems». The goal of this project is «capacity building for the local implementation and follow-up of medical management of HIV/AIDS in Niger and Guinea. The project, which will last three years, should be signed in the upcoming months and should be launched at the beginning of 2013

— In countries —

GUINEA: Towards a project for the support of patient therapeutic education

For the moment the public healthcare centers in Guinea have developed very few activities, thus everything must be created. Last September 26 and 27 a workshop to discuss this question was organized at the CHU Donka and the following departments participated: Dermatology, Infectious diseases, Internal medicine as well as Hospital Management and the Patient Association, Fondation Espoir Guinea. This workshop was led by Solthis, in particular Etienne Guillard, who is manager of PTE at Solthis.

Discussions were organized on the problems inherent in patient support and TPE which have been identified in the other countries where Solthis has activities or by other actors: the goals, the contents, how and who to include in the patient treatment program, how to organize healthcare facilities and funding (Lettre de Solthis n°13)... Despite the many challenges, basic goals were established during the workshop: sharing a common vision of this support, identifying the actors who can manage this activity to provide them with capacity building, identifying the questions that these actors must respond to and the errors to be avoided to ensure long term functioning of these activities.

Solthis will continue to support the structuring of this patient support program in this pilot project at the Donka Hospital. Feedback from these experiences will certainly then be applied to other structures so that a maximum number of Guineans can profit from these efforts.

NIGER : Decentralization of patient management to district hospitals: initial training sessions in Maradi

The United Nations and the ULSS gave the Solthis team in Niger a capacity building mission in the Maradi region. This was a pilot project for decentralization of HIV management to district healthcare facilities based on the principle of integrating HIV activities into existing departments. Solthis leads, coordinates and provides training as well as material and organizational support to the participating structures. In September, the first joint United Nations-Solthis-ULSS mission began in the regions. Approximately 123 people were trained by Solthis in HIV (initial training or re-training) PMTCT, dispensing treatment and TPE.

SIERRA LEONE: Support of supply procurement and stock management

In association with the Minister of Health and the National HIV/AIDS Secretariat, Solthis organized a national workshop from October 22-23 in Freetown for HIV counselors (in charge of management of HIV patients) and pharmacists. Debates were held on how to include the management of HIV products in the national pharmaceutical supply system as these are at present managed by two different systems. «The active participation of those at the workshop is a sign that this will be a promising collaboration» declared Sophie Ouvrard, referent Pharmacist and leader of this workshop. This project should be launched at the beginning of 2013.

Your next appointment with Solthis : Save the date !



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Scientific Conference **10 years of Solthis**

19-20 september 2013

On the occasion of the tenth birthday, Solthis will organize a symposium international in presence of all the teams of the ground on topic « 10 years of ARV in Africa: what bilans? what perspectives? »

We wait for you !

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