GETTING TO 90-90-90
WHAT WILL IT TAKE?

Perspectives and Realities from the Field

This brief summarizes some of the most pivotal strategies and interventions that are prerequisites for achieving the global targets of 90-90-90, based on MSF's experiences in sub-Saharan Africa.

MEDECINS SANS FRONTIERES

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1. **Achieving 90-90-90 relies on a high-level of commitment to implementing 'Test and Start,' including people and community-based models of care, strategies that enhance and focus on retention and quality of care, task shifting, and an engaged and funded civil society**

   The 'Test and Start' approach allows reduction in the currently high loss-to-follow-up prior to antiretroviral treatment (ART) initiation, improved health outcomes by starting ARVs before people living with HIV (PLHIV) become ill, and lower risk of sexual transmission. The globally-agreed to '90-90-90' targets require 90% of PLHIV knowing their status, 90% of PLHIV initiating and remaining on ART, and 90% of people on ART reaching and maintaining an undetectable viral load by 2020. Reaching these targets will critically depend on the implementation of WHO guidelines, and in particular, starting treatment before PLHIV develop clinical or immunological signs of illness.

2. **There are still many countries, such as in West and Central Africa, where low ART coverage threatens global progress**

   There are low-coverage countries with very little HIV care available and people still die in large numbers of AIDS. ART coverage is below 30% in most countries in West and Central Africa (WCA), including in Guinea, Central African Republic, Cameroon, and Democratic Republic of Congo (DRC). Only one in ten children living with HIV get ART. The region accounts for 30% of deaths due to AIDS worldwide, and 21% of all new infections among children. In order to reach 30 million on treatment by 2020, the region can no longer be ignored. These countries need initiation rates to triple.

3. **Adherence counselling and HIV testing must be assured by a motivated and recognised health worker cadre**

   Lay health care workers can be trained in HIV testing and adherence counselling, which MSF and others have shown to be critical to ARV scale-up and quality of care. With more people on treatment as countries roll out 'Test and Start', there will be a reduction in services provided if this essential cadre is not adequately supported and expanded, as we have already witnessed in several contexts. More, not less, lay workers will be needed to expand testing, linkage, and treatment services to reach 90-90-90.

4. **Implementation strategies must include rapid scale-up of routine viral load monitoring, and targeted interventions for those with high viral loads**

   The third 90 cannot be achieved without routine viral load monitoring, yet it has been slow to be rolled out. There is also a need to provide targeted interventions to those with high viral loads, for example adherence counselling. Decentralisation and task-shifting of second-line regimen initiation must also be urgently addressed.

5. **Medicine access: Drug stock outs must be tackled and generics protected to ensure people get the medicines they need**

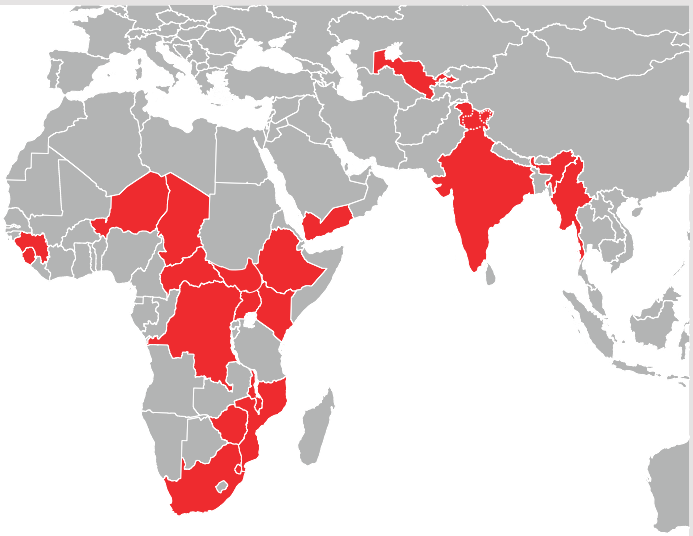
   Availability of medicines and tests is a prerequisite to 90-90-90. ARV stock outs contribute to the risk of viral resistance. Fragile national supply chains will have to cope with growing numbers of people on treatment. In addition, generic medication availability is under threat. Patent laws need reforming to lower drug prices for newer and better drugs, to ensure multiple sources rather than relying on single providers.

