PERSPECTIVES PAPER

The Abuja +12 Declaration: Implications for HIV Response in Africa

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Abstract

Heads of State and Governments of the Organization of African Unity now the African Union (AU) met in April 2001 at a Special Summit held in Abuja to address the challenges of HIV/AIDS, Tuberculosis, Malaria and other related infectious diseases in Africa. In May 2006, at the Special Summit under the theme: "*Universal Access to HIV/AIDS, Tuberculosis and Malaria Services by 2010*", the African Union Heads of States and Governments adopted the "Abuja Call for Accelerated Action towards Universal Access to HIV/AIDS, Tuberculosis and Malaria Services in Africa" and related commitments thus reaffirming earlier commitments. In July 2013, African leaders once again gathered in Abuja for the Abuja +12 summit, which focused on the theme 'Ownership, Accountability and Sustainability of HIV/AIDS, Tuberculosis and Malaria in Africa: Past, Present and the Future'. At the meeting, African leaders noted the tremendous progress that has been made in addressing HIV and AIDS, and made further commitments to effectively tackle the HIV epidemic on the continent. This article presents a critical look at each of these commitments and makes recommendations that would assist African countries in developing policies to end the HIV/AIDS epidemic in the region. *(Afr J Reprod Health 2014; 18[3]: 34-46)*

Keywords: Abuja declaration; HIV infections; combination prevention; research for preventive measures; domestic resource mobilization

Résumé

Les Chefs d'Etat et de gouvernements de l'Organisation de l'unité africaine devenue l'Union africaine (UA) se sont réunis en avril 2001, à un Sommet extraordinaire tenu à Abuja pour relever les défis du VIH / SIDA, de la tuberculose, du paludisme et d'autres maladies infectieuses connexes en Afrique. En mai 2006, lors du Sommet extraordinaire sur le thème: «Accès universel aux services du VIH / SIDA, de la tuberculose et du paludisme d'ici 2010", les chefs d'Etats et de gouvernements de l'Union africaine ont adopté l' «Appel d'Abuja pour une action accélérée vers l'accès universel aux services du VIH / SIDA, de la tuberculose et du paludisme en Afrique » et les engagements connexes réaffirmant ainsi ses engagements antérieurs. En juillet 2013, les dirigeants africains se sont réunis une fois de plus à Abuja pour le sommet d'Abuja +12, qui portait sur le thème «La propriété, la responsabilité et la durabilité du VIH / SIDA, de la tuberculose et du paludisme en Afrique: le passé, le présent et l'avenir». Lors de la réunion, les dirigeants africains ont noté les progrès considérables qui ont été accomplis dans la lutte contre le VIH et le sida, et ont pris des engagements supplémentaires sur un certain nombre de questions dans les moyens de lutter efficacement contre l'épidémie du VIH sur le continent. Cet article présente un regard critique sur chacun de ces engagements et fait des recommandations qui aideraient les pays africains à élaborer des politiques pour mettre fin à l'épidémie du VIH / SIDA dans la région. *(Afr J Reprod Health 2014; 18[3]: 34-46)*

Mots-clés: Déclaration d'Abuja, infections du VIH, prévention de la combinaison, recherche de mesures préventives, mobilisation des ressources

Introduction

There has been exciting developments in HIV prevention research and treatment over the last four years. For the first time, clinical trials of candidate HIV vaccine, microbicides and pre-exposure prophylaxis showed encouraging levels of efficacy[1-5]. With the striking success of the HPTN 052 trial[6], early initiation of antiretroviral (ARV) treatment seems poised to join condoms, partner reduction, use of clean syringes and needles and voluntary medical male circumcision in the toolbox of comprehensive combination prevention. There has also been increased focus on research to drive evidence-based decision-making in policies and programmes to combat AIDS,

Tuberculosis, and Malaria (ATM) across Africa. Recent evidence of the protective effect of male circumcision for HIV prevention[7-9] has led to the scaling up of its implementation in 13 member states[10]. Ongoing research is still required to learn how the use of antiretroviral for HIV prevention can be made available to populations most in need, including demonstration projects on the real life use of pre-exposure prophylaxis[11-13] and microbicides[14,15].

