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## Global challenges keynote address *in memoriam* to colleagues lost in the Malaysia airlines 17 crash

Catherine A. Hankins<sup>a,b,c</sup> 

<sup>a</sup>Amsterdam Institute for Global Health and Development, Amsterdam, The Netherlands; <sup>b</sup>Department of Global Health, Academic Medical Centre, University of Amsterdam, Amsterdam, Netherlands; <sup>c</sup>Department of Infectious Disease Epidemiology, Faculty of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, London, UK

### ABSTRACT

Six colleagues working in the HIV field were killed when their flight en route to Kuala Lumpur was shot down over the Ukraine. This report is drawn from the *in memoriam* keynote opening address given at the 12th International AIDS Impact conference in Amsterdam in 2015. It highlights their tangible and valued roles in the HIV response and looks forward to the road ahead. It describes the ways in which we can build on their legacy to address current global challenges in HIV prevention and treatment and to mobilise the intensified, focused resources that are needed to turn the HIV epidemic on its head.

### ARTICLE HISTORY

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### Introduction

On 17 July 2014, Malaysia Airlines Flight 17, an international passenger plane flying from Amsterdam to Kuala Lumpur, crashed near Torez in Ukraine's Donetsk Oblast, 40 kilometres from the Ukraine–Russia border. It had been shot down by a surface-to-air missile. All 283 passengers and 15 crew on board were killed. Among them were 6 people en route to Melbourne, Australia to attend AIDS 2014, the Twentieth International Conference on AIDS.

A year later, when the Twelfth International AIDS Impact conference, themed “We are our choices”, opened in Amsterdam, a keynote address *in memoriam* to these 6 colleagues highlighted their tangible, valued roles in the HIV response and looked forward to the road ahead. This short report drawn from the plenary describes the ways in which we can build on their legacy to address current global HIV challenges and mobilise the intensified, focused resources that are needed to turn the HIV epidemic on its head.

The six HIV colleagues who had their lives cut short had contributed in diverse ways to the HIV response. Lucie van Mens, a passionate advocate for women and girls, promoted the female condom and safer working conditions for sex workers in the Netherlands. Glenn Thomas, media officer at the World Health Organization (WHO) for over a decade, was always keen to tell the stories that really mattered. Martine de Schutter

was a key player in AIDS Action Europe for a decade and the driving force behind the HIV/AIDS Civil Society Forum. Pim de Kuijer, a skilled lobbyist for AIDSFonds, was a diplomatic activist who advocated for increased resources for the Global Fund. Jacqueline van Tongeren, Director of Communications at the Amsterdam Institute for Global Health and Development, was renowned for her warmth, dedication, aesthetic taste, and invaluable emotional intelligence. Joep Lange, a Dutch HIV clinician scientist who had argued in 1995 that combining at least three antiretroviral drugs was essential for sustained, effective treatment without drug resistance, was a former President of the International AIDS Society who challenged group think and was renowned for his activism for treatment access in resource-limited settings.

Many of us moved from experiencing an acute and searing sense of loss, through anger and disbelief, to being inspired by their stories and demonstrated commitment to HIV. Now, it is time to find ways to build on their legacy to complete the task of ending AIDS as a public health threat by 2030 (Piot et al., 2015). Ten indicators of global progress are tracking progress towards this goal (Table 1) (WHO, 2015b) and two main cascades, one in prevention (McNairy & El-Sadr, 2014) and one in treatment (Bärnighausen, 2015), are the focus of concerted action to achieve impact over the short-term and for a sustained effective

**CONTACT** Catherine A. Hankins  [c.hankins@aighd.org](mailto:c.hankins@aighd.org)

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**Table 1.** Ten Global Strategic Information Indicators.

1. *Epidemiology*: Number and percentage of people living with HIV
2. *Domestic finance*: Per cent of HIV response financed domestically
3. *Prevention by key populations*:
  - a. Sex workers: per cent condom use with most recent client
  - b. Men who have sex with men: per cent condom use at last anal sex with a male partner
  - c. People who inject drugs: needle-syringes distributed per person
  - d. General population: per cent of women and men who had more than one partner in the past 12 months who used a condom during their last sexual encounter
4. *Knowing HIV status*: Number and proportion of people living with HIV who have been diagnosed
5. *Linkage to care*: Number and proportion of people living with HIV who are receiving HIV care (including ART)
6. *Currently on ART*: Number and percentage of people living with HIV receiving ART
7. *ART retention*: Number and percentage of people living with HIV who are retained on ART 12 months after initiation (and 24, 36, 48, and 60 months)
8. *Viral suppression*: Number and percentage of people on ART who have suppressed viral load
9. *HIV-related deaths*: Number of HIV-related deaths per 100,000 population
10. *New infections*: Rate of new infections per 1000 uninfected population

response. Innovative research to find a cure (Lewin, 2013) and create an efficacious vaccine (Burton et al., 2012; Nabel, 2013) holds hope for the long term.