6. **Increased funding is needed to back up the commitments and support strategies that work – doing 'more with the same' will not take us far enough**

   Donor funding has stagnated in recent years, raising demands on countries to increasingly fund the HIV response domestically. This puts the future support of treatment scale-up at risk. In response to this push towards domestic resource mobilisation, people living with HIV are increasingly confronted with (higher) user fees. Donors' withdrawal from so-called Middle-Income-Countries (MICs), where most people with HIV live, is particularly worrying.

MSF HIV TREATMENT PROGRAMMES IN 2016

Central African Republic
Chad
Democratic Republic of the Congo
Ethiopia
India
Guinea
Kenya
Malawi
Mozambique
Myanmar
Niger
Sierra Leone
South Africa
South Sudan
Swaziland
Uganda
Uzbekistan
Yemen
Zimbabwe



MSF supports HIV treatment for 247,000 people in 19 countries

INTRODUCTION

The International AIDS Conference (IAC) this year in Durban marks a historic moment since the hosting of the conference at the same venue 16 years ago. Progress has been made: over 17 million people are on treatment out of 37 million people living with HIV. However, the crisis of HIV is far from over. This is especially the case in West and Central Africa (WCA) which is home to 5 million people still in need of ARVs.[1]

In the experience of Médecins Sans Frontières/Doctors Without Borders (MSF), there are several reasons for the success of '15 by 15' (15 million on treatment by 2015). On the one hand, donor funding was available to fight HIV/AIDS in very poor countries. Billions of dollars were mobilized from multilateral donors including the Global Fund to Fight AIDS, TB and Malaria ('Global Fund') and bilateral donors such as the U.S. President's Emergency Plan for AIDS Relief (PEPFAR).

Global and country-specific political will to tackle barriers head-on was also important. For example, changing the way drug prices were set (e.g. applying legal pressure on pharmaceutical companies), shifting to the use of generic medications (largely made in India), and fostering demand and competition for new and old drugs, all contributed to large price reductions that made treating HIV more affordable. This led to the cost of first-line ARVs (the first treatment option) dropping from around US$10,000 per person per year to US$ 100.[2]

'Task-shifting' strategies were also important, given the shortage of health care workers in low-resource settings. Nurses were empowered to prescribe ARVs where there was a shortage of doctors, and lay workers, without formal medical training, took on the task of HIV testing and counselling (HTC) to free up time for nurses to attend to clients. People living with HIV and advocacy groups played an essential role in this struggle, including confronting governments that denied HIV was a crisis.[3] Since then, civil society's role has continued to be essential, now as monitors and implementers of the response, though they have faced severe funding cuts.

The ambitious '90-90-90' targets aim, by 2020, for 90% of HIV positive people knowing their status; 90% of people living with HIV initiating and remaining on treatment; and 90% of people on treatment to have a suppressed viral load. These targets rely on a high-level of commitment to end and control the HIV epidemic; but they rightfully stress the need to test more people, increase linkage to care, and focus on the importance of quality of care through routine viral load monitoring. However, from our field and implementation experience, we see that it is unlikely that they will be achieved if the following needs are not prioritised:

- Rapid scale-up of 'Test and Start'
- People centred, differentiated and less burdensome models of care (not 'one size fits all' care)
- Tripling initiation rates in low ART coverage contexts such as West and Central Africa
- A strong role for civil society that represents communities and PLHIV
- HIV testing and counselling and adherence counselling by established and recognised lay health workers
- Routine viral load monitoring
- Ensuring a reliable drug supply as well as affordable availability of generic drugs
- Increased resource commitments to effective and patient-centered strategies for effective scale-up