With the emergence of extremely drug resistant (XDR) tuberculosis in high-HIV-burden areas across Africa[16], the need for rapid culture confirmation of smear positive TB, rapid culture to detect smear negative TB, and rapid drug susceptibility testing and drug resistance surveillance is moving to the top of the tuberculosis research agenda, along with the need for new anti-tuberculosis drugs active against Multi Drug Resistant- and XDR-TB[17]. Advancements in research for malaria vaccines, its rapid diagnosis, and treatment are also underway[18].

However, there have been challenges as well. In 2011, for example, the VOICE trial was unable to confirm the CAPRISA finding that a tenofovir-based vaginal microbicide gel could protect women from infection[19]. The Fem-PrEP trial results were also disappointing: the study found that pre-exposure oral ARV prophylaxis (PrEP) that worked very well in Men who have Sex with Men (MSM) appeared ineffective for heterosexual women[20].

The successes and setbacks of the last three years will inevitably lead to more complicated HIV prevention research and demonstration projects taking place in Africa. It will also prompt increased national and regional dialogue about the potential benefits and risks of new prevention modalities and how they might best be deployed in country-specific settings.

The 2012-2015 UNAIDS strategy for 'Getting to Zero' calls for a national transition process that will see more people getting treated and less people acquiring new HIV infections, with treatment rates outstripping the rate of new HIV infections. Doing so will require decisive action guided by a groundbreaking vision: zero new HIV infections, zero discrimination, zero AIDS-related deaths.

'Getting to Zero', has been the theme of World AIDS Day since 2010 and will remain so until 2015. This is a political decision that is reflective of the belief of HIV scientists that the end of AIDS may occur within our lifetimes. Several recent prevention and treatment advancements that provide concrete hope for the realization of this goal include: the rapid scale-up of Anti-Retroviral Therapy and prevention efforts that have saved millions of lives; HIV infection rates decreasing in many heavily affected countries; the number of AIDS-related deaths have also decreased worldwide; and, most importantly, research findings have shown that Anti-Retroviral Therapy can prevent new infections.

'Getting to Zero' new HIV infection on the African continent will not only depend on expanding antiretroviral treatment and proven HIV/AIDS-prevention tools to all people who need them, it would also require additional investment in the research and development of HIV vaccine. Efforts would also be required to ensure combination of use of known and effective HIV prevention tools, ensuring universal coverage of access and uptake of these tools, and investment in addressing structural drivers of HIV infection risk[21,22].

In this regard, investing in research and development of prevention tools that are appropriate for populations at high risk of HIV infection such as HIV sero-discordant couples, sex workers, people who inject drugs, and men who have sex with men, women and girls, is of great importance. Now more than ever, political will and commitment, illustrated through allocation of adequate resources, and bold action is needed to 'Get to Zero' in Africa.

Commitment of African Leaders to Addressing HIV Epidemic on the Continent

On the 15th and 16th of July 2013, African leaders met in Abuja for the Abuja +12 summit, as a follow up to the 2001 Abuja summit. The theme of the conference was: '*Ownership, Accountability and Sustainability of HIV/AIDS, Tuberculosis and Malaria in Africa: Past, Present and the Future'*. Its broad objectives were to review progress on various commitments made in 2001, share

experiences on implementation in the different countries, draw lessons from these experiences, and map the way forward. At the meeting, African leaders noted that there has been tremendous progress made in addressing HIV and AIDS, and that this has resulted from the political will of leaders with strong and committed support of partners at all levels[23].

The leaders also recognized the need to accelerate the implementation and enforcement of protective laws for People Living with HIV/AIDS (PLHIVA) and vulnerable populations as well as ensuring the uptake of HIV preventive measures for these populations. The conference also took cognizance of the need for an African Centre for Disease Control and Prevention (CDC) for the conduct of life saving research for priority health problems in Africa. This African CDC, according to the leaders, will serve as a platform to share knowledge and build capacity in responding to the public health emergencies and threats.