### Ramping up HIV prevention

Every one of the 2 million people who newly acquired HIV infection in 2014 will require antiretroviral treatment (ART) for life. Reducing risk now is critical to stem the tide of HIV transmission and subsequent ART need. The HIV epidemic is not static: some countries have experienced important declines in the numbers of new infections while others, such as Uganda, have seen increased HIV incidence (UNAIDS, 2015b). Striking outbreaks of HIV infection linked to the use of non-sterile injecting equipment have occurred in Greece (Sarafis & Tsounis, 2014) and Indiana, USA (Morbidity and Mortality Weekly Report [MMWR], 2015), while HIV incidence continues to increase in Russia (Russian HIV-Aids epidemic worsening under Kremlin policies, says expert, 2015).

The prevention cascade or continuum begins with risk identification to facilitate stratification for tailored counselling and provision of prevention services. These may include voluntary medical male circumcision (VMMC) for men living in areas of high heterosexual transmission; male and female condoms; pre-exposure prophylaxis (PrEP) with daily, intermittent, or event-driven use of pills for men and women at substantial risk of HIV exposure; sterile injecting equipment for people who inject drugs; and other prevention modalities. Conducting outreach, supporting adherence, and encouraging regular HIV testing and counselling; engaging communities for social and sexual norm changes; and

implementing social protection and other programmes that address the structural determinants of risk, such as gender disparities (Jewkes, Dunkle, Nduna, & Shai, 2010) and the need for drug law reform ('International Drug Policy Consortium', 2015), are all key components of effective combination HIV prevention (Hankins & de Zaldondo, 2010). For example, a new initiative in 10 countries in sub-Saharan Africa called the DREAMS partnership (*Determined, Resilient, Empowered, AIDS-free, Mentored, Safe lives*) focuses on empowering young women and girls and reducing risk in them and their sexual partners (DREAMS: Working Together for an AIDS-free Future for Girls, 2015).

Significant progress has been made in the scale-up of VMMC, with over 10 million procedures performed in priority countries of sub-Saharan Africa since 2008 (UNAIDS, 2015a); however, promising antiretroviral (ARV) prevention faces several implementation challenges. Oral PrEP was approved in the USA more than three years ago (FDA, 2012) and the World Health Organisation has published guidelines (WHO, 2012) (WHO, 2013) but thus far only France (ANRS, 2015), South Africa (Medicines Control Council, 2015), and Kenya (Gilead Sciences, Inc., 2015) have taken regulatory or other action to ensure access for those at highest risk. With trials underway of ARV-containing vaginal rings (Microbicide Trials Network, n.d.) (International Partnership for Microbicides, n.d.), long-acting injectable formulations (Spren et al., 2014), and rectal microbicides (Microbicides Trials Network, n.d.), it is critical that steps be taken now to prevent similar delays in ensuring access to any product proven effective. Trials of broadly neutralising human monoclonal antibody injections are underway (Ledgerwood et al., 2015), as well as clade-specific vaccine trials following up on the RV144 HIV vaccine trial (Rerks-Ngarm et al., 2009), and these too require anticipatory preparation to make them rapidly available in the event of proven efficacy.

### Treatment for all people living with HIV

The goals for strengthening the treatment cascade laid out in the UNAIDS Fast Track Initiative are 90–90–90 by 2020 and 95–95–95 by 2030 (UNAIDS, 2014a). The short-term objective means that 90% of people living with HIV know their HIV status, 90% of people who know their HIV status are on ART, and 90% of people on ART are virally suppressed. This translates into 73% of all people living with HIV being virally suppressed. Viral suppression is key not only for individual clinical benefit but also for prevention, reducing HIV transmission by 96% (Cohen et al., 2011). The recent results of the Temprano (The TEMPRANO ANRS, 12136

Study Group, 2015) and START (Lundgren et al., 2015) trials confirmed the clinical benefit for individuals of early treatment and the WHO has released preliminary guidelines recommending that all people living with HIV should be offered ART regardless of their CD4 count, a measure of immune suppression (WHO, 2015a).