1 MSF 2016, http://cdn.msf.org/sites/msf.org/files/2016_04_hiv_report_eng.pdf

2 UNAIDS 2015, http://www.unaids.org/sites/default/files/media_asset/MDG6Report_en.pdf

3 UNAIDS 2015, http://www.unaids.org/sites/default/files/media_asset/MDG6Report_en.pdf

1. Achieving 90-90-90 relies on a high-level of commitment to implementing Test and Start, including people-centred and community-based models of care, strategies that enhance and focus on retention and quality of care, task shifting, and an engaged and funded civil society

MSF's first Test and Start pilot project in Swaziland has shown that both men and women have good clinical outcomes with this strategy, while retention in care is at around 87% at 12 months, close to international targets. Botswana's national experience has also shown that 90-90-90 may be achievable in another sub-Saharan African setting.[4] All countries should switch to the current WHO guidelines as soon as possible, and conduct a well-planned roll-out.

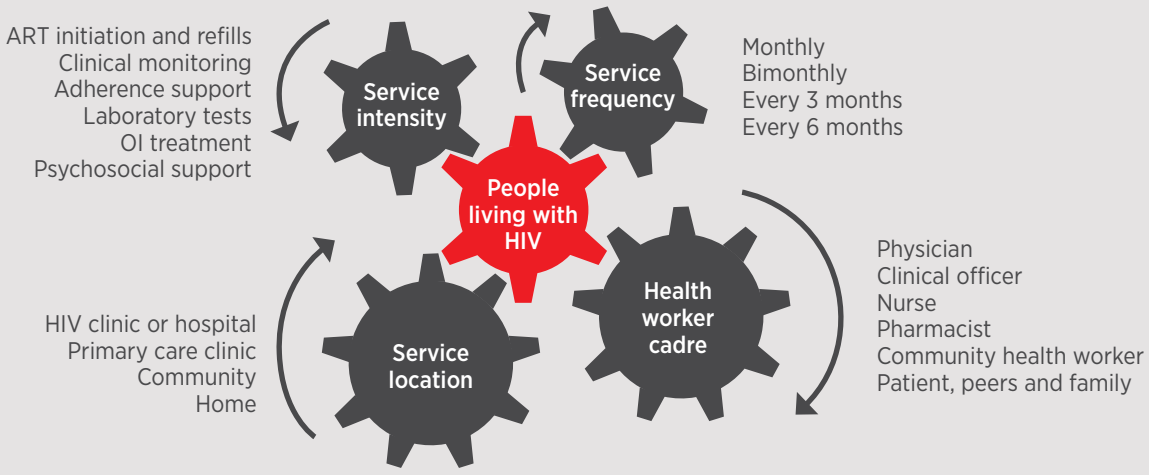
MSF's field experience has demonstrated a number of strategies that we believe are critical to achieving the 90-90-90 goals. First is the expansion of community-based HIV testing. It is unlikely that 90% of the population will be reached through health care facility-based testing alone. Fixed site and mobile site testing in the community may be cost-effective and the most effective at yielding both significant numbers of people who are currently unaware of their positive status and reaching hard to find groups like men or adolescents, who typically fall behind on testing, ART initiation and retention in care. Recent findings from MSF in fact show that fixed sites and mobile sites were more effective at reaching men than health facilities, although at an additional cost, while door-to-door testing had the lowest cost (as to be presented by MSF at IAC).

Community ARV distribution points (PODI) put in place in Kinshasa (DRC) bring ARV refills closer to people living with HIV, and have demonstrated positive ART retention results (89% after 12 months on treatment). They also represent a good strategy to reduce out of pocket transportation costs as well as waiting times, compared to facility ARV refills[5]. In MSF's project in Guinea, simplifying HIV care through less frequent clinic visits and multi-month ARV refills has improved treatment adherence and reduced unnecessary workloads for health workers. It reduces inconvenience for people on treatment and facilities to process refills.