In view of these, the leaders undertook to accelerate the implementation of the Abuja declaration, review relevant laws and policies at the national and regional levels to strengthen rights based protection for all vulnerable and key populations, increase access of young people to combination prevention programmes which are evidence driven, eliminate mother to child transmission of HIV, and promote the integration of sexual and reproductive health and rights (SRHR) and HIV/AIDS services. They also agreed to invest in tuberculosis (TB) and HIV service integration, accelerate child and adolescent access to HIV treatment, and intensify research aimed at strengthening preventive measures among others.

This paper takes a critical look at each of these commitments and makes recommendation on how to address some of the issues raised as we move towards Africa Union's target of zero new infection by the year 2030.

Laws and Policies to Strengthen Right- based Protection for all Vulnerable and Key Populations

The need for a human rights-based approach to programming has been long identified. A right-based approach to programming recognizes the existence of rights, reinforces the capacities of duty bearers, including national governments, to respect the rights of all individuals, and promotes the enactment of laws that create mechanisms to prevent violation of rights by state authorities or by non-state actors. In addition, a right-based approach reinforces the capacities of duty bearers to fulfill the right by taking active steps to put in place institutions and procedures, including the allocation of resources to enable people to enjoy their rights[24].

Current efforts on the Continent are centred on the enactment of laws that prevent stigma and discrimination of people living with HIV, promote gender equity and women's empowerment, as well as review of laws that infringe on the rights of key populations. The need to enact laws to prevent stigma and discrimination is important in view of the association between stigma and increased HIV risk behaviour[25-28]. In addition, stigma and discrimination prevents pregnant women from participating in PMTCT[29,30], serves as a barrier to uptake of HIV testing[31,32], impedes access to and retention in HIV care[33-35] and adherence to antiretroviral medications[36-39]. The persistence of HIV related stigma would also likely impact negatively on future HIV research on the African Continent with evidence suggesting poor uptake of novel biomedical HIV intervention methods due to stigma[40].

Unfortunately, current laws and policies in many countries directly contribute to and or exacerbate pre-existing stigma and discrimination associated with at-risk groups. Of the 82 countries in the world with antigay laws, 37 (45.1%) are located in Africa. The recent promulgation of the same sex marriage prohibition Act in Nigeria[41] and a similar law in Uganda[42] further heightens global, regional and national tensions on the issue of rights of homosexuals and the rights of other minority in the country. In Nigeria, there had been media and community reports of unlawful arrests and prosecution of men suspected to be gay since the promulgation of the law[43]. Drug use and sex work are also criminalized in many African countries. These laws and policies reinforce stereotyping and status loss of persons who are infected with HIV. Laws and policies that criminalize consensual homosexual activity,

prohibit syringe possession and needle exchange, and facilitate violent policing of sex workers need to be revised. Where protective legislation on HIV and AIDS discrimination is in place, support for enforcement and targeted information campaigns for stakeholders about rights afforded by such legislation should be provided.

Access of Young People to Combination Prevention Programmes

The concept of combination prevention was introduced in 2003 as a strategy for the 'use all appropriate interventions to achieve maximum effect, including behaviour change programmes, sexually transmitted disease control, voluntary counselling and testing, harm reduction, prevention of mother-to-child transmission, blood safety, infection control in healthcare, structural interventions, and programmes for people living with HIV'[44].

The UNAIDS Prevention Reference Group agreed in December 2009, that combination prevention programmes would be defined as rights-based, evidence-informed, and community-owned programmes that use a mix of biomedical, behavioural, and structural interventions, prioritized to meet the current HIV prevention needs of particular individuals and communities, so as to have the greatest sustained impact on reducing new infections[45].

The 2006 AIDS epidemic Data of the UNAIDS[46], reported that provision and access to combination prevention services contributed to declining incidence of HIV. As noted by Hankins et al[44], combination prevention had been inspired by the recognition that countries such as Uganda, Thailand, and Brazil had generated sharp, sustained declines in HIV incidence using an array of biomedical, behavioural, and structural approaches. Visible, consistent, political leadership and community mobilization seemed critical components of these successful national programmes, each of which had deployed strategically chosen strategies to meet the diverse needs of key populations at risk[46].

