

APRIL 10, 2018 • CULTURE • MSM • PUBLIC HEALTH • HIV/AIDS

“Know your epidemic”: driving down HIV in London and beyond

Keerti Gedela

The global health community aims to eradicate HIV from the world in the next 15 years. But with 1.8 million new HIV infections in 2016 it seems like an impossible task. Over the last 3 years we’ve observed a phenomenal reduction in HIV diagnoses in London, predominantly in men who have sex with men (MSM), our highest risk population. This is the first time the UK has seen a reversal of the HIV epidemic in MSM. How was this achieved in London? Are any of London’s successful HIV reduction interventions relevant to settings with differing HIV epidemics? If we are to be successful in ending AIDS, the “know your epidemic” agenda needs heightened focus.



Keerti Gedela is a Consultant Physician at 56 Dean Street, Chelsea & Westminster NHS Foundation Trust. She has worked as a HIV physician and TB research physician in Southern Africa and India and studied tropical medicine and international health at the London School of Hygiene and Tropical Medicine. Some of her current work and interests are on innovative service-delivery models of healthcare and digital health solutions in low-income countries.

Public Health England reported a **35% decline** in new HIV infections in MSM in London between 2015 and 2016. This is largely due to a decline observed in five London sexual health clinics, but predominantly at the 56 Dean Street clinic, which has had a **dramatic 80% reduction in new HIV diagnoses** from 2015 to the present day (figure 1).

Since the turn of the millennium, new cases of HIV in MSM in London have been increasing, with 1804 new diagnoses in 2015. That year, Dean Street was diagnosing around 50–70 new infections a month, almost exclusively in MSM. We endeavoured to understand and engage London’s highest at-risk population and tailor risk reduction interventions to their needs. The impact was undeniable.

Knowing your epidemic and tailoring services

What does “knowing your epidemic” mean? In 2007, UNAIDS highlighted the need for better data to improve country HIV estimates and improve the response to evolving epidemics and changing needs. It highlighted that globally a multitude of diverse HIV epidemics exist that need targeted responses.

In a changing world we need to continue to understand the attitudes and concerns of affected communities and understand the impact of complex drivers of both **generalised and concentrated epidemics**, such as sexual behaviour and networks (including technology/social media use for linking up for sexual purposes, **chemsex**), concurrent sexual partnerships, gender inequality, gender-based violence, and stigma. We need to understand what puts our population at high risk of HIV and where incident HIV infections are occurring.

At Dean Street, we realised that 50% of all our new diagnoses were in those seroconverting—ie, in the very early stage of HIV infection when they are highly infectious. So in 2015, we proactively offered antiretroviral treatment (ART) to all individuals newly diagnosed with HIV (particularly those seroconverting), within 48 h of their diagnosis. It has been a highly acceptable strategy and is likely to have been highly effective in preventing further new infections in this population.

In 2015, **PROUD** and **IPERGAY** demonstrated that oral pre-exposure prophylaxis (PrEP) protects against HIV in MSM when taken properly. MSM accessing our services



This blog post was originally published on *The Lancet Global Health Blog*

The blog was closed on December 31, 2018 and all posts are available via the archive at <https://www.thelancet.com/journals/langlo/blog>

were buying [generic PrEP online](#) before it was available in the UK and without the support or monitoring they needed. Engaging this population by discussing and supporting their PrEP use in dedicated services is likely to have been another major factor in the reduction in new HIV cases.

We also established risk factors associated with a “very high” risk of HIV. Separate pieces of work recognised that a diagnosis of rectal chlamydia/gonorrhoea, early syphilis, unprotected receptive anal sex with multiple partners, and recent post-exposure prophylaxis for HIV (PEP) conferred a greater than 10% risk of acquiring HIV by the end of the year. We can identify people with these risk factors, educate them on this risk, and invite them to join a digital risk reduction intervention that offers priority access for HIV and sexually transmitted infection (STI) screening. These packages have been developed with our high-risk users and are optimised and delivered via mobile phones, which we know our local population show high engagement with, including for sexual purposes. The risk reduction information is tailored to their sexual health needs and lifestyle.