Even with such strategies, it will be a struggle to meet 90-90-90 in many countries, including where MSF works (Figure 2). 90-90-90 will only be achieved with people-centred models of care, and a strong role and effective involvement of PLHIV and civil society in the response. Yet a recent survey conducted by UNAIDS found that 40% of HIV Civil Society Organizations (CSOs) had experienced funding cuts since 2013. Many organizations have already closed their doors.[6]

The National Association of People living with HIV/AIDS in Malawi (NAPHAM) recently lost 95% of its funding, directly affecting community-based activities. Treatment Action Campaign (TAC), a stalwart of the South African community of people living with HIV, also lost 40% of its funding last year on top of previous cuts. For MSF this is disappointing because we often rely on CSO services to help our medical programmes to access hard to reach places and people. For the HIV response it is devastating. A strong civil society defends the rights of PLHIV and must monitor the implementation of 90-90-90, holding governments and donors accountable.

Figure 1: The central role of PLHIV and civil society in the HIV response

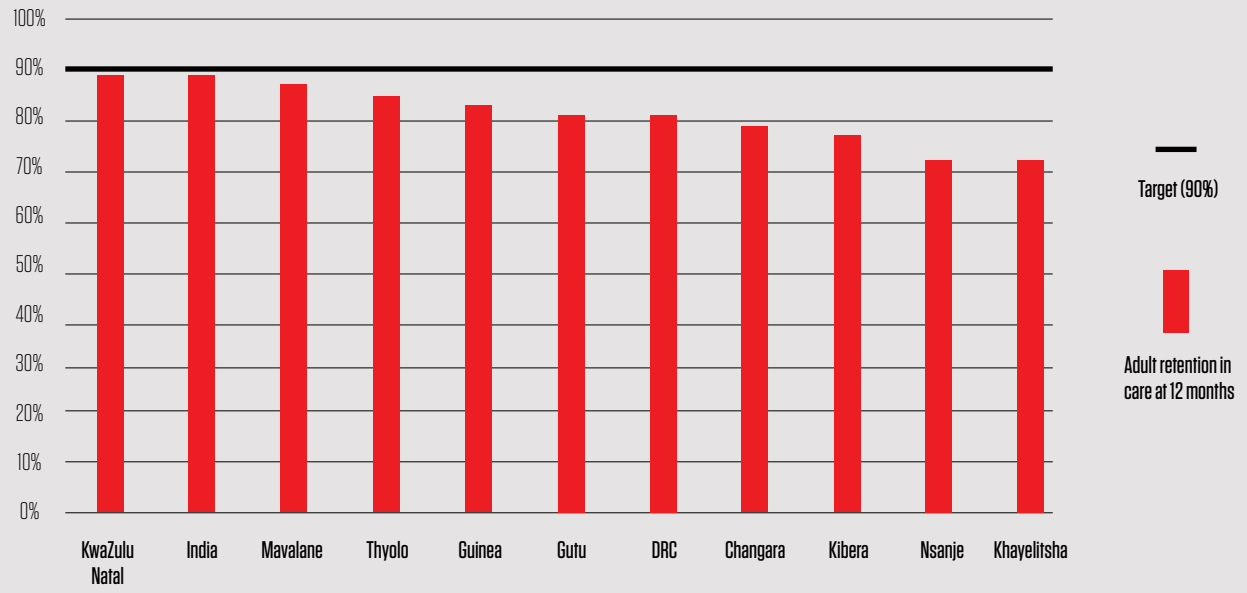


4 Goalathe 2015, http://www.croiconference.org/sessions/botswana-close-meeting-unaids-2020-goals-90-90-90-coverage

5 MSF 2015 Kinshasa activity report

6 UNAIDS 2016, http://www.unaids.org/en/resources/presscentre/featurestories/2016/april/20160404_community_advocacy

Figure 2: Retention in care of adults at 12 months in some MSF projects vs. target[7]



2. Reaching the global targets will rely on accelerated scale-up of access to ART for many countries, such as those in West and Central Africa, where low ART coverage threatens global progress

The UNAIDS Fast-track strategy is focused on 'high-impact' interventions and is refocusing investments on high-burden areas within and between countries. Also the strategic approach of Global Fund and PEPFAR reflect this. However, this implies an approach that trades off against the right of every person living with HIV to equal treatment.