In a similar way, we note that programs to protect young people from HIV must use combination prevention approaches that are friendly to young people and must be accessed by young people. In countries with generalized epidemics, programs for young people should promote comprehensive services that include knowledge about HIV, sexuality education, access to sexual and reproductive health services and discussion on harmful sexual norms and practices.

Persistent challenges to effective HIV prevention for adolescents and young people include inadequate access to high-quality, youth-friendly HIV and sexual and reproductive health services, and sexual violence against young women and girls[47]. In addition, some young people are hindered in their ability to obtain essential services by limited protection for young people's confidentiality and right to medical privacy[48]. Inadequate access to comprehensive sex education, shown to be effective in delaying sexual debut and increasing condom use among young people who are sexually active[49], also undermines efforts to protect young people from acquiring HIV.

Across sub-Saharan Africa, diverse countries has achieved notable reductions in HIV prevalence among young people (15–24 years).[51] despite these favourable trends, HIV prevalence among young women remains more than twice as high as among young men throughout sub-Saharan Africa[51], which further makes the case for combination prevention programs.

Elimination of Mother to Child Transmission of HIV

In order to prevent the needless transmission of HIV to infants, the global community has committed itself to accelerating progress for the prevention of mother-to-child transmission (PMTCT) with the goal of eliminating new pediatric HIV infections by 2015[52]. Elimination of mother to child transmission of HIV is critical to Getting to Zero New infections globally.

In 2009 alone, an estimated 400,000 children were newly infected with HIV, with 90% of infections occurring in children in sub-Saharan Africa through mother-to-child transmission (MTCT)[53]. Without any intervention, the risk of MTCT ranges from 20% to 45%; without any treatment, half of the babies will die before their second birthday. About 42,000 to 60,000 of pregnant women die from HIV annually. In

contrast, in high-income countries, the number of new infections among children as well as the number of maternal and child deaths due to HIV are virtually zero[52].

MTCT threatens Africa's future generation and has a huge impact on broader maternal and child healthcare. The potential for eliminating MTCT to have profound impact on the HIV epidemic and broader maternal and child health is now more compelling. Scaling up an effective MTCT elimination global approach can reduce rates of transmission to less than 5% annually, and avert more than one million new HIV infections among children by 2015, while at the same time improving overall maternal and family health[52]. As outlined within the Global Action Plan towards Eliminating New HIV Infections among Children by 2015 and Keeping their Mothers Alive[52] EMTCT activities focus specifically on strengthening activities to prevent HIV infection among women and their partners, expanding efforts to reach men and to reduce the stigma of the disease in both rural and urban communities as well as ensuring access to anti-retroviral (ARV) treatments for every HIV positive woman and her partner. EMTCT activities also seek to strengthen linkages that support safe motherhood and reduction of unintended pregnancies among women living with HIV/AIDS, as well as expand access to enhanced quality of service delivery.

Africa bears the brunt of the new HIV infections among children and urgent steps need to be taken to accelerate the implementation of the African Plan towards the Elimination of New HIV Infections among Children by 2015 and keeping mothers alive in order to make EMTCT a reality in our generation.

Integrated Sexual and Reproductive Health and HIV/AIDS Services

The connection between sexual and reproductive health and rights (SRHR) and HIV/AIDS is undeniable; the majority of infections are sexually transmitted[54]. Biologically, women are more vulnerable to HIV infection during heterosexual sex than men, and they often have less power to refuse sex or negotiate condom use. Poverty, gender inequality, and social marginalization are factors that contribute to both HIV/AIDS and poor reproductive health[55].

Existing evidence[56] provides support for integrating SRHR and HIV/AIDS services, which is an important part of the global response to HIV and SRHR. Integrated approaches can increase access to component services, reduce clinic-based stigma (by delivering HIV care in more generalist contexts), increase client satisfaction and even impact positively on outcomes such as condom use, unintended pregnancies and perinatal HIV infection[57,58].