Significant gaps exist in country progress towards 73% viral suppression. Switzerland, Australia, UK, Denmark, the Netherlands, Rwanda, and France already have more than 50% of their people living with HIV achieving viral suppression. Trailing behind are the USA (30%), Africa (29%), Russia (9%), and Cambodia (2%) (Hill, 2015). The biggest gap is in knowledge of HIV status. Strategies to increase HIV testing uptake include community approaches, couples counselling and testing, provider-initiated offers of HIV testing, and self-testing (WHO, 2015c). Linking those who test HIV-positive into care quickly and effectively will reduce loss to follow-up of people who know their HIV status. To ensure that people achieve and are able to sustain their viral suppression, essential community and peer support complements health service adherence counselling, but equally important are avoiding drug stock outs and managing first-line regimens well to avoid drug resistance.

Progress in the elimination of paediatric HIV has been remarkable with a 43% decline since 2009 in new HIV infections among children in 21 priority countries (UNAIDS, 2014b). With the B+ treatment strategy, that is, starting pregnant women on ART for life, now recommended by WHO (World Health Organization, 2015a), the decline in paediatric infections is set to accelerate while maternal survival increases.

Stigma and discrimination continue to impede both prevention and treatment programme effectiveness worldwide, most markedly with respect to men who have sex with men, people who inject drugs, and sex workers. Legislative and policy changes are urgently needed to underpin improvements in public attitudes towards these key populations.

### Financing the response

New strategies to fast track the HIV response require effective use of existing resources and increased investment over the short term to reap the benefits of averted HIV treatment costs in the future. Funding for HIV plateaued and then declined after the global economic crisis. Recently it began to rise but, after adjusting for inflation and exchange rate changes, the increase between 2013 and 2014 was marginal (1%) (Kates, Wexler, & Lief, 2015). Encouragingly, the proportion of HIV expenditure from domestic resources has increased

steadily over the last 15 years. In 2005, bilateral and multilateral sources accounted for 69% of all HIV-related spending but by 2014, domestic sources in low- and middle-income countries had increased to 57% (UNAIDS, 2015b). Nonetheless, half of Caribbean region countries remain dependent on external sources for 75–100% of their HIV treatment budget (McLean, 2015) and 73% of all HIV expenditure in Kenya is supported by external resources (Muchiri, 2015). This is not simply a financial issue; governance concerns are raised when the survival of so many citizens depends on external funding.

Standard fiscal space analyses suggest that possible strategies to increase HIV funding include economic growth, improved tax administration, reprioritisation, development assistance, innovative financing, external borrowing, earmarked resources, and efficiency gains in HIV service delivery and broader development programmes (Vassall, 2015). Investment and taxes in poor countries can matter as much, if not more, as development aid (Gates, 2015) but taxation systems need considerable investment themselves. In 2013, tax revenue constituted almost 34% of gross domestic product in rich countries, compared to under 13% in poor countries ('Beyond aid: Financing Development', 2015). Efficiency gains can be made, both in allocative and technical efficiency but both domestic and bilateral/multilateral investment can and must be increased and prioritised to those areas, populations, and services where they will have the greatest impact.

### Conclusion

An estimated 30 million HIV infections were averted between 2000 and 2014 as a result of ART roll-out and effective prevention (UNAIDS, 2015b). The task now is to end AIDS as a public health threat by 2030 as part of the post-2015 development agenda. The UNAIDS-Lancet Commission sets out seven key recommendations to defeat AIDS and advance global health: expand HIV prevention and treatment access, uphold human rights, ramp up funding, ensure accountability, strengthen leadership and community engagement, invest in research and innovation, and promote multi-stakeholder governance to address determinants of health (Piot et al., 2015).

Business as usual will see the HIV epidemic with us for decades and decades to come. The choice is clear. We must, as Joep Lange often said, 'Be creative and think big to tackle the real problems'. HIV in the twenty-first century remains a very real problem. Inspired by the memories of the tasks left undone by the untimely deaths of our colleagues, we need to move

forward with resolve, dedication, inspiration, passion, and commitment to engage others and mobilise the necessary financial and human resources to finish the task ahead.

## ORCID

Catherine A. Hankins  <http://orcid.org/0000-0002-1642-8592>

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