HIV is a manageable disease, and people can now expect to live long, productive lives if they access treatment. However, in West and Central Africa (WCA), and in conflict zones, people are still dying unnecessarily. 30% of allAIDS deaths occurs in WCA. In the Central African Republic (CAR), in hospitals supported by MSF, up to 29% of inpatients have an HIV-related illness, and 84% of intra-hospital deaths are linked to HIV. At the MSF-supported Kabinda hospital in Kinshasa, Democratic Republic of Congo (DRC), one in four hospitalized HIV clients died after admission and, among those, 39% within 24 hours[8].

Access to testing is still a challenge in these countries. The majority of HIV tests, when available, are used to confirm suspected cases of HIV among people who are already ill. In DRC 90% of inpatients interviewed in a hospital in Kinshasa said they had never received an HIV test.[9] In Guinea, despite an important increase in the number of sites offering Prevention of Mother to Child Transmission (PMTCT) services, only 16% of pregnant women were tested for HIV in 2014[10].

In MSF's 'Out of Focus' report released this year, we noted that three out of four people who need ART in WCA are still waiting for treatment.[11] Among these countries, CAR has one of the lowest ART coverage rates in the world, at just 18%, while the estimated HIV prevalence is 4.3%, one of the highest in WCA[12].

In WCA in 2013, only 39% of the estimated 360,000 HIV positive pregnant women were receiving ART in WCA, compared to 79% in East and Southern Africa. This jeopardizes

7 Operational Centre Brussels Medical Activity Report 2015.

8 Machako M. Forte mortalité intra-hospitalière de PVVIH in Kinshasa: quelle stratégie pour y remédier? Juin 2015

9 MSF 2016, http://www.msfaccess.org/sites/default/files/MSF_assets/HIV_AIDS/Docs/HIV_report_WCA_ENG_2016.pdf

10 PNPCSP, Annual report, 2014

11 MSF 2016, http://www.msf.org/sites/msf.org/files/2016_04_hiv_report_eng.pdf

12 UNAIDS 2014 data, available from : http://aidsinfo.unaids.org/

the health of both mothers and their new-born children. Paediatric ART coverage is only 11%, far from the goal of 90% of people living with HIV accessing ART by 2020. This is underpinned by a lack of trained staff, unavailability of paediatric ARV formulations, and the lack of diagnosis of HIV positive children.

The main factors hindering progress in accessing quality HIV care and treatment in WCA are the lack of ART delivery at peripheral and community level; and very slow progress in task-shifting to nurses and lay workers. People are required to come once a month to health facilities for drug refills and there is poor retention in care due to the high cost of transportation, long waiting times and drug stock outs. In addition, there is poor integration of HIV and TB services. ARVs, laboratory tests and drugs for opportunistic infections also need to be available free of charge. Out of pocket payments for consultations and laboratory tests are often required before people can access HIV care. There is also lack of international support for civil society, in particular patient associations who could leverage the demand for better care from authorities and donors in the region.

It is critical that WCA governments commit themselves to improving ART coverage, demonstrate political will to tackle the problem, and that international donors assist in helping to provide funding, human resources and technical assistance to countries in need. Weak civil society and prevalent corruption, as well as isolation in exchange of best implementation lessons and experiences of Francophone countries from the rest of the continent due to language barriers, also need to be overcome by all actors. A high-level task force should be established to develop a plan which accelerates addressing the barriers to accessing HIV treatment services, and to set specific annual targets[13]. It is meaningless to talk of an end to AIDS if the world does not prioritize and closely monitor countries where people continue to die needlessly of AIDS.

3. Adherence counselling and HIV testing must be assured by a motivated and recognized health worker cadre

To a large extent, the success of the HIV response in sub-Saharan Africa has hinged upon the employment of lay workers, including lay counsellors and Community Health Workers (CHWs). Most countries in sub-Saharan Africa have extremely low levels of human resources for health – as low as 2 doctors per 100,000 people in Malawi.[14] As such, the possibility of providing quality HIV care is virtually impossible without empowering lower-skilled cadres to take essential support and education tasks and relieve more qualified health professionals' workload. This implies a fully pledged recognition of these cadres by incorporating them into the existing health system.