Likewise, increased access to information about HIV among those receiving sexual reproductive health services can help to curb sexually transmitted HIV infection. Overall, integration makes for more efficient and effective use of resources to address clients' health needs and increases access to both types of services[57, 58]. One of the most important advantages to integrating family planning and HIV services is the potential contribution of contraception to preventing HIV-positive births, which has been well established through extensive research[58-63].

At a minimum, integration involves setting up systems for mutual referrals and communication, so that women and men who access HIV/AIDS services are referred to appropriate SRHR services, and vice versa[56]. Integration may also involve developing dual-purpose interventions and integrating services. For example: Adding voluntary counseling and testing for HIV to SRHR services; Introducing SRHR services to ART and PMTCT services[56].

SRHR and HIV integration in Africa however, faces a myriad of challenges one of which is silo-ed funding streams that lack flexibility[57]. Traditionally, public health funding silos have created barriers for integrated service delivery in health care settings. Kenya's 2009 National Reproductive Health and HIV and AIDS Integration Strategy[64] reflects the influence of US government funding decisions as a determinant of how the country could address its HIV prevention needs: the U.S. Agency for International Development (USAID), Kenya, one of the leading supporters for the Kenyan population programme, cut its support for family planning by one-third from 1995 to 2002, while increasing its funding

for the HIV and AIDS programme six fold. In 2004, USAID budgeted US$35 million for HIV and AIDS and US$6 million for family planning in Kenya[64]. African governments should draw lessons from such missed opportunities and intensify SRHR and HIV integration in their countries.

Tuberculosis and HIV Service Integration

Tuberculosis (TB) and HIV/AIDS, which often occur as "Two diseases in one patient" are a deadly duo. In high-burden countries, people living with HIV are 20 times more likely to contract TB than those who are HIV negative. HIV is the main reason for failure to meet TB control targets in high HIV settings. On the other hand, TB bacteria can hasten the progression of an HIV infection, causing patients to fall sick more quickly[65].

TB is the leading cause of death among people living with HIV especially in sub-Saharan Africa, where it causes up to half of all AIDS related deaths. TB-HIV co-infections are also on the rise in other areas of the world, particularly Western Asia including China, and Eastern Europe. As long as HIV continues to spread, TB will remain a constant and deadly threat. In addition the rising incidence in cases of Multi-Drug Resistant (MDR-TB) in sub-Saharan Africa is posing a major challenge in the management of TB.

Sub-Saharan Africa bears the brunt of the HIV fuelled TB epidemic. Of the 34 million people living with HIV across the world at the end of 2011, 69% live in Africa. Around 1 in 20 adults in Africa are living with HIV. Africa also carries a large burden of the TB disease with 30% of the approximately 9 million new TB cases each year and 9 of the 22 most affected countries (TB high burden) are African countries (South Africa, Ethiopia, Kenya, Mozambique, Nigeria, Uganda, DRC, Tanzania and Zimbabwe) [66].

In order to control TB in high HIV settings, the Stop TB strategy includes collaborative TB/HIV activities. These collaborative TB/HIV activities have the objectives of creating the mechanism of collaboration between TB and HIV/AIDS programmes, reducing the burden of TB among people living with HIV and reducing the burden of HIV among TB patients.

While some progress has been made in ensuring integration of TB/HIV services, Africa is not yet on track to meet the goal of halving TB mortality from 1990 to 2015. Access to prevention, diagnosis and treatment of TB for people living with HIV remains a considerable challenge in many parts of Africa. Another major challenge identified by the World Health Organisation (WHO) is the rise in the number of multi-drug resistant TB cases in the AU Member States. In the case of MDR-TB, there is limited availability of medical equipment for effective screening, limited treatment options and the treatment is extensive, costly, not widely available and causes serious side-effects in patients. In addition, there is also the growing challenge posed by extensive drug-resistant TB (XDR-TB) which responds to even fewer available drugs, including the most effective second-line drugs. There is also an urgent need to focus on TB diagnosis and management in vulnerable populations particularly women and children. Building capacity and adequate facilities for the detection and monitoring of drug resistant TB (MDR and XDR) and ensuring availability of resources to provide treatment and care support for detected cases is of utmost priority.