Health technology innovations such as video-guided self-testing, rapid diagnostics, mobile results, digital health, and social media interventions have enabled the service to be more accessible and user-focused. The downturn in new HIV infections occurred against a background of a surge in HIV and STI testing. Granted, London is a technology-savvy, high-income city, but in many low- and middle-income countries’ information technology and social media are growing and some of this technology is potentially transferable and relevant if tailored well.

Engaging key populations in differing epidemics

Wide-scale HIV testing, [ART scale-up to all individuals diagnosed and living with HIV](#) and PrEP (plus voluntary medical male circumcision in generalised epidemics) are key proven medical interventions that need disseminating in key population-focused ways (alongside interventions that can have non-HIV-related public health benefits such as sexual health education, prevention of violence against women, and de-stigma campaigns). But once diagnosed, retention in HIV care and adherence to ART are ongoing challenges globally, preventing people remaining virally suppressed, well and [non-infectious](#).

Engaging communities effectively, listening to patient’s narratives, and empowering peer navigators to guide and adapt service delivery in innovative ways can help to improve the effectiveness of these interventions. This could involve community-based treatment delivery, protocols standardising treatment provision at HIV diagnosis, point-of-care testing (HIV and viral load), flexible clinic hours, or digital health solutions.

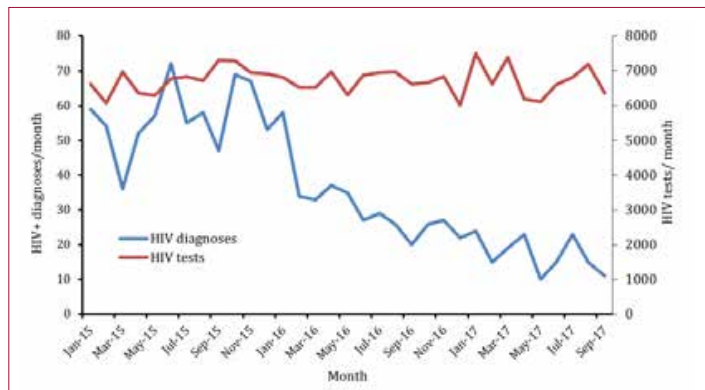


Figure 1: HIV diagnoses at the 56 Dean Street service in London, UK

There are some inspiring global examples of community-based care and differentiated HIV service delivery models, including Uganda’s community client-led ART delivery groups for female sex workers ([TASO AIDS](#)); differentiated HIV service delivery for MSM and transgender women led by transgender peers and community based organisations in Thailand ([SISTERS Foundation, Thailand](#)); and differentiated ART delivery for people who inject drugs in the north-east region of India ([FHI360 Project Sunrise](#)).

PrEP has become an acceptable method of HIV prevention in MSM in London and other high-income cities, but African women and men living in regions with generalised HIV epidemics may not find PrEP as acceptable; we need to understand issues around acceptability of interventions and engage at-risk communities to find the best ways of prioritising need, normalising HIV prevention, and optimising implementation. [Kenya has made inspiring and encouraging progress in PrEP scale-up](#), incorporating PrEP champions with tailored social media campaigns and community engagement. [Recent data highlighted that African women in late pregnancy and postpartum are at significantly greater risk of acquiring HIV](#) compared to other times in their life. This data lends power to prioritise HIV prevention, particularly PrEP, in antenatal and postpartum services in Africa; but understanding why these women are at greater risk, the social and sexual dynamics involved, and community engagement may help to optimise interventions. PrEP scale-up is a work in progress and we must learn from dedicated programmes working in diverse epidemics that face many social, behavioural and financial challenges.

We have the tools to end AIDS, with zero new HIV infections worldwide an achievable goal. But to be successful we need to push the “know your epidemic” agenda, be more innovative than before, and tailor services with greater focus and attention.