In the past, temporary arrangements were made between donors and recipient governments to employ lay workers. In a recent journal article MSF found that some countries are undershooting targets to employ lay workers.[15] Many lay workers were also found to have been recently been laid off in response to donor withdrawal of funds. In most sub-Saharan African countries these cadres are not recognized as a professional cadre by the Ministry of Health. This is a widespread problem that requires an urgent response to enable not only the scale-up of Test and Start but also to reach the ambitions of 90-90-90 – if not simply to avoid declines in quality service provision.[16][17] Figure 3 shows how extreme the shortages are in several countries where we work (those where data is actually available).

Recent MSF evidence from KwaZulu Natal Province, South Africa, shows that reductions in the number of lay counsellors has directly, negatively impacted the number of HIV tests performed, threatening the ability of the province to meet its targets on the first 90%, the number of people who know their status. The MSF study found that withdrawal of one lay counsellor resulted in 28 fewer tests per month. It is well known that in South Africa, the success of the testing campaign, where 18 million people have been tested for HIV since 2009,[18] was highly dependent on the employment of lay counsellors.

It is also important to stress that besides HTC, lay workers perform adherence counselling and patient education. These are critical functions that cannot and will not be performed without greater and renewed investment in dedicated staff. Currently they are too often viewed as dispensable and, given their lack of professional status, their perspectives and voices are not being heard.

13 MSF Letter to the UNAIDS Executive Director, July 2014

14 WHO 2016, http://www.who.int/workforcealliance/en/

15 Bemelmans et al. 2016. http://www.jiasociety.org/index.php/jias/rt/printerFriendly/20751/0

16 MSF 2015, https://www.msf.org.za/msf-publications/hivtb-counseling-who-is-doing-job

17 Bemelmans et al. 2016, http://www.jiasociety.org/index.php/jias/article/view/20751

18 South African Government 2016, http://www.gov.za/about-government/government-programmes/hiv-counseling-and-testing-hct-campaign

Figure 3: Number of lay health care workers in a selection of countries MSF works in[19]

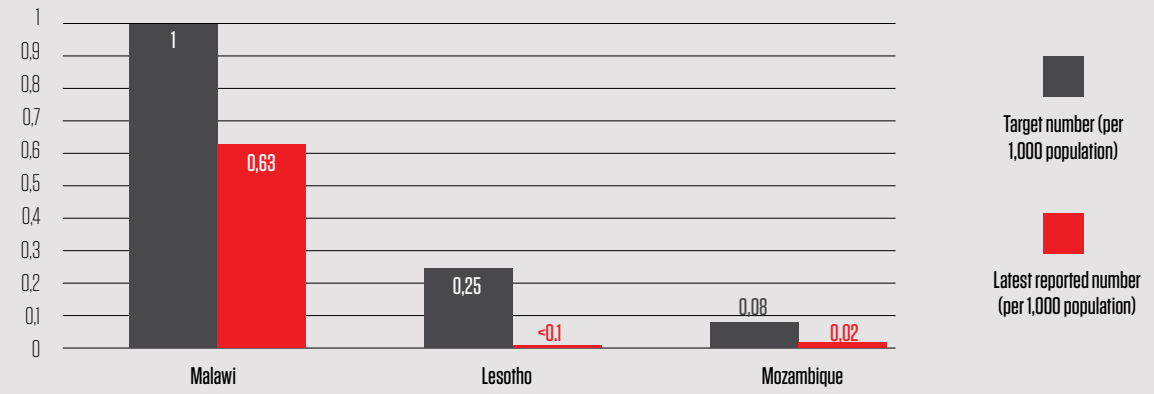
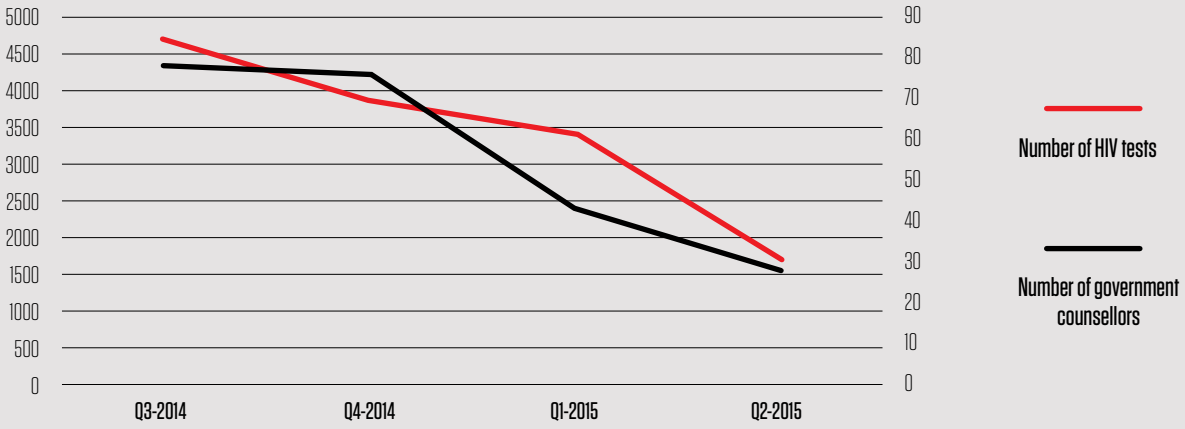