The need to accelerate progress in ensuring TB/HIV integration is an urgent requirement as we work towards the attainment of Zero AIDS related deaths. However, in implementing effective TB/HIV integration strategies, actors must also work in partnership with patient groups and communities and adopt patient centered approaches for service provision in order to achieve meaningful progress.

Child and Adolescent Access to HIV treatment

Treatment-eligible children living with HIV in Sub-Saharan Africa are only about half as likely to receive antiretroviral therapy as HIV-positive adults[67,68]. In nine of the 21 sub-Saharan African countries prioritized by the Global Plan towards the Elimination of New HIV Infections among Children and Keeping Their Mothers Alive, 25%

or fewer children eligible under the 2010 WHO guidelines actually received antiretroviral therapy in 2012[67,68]. When comparing the number of children receiving antiretroviral therapy in 2012 to the potential eligible under the new WHO guidelines in 2013, it is evident that paediatric coverage is exceptionally low.

Adolescents (10–19 years) are the only age group in which AIDS-related deaths increased between 2001 and 2012. From 2005 to 2012, the annual number of AIDS- related deaths among adolescents almost doubled[69]. The inability of adolescents to benefit equally from treatment underscores the need for more HIV testing and counselling among this age group and for adolescent-friendly health services. The world is within reach of providing antiretroviral therapy to 15 million people by 2015[70]. Yet, within the scope of this achievement, adolescents and youth remain underserved. It is critical for adolescents and youth to know their HIV status and to be linked to appropriate care and treatment if diagnosed with HIV.

In Africa, a majority of adolescents and youth living with HIV are unaware of their status. In a study of nine of the highest prevalence countries - Kenya, Lesotho, Mozambique, Namibia, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe - less than 20% of adolescent boys and 30% of girls have been tested and know their HIV status[71]. This may be due to a number of factors including inadequate access and utilization of overall health services, and national guidelines that limit the ability of adolescents to independently access HIV testing and counselling[72].

We note that linkages to care for adolescents who test positive are weak[69], but even when linked to care services, retention in care of adolescents living with HIV is poor[71]. Late diagnosis of HIV infection is increasingly being recognized as a significant problem with regard to adolescents living with HIV, leading to delayed initiation of ART and poor linkages to and retention in care[69], which can lead to compromised treatment outcomes, premature deaths and risk of onward transmission. Adolescents also have low adherence rate when on ART[72]. Given the poor accessibility to second line ART, maintaining adherence to ART is one of the most significant problems for optimizing health outcomes in young people living with HIV.

Research on Preventive Measures

Until recently, HIV prevention lacked credibility with data from prevention trials showing little or no decrease in incidence of HIV/AIDS[73]. The promise of the recent scientific breakthroughs has marked the end of a steady stream of disappointing results. This has dramatically changed the public perception and the opinions of policy makers. The discourse on HIV prevention now includes the possibility that the epidemic can be stopped[74].

Scarce financial resources also drive this renewed focus on prevention, with resources for prevention levelling off in the past decade and future funding commitments unclear. These reductions put many HIV prevention programmes at risk, and have put pressure on prevention programmes to be more accountable by providing clearer evidence of impact and delivering better value for money.

It is imperative that African leaders intensify funding for prevention research to meet the pressure and demand for clearer evidence. In the absence of a cure, prevention is currently the biggest hope of reversing AIDS. This will require intensifying the scale and scope of HIV-prevention measures that have been shown to work. The recent breakthroughs in HIV prevention research have confirmed the promise of new options to help end the AIDS epidemic and highlight the urgent need for ongoing research to develop additional prevention options and support rapid rollout of proven ones. Continued progress in HIV prevention research will require unprecedented political will by African leaders to prioritize research and a broader base of funders committed to sustained support.

Recommendations

Allocate at least 15% of national budgets to health and step up domestic resource mobilization

In April 2001, heads of state of African Union countries met and pledged to set a target of

allocating at least 15% of their annual budget to improve the health sector. At the same time, they urged donor countries to fulfil the yet to be met target of 0.7% of their GNI as official development assistance to developing countries[75]. By the end of 2011, only Rwanda and South Africa have achieved the Abuja Declaration target of committing at least 15% of national budget to health. Seven other countries had reduced their relative contributions of government expenditures to health during the period while in 12 others, there was no obvious upwards or downwards trends reported. Twenty-seven other countries had increased the proportion of total government expenditures allocated to health[75].

While the success of the 2001 Abuja Declaration of committing 15% to health was premised on the need for donor countries to meet their target of 0.7% of their GNI as official development assistance, it is becoming clearer that the capacity of the donor countries to fulfil this obligation is getting thinner especially following the global financial crisis. By 2009, only five countries reached 0.7% of GNI devoted to development assistance namely Denmark, Luxembourg, Netherlands, Norway and Sweden. The overall ODA has actually decreased since 2001[75].

In effect, the African governments would need to look inwards to raise the needed funds to meet the health needs of its citizens. Domestic investment in health, including the HIV response needs to improve. The current donor dependency syndrome in the HIV response field needs to gradually reverse. This would require efforts at increasing the efficiency in and equitable domestic health spending[76], and increased allocation of aids resources for improvement of health and well-being of citizens[75]. Domestic health spending can be made more efficient by compulsory prepayment through general taxation or compulsory contributions to health insurance schemes[75].

While these efforts alone may not enable Africa countries to reach achieve universal access to health, it would significantly increase the government's response to the health needs of its citizens. The shrinking international response and commitments to HIV resulting from the uncertain global economic crisis and donor fatigue means that national Governments will need to take more fiscal responsibility for HIV.

Increase Funding for Research and Development

*I*t is imperative for African governments to invest in HIV research and development efforts. Research is needed to provide the evidence for the design and implementation of cost effective responses. For the HIV response in Africa, the need to develop new HIV prevention strategies is important as this would help increase the range of tools and options available for HIV prevention. An environment of political, social, and economic instability, have all contributed to the scarcity of scientific research in Africa. The dearth of research conducted in Africa for Africa is untenable[77] and threatens the long-term sustainability of any disease control programme.

Inequalities in health research contribute to inequalities in health and ultimately wealth. Some countries, such as Brazil and the People's Republic of China, have made remarkable progress, in part because their governments have invested substantially in health research and capacity building[78]. For Africa, the call to allocate at least 2% of national health expenditure and at least 5% of external aid for health projects to research and research capacity building in line with the Bamako Declaration[79] is an effort in the right direction. A commitment to fulfilling that declaration would result in African governments developing more evidence based policy, development of robust ethical and regulatory frameworks of standards to protect their populations from harm and to promote public trust in research, and the creation of regional alliances and centres of excellence to assist in strengthening research for health capacity on the continent. This is obviously borne out of the recognition of the importance of adopting sound policies on health research and the potential positive implications such policies may have on the health and development of their nations[79].

The commitment of the Africa leaders at the Abuja+12 Summit to the development of an African CDC to *conduct life saving research for priority health problems in Africa and to serve as a platform to share knowledge and build capacity in responding to the public health emergencies*

and threats is an additional step towards addressing the goals of the Bamako Declaration. However, the current pace of in-country fulfillment of the commitment is slow and at a pace that does little to address the health research needs of countries on the continent. While South Africa, Benin, Egypt, and Mauritius have done reasonably well regarding national investment and productivity in science and technology, there is however, no nation in Africa that has made a clear commitment to meet the resolutions in the Bamako Declaration[79].