Figure 4: The effect of removing lay counsellors from facilities, from KwaZulu Natal, South Africa



4. Implementation strategies must include rolling out routine viral load monitoring, and include targeted interventions for those with high viral load

Since 2013, MSF has been involved in rolling out viral load testing in seven countries in the sub-Saharan Africa region in partnership with UNITAID. At the end of 2015 viral load coverage rates were only 17% in Malawi, 30% in Swaziland, and 5% in Zimbabwe. An MSF study in Malawi found that, where available, people often do not understand their viral load results. In Lesotho, MSF had to post dry blood spots (DBS) to South African labs as a solution to obtain viral load testing.

In MSF's new report, 'Making Viral Load Routine',[20] it was found that despite challenges, scale-up of viral load was feasible in resource-poor settings, with almost 320,000 tests performed in MSF-supported laboratory services since 2013, and over 150,000 in 2015 alone. The report, which evaluates three years of experience in rolling out routine viral load monitoring, showed a steep increase in uptake of viral load testing from initial implementation. During the last three years the challenge of sample transport has been overcome through the use of DBS and near-point-of-care technologies and significant price reductions have been seen.

A high viral load requires an intervention, such as adherence counselling, while low viral load results imply that people can be offered differentiated ART delivery models that relieve the burden of frequent visits. In addition, linking viral load results both as an entry criteria to differentiated ART delivery, and using the group dynamics of such models to enhance uptake of viral load, can significantly improve results.

Lack of decentralisation and task-shifting of second-line regimen initiation must also be urgently addressed if people are to avoid failing their first-line regimen. So long as these issues go unaddressed the ultimate goals of 90-90-90 are in jeopardy. Second line drugs are also often out of stock or unavailable in many contexts.

19 Bemelmans et al. 2016, http://www.jiasociety.org/index.php/jias/article/view/20751

20 MSF 2016, https://www.msf.org.za/about-us/publications/reports/making-viral-load-routine-successes-and-challenges-implementation

5. Medicine access: Drug stock outs must be tackled and generics protected to ensure people get the medicines they need

In most contexts where we work, drug stock outs (running out of medicines) are a health system failure that endangers the lives of people. In MSF's 'Empty Shelves'[21] report we documented that in DRC, over three-quarters of ART facilities in urban Kinshasa, representing 79% of the city cohort of people on ART, had at least one ARV or TB stock out over three months between January and March 2015.

In South Africa, the Stop Stock Outs Project (SSP), a civil society initiative, has shown that stock outs are a persistent problem even in relatively well-resourced settings, and are a combined result of global pharmaceutical shortages, as well as weak supply systems at country level.[22] The SSP demonstrates the continuing and evolving importance of civil society in monitoring the global HIV response. In Guinea, preliminary reports by a group of local PLHIV associations (Observatoires Communautaires) highlighted the problems of access to treatment for people living with HIV in 27 health facilities across the country[23].

The World Health Organization (WHO) and others have shown commitment to tackling the problem of stock outs but we are yet to see strong results on the ground. We are also concerned that WHO have not placed enough emphasis on improving the supply chain in-country, including 'last-mile delivery'. All actors must recognize the important role of civil society as representing PLHIV, the need to tackle stock outs at all levels of the supply chain, and the need to reform intellectual property laws to allow parallel imports to increase the number of suppliers to individual countries and the region.

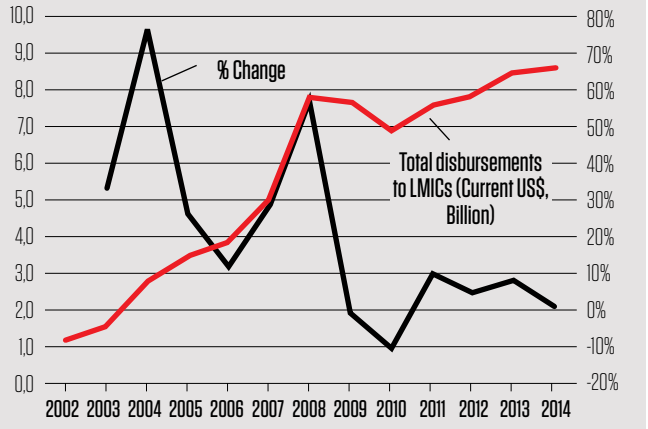
Ninety-seven percent of the HIV drugs MSF purchases to treat its patients are Indian generics.[24] At the IAC conference MSF will explore how generic competition and patent oppositions (challenges on patent applications) have been effective in India at drastically reducing the prices of lamivudine/zidovudine, tenofovir, nevirapine syrup, abacavir, lopinavir/ritonavir, and atazanavir. Civil society had a central role in challenging patents in South Africa, too, where there are currently patent law reforms pending that could reduce the cost of all manner of drugs, such as trastuzumab for breast cancer, by preventing patent 'evergreening'. While the price of ARVs in South Africa is now one of the lowest in the world, nothing prevents drug companies from renewing other medicine patents indefinitely (evergreening) and keeping prices artificially high.[25]

6. Increased funding needs to back up the commitments and support strategies that work – doing 'more with the same' will not take us far enough

US$26.2 billion is required by 2020 to achieve the 90-90-90 goals.[26] There are only a few years left and donors are pushing (primarily middle-income) countries to finance their own responses. Over 70% of the world's poor live MICs and it is not clear they are able to finance their own HIV responses fully without adequate support.[27] Figure 5 demonstrates stagnation and a slowing in growth in HIV-related Overseas Development Assistance (ODA) to developing countries in recent years.

There is much rhetoric internationally about doing 'more with the same' to end the AIDS epidemic. While there are still efficiencies to be realized, such as through PEPFAR reducing overheads by using more local contractors,[28] it is clear that the amount of money available for HIV will have to exponentially increase to achieve and secure the 90-90-90 targets.

Figure 5: Funding trends – HIV disbursements from High Income to Low and Middle Income Countries over time[29]



21 MSF 2015, https://www.doctorswithoutborders.org/sites/usa/files/msf_out_of_stocks_low_per_pages.pdf

22 See http://stockouts.org/

23 OCASS, draft report 2015

24 MSF 2015, http://handsoff.msf.org/generics-under-attack

25 Tomlinson et al. 2015, http://www.samj.org.za/index.php/samj/article/view/9966

26 UNAIDS 2016, http://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2016/april/20160401_PR_fast-track-update

27 Markham 2015, http://blogs.plos.org/speakingofmedicine/2015/07/13/dismantling-gains-in-global-health/

28 Barnhart 2016, http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)00570-5/fulltext?rss=yes

29 Kaiser Family Foundation 2014, http://kff.org/global-health-policy/report/financing-the-response-to-aids-in-low-and-middle-income-countries-international-assistance-from-donor-governments-in-2014/