Accelerate Research and Development of HIV Prevention Tools

The successes with the development of new biomedical HIV prevention tools such as medical male circumcision, use of systemic and topical antiretroviral for HIV prevention, and evidence for improved impact on the HIV epidemic with use of these existing and new tools in combination[80] are evidences to justify the continued investment in the research and development of new HIV prevention tools. Continued support for investment in the development of vaginal and rectal microbicide are both critical and essential in view of the high risk associated with sexual transmission of HIV for women through vaginal sex[81], and the significant high risk for HIV infection through anal sex for both men and women[82]. The various studies looking at the delivery of topical antiretrovirals in the form of gels, rings and films[83] and the research into the development of long acting PrEP in the form of intra-dermal injections or subcutaneous patches[84] are welcome developments. So also is the development of non-ARV based microbicides in view of the need for people living with HIV to also be able to access tools that can reduce their risk for re-infection with new HIV strains.

The support for the development of a HIV vaccine in an effort to end the HIV epidemic is needed now more than ever[85]. The world needs both a therapeutic vaccine and the preventive vaccine just as much as we need more investment in the HIV cure research. While these researches would take many more years for results to evolve, increasing national investment into the various forms of researches that are critical for the preparing ground for direct research implementation or preparing grounds for the smooth roll out of these research products are needed now.

Proactively Develop Policies and Agreements on Intellectual Property

It is imperative that African governments proactively develop policies and agreements on intellectual property that will accelerate access to and delivery of newly found efficacious products for treatment and prevention. The WHO Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property[86] urges governments to "consider, whenever necessary, adapting national legislation in order to use to the full the flexibilities contained in the Agreement on Trade-Related Aspects of Intellectual Property Rights, including those recognized by the Doha Declaration on TRIPS Agreement and Public Health and the WTO decision of 30 August 2003[87].

While acknowledging that prices are influenced by a variety of factors, we note that cost remains one of the barriers to increasing access to treatment and care services. The 2006 Political Declaration on HIV/AIDS commits United Nations Member States to "finding solutions to overcome barriers in pricing, tariffs and trade agreements and to making improvements to legislation, regulatory policy, procurement and supply chain management in order to accelerate and intensify access to affordable and quality HIV/AIDS prevention products, diagnostics, medicines and treatment commodities'[88].

Create Opportunities for Sharing Expertise and Lessons Learned from Research

Africa has continued to lag behind in scientific research to contribute meaningfully to social and economic development[89-91]. African governments should therefore create spaces/platforms for African scientists to increase their productivity and relevance to needs of local health systems. It is imperative that south-south scientific cooperation be strengthened. The collaboration should be aimed at strengthening Africa's capacity to

conduct scientific research to solve health problems confronting the people of Africa.

Funds, specifically allocated by Parliament, to support essential national health research are essential. In addition, African governments should run regular workshops on research methodology and data analysis for multidisciplinary teams of researchers at district level to provide them with enhanced skills for conducting health research. Research findings should be disseminated to peers, policy-makers, and members of the public through forums such as an annual open days and national scientific conferences in conjunction with local universities and research organizations. Members of the public should be invited to discuss research questions and findings.

Conclusion

The Civil Society in Africa are committed to using existing structure and mechanisms at its disposal to support and strengthen African leadership's involvement in HIV prevention research and development by mobilising communities to access services and contributing to the provision of prevention, treatment, care and support services; promoting human rights and access to essential medicines for all by advocating for rights and evidence-based policies on health and for mechanisms to strengthen health systems in Africa; acting as a watchdog to ensure accountability, good governance and more efficient management of programmes and resources for all stakeholders, including civil society organisations; and encouraging governments, citizens, development partners and the private sector to contribute significantly to funding health and research and development interventions. The Africa HIV response needs to be driven by evidence derived from research. The Continent also needs continental led investment in the development of new HIV prevention tools in addition to learning how to facilitate uptake and use of existing tools. Committing to the implementation of the Bamako Declaration is one step in this direction.

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Contribution of Authors

MOF conceived the idea of the paper. RM, MOF and OA collected the papers needed for the writing of the manuscript/ RM led the process of putting the manuscript together. All authors were engaged in the preparation of the manuscript and gave final consent to its publication.

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