Preparing for an ageing HIV epidemic

For much of its history, the story of HIV has been that of young lives cut short and children born with an infection that will stop them reaching adulthood. On June 5, 2017, however, HIV Long-Term Survivors Awareness Day was marked worldwide recognising long-term survivors of HIV infection and raising awareness of their specific needs. Long-term survival is part of a broader picture in which the demographic profile of people living with HIV is shifting to ever older ages, which will present new challenges for HIV programmes in the future.

In the early era of antiretroviral therapy (ART), treatment regimens were characterised by high pill burdens, complicated dosing, and side-effects that led to low adherence and reduced long-term survival. Over the years, ART pill burden has decreased: many modern regimens are just one or two pills a day with vastly improved side-effect profiles. Paradoxically, as the population with HIV infection becomes older, their pill burden will increase again in response to agerelated comorbidities as patients begin taking statins for high cholesterol and ACE (angiotensin-converting enzyme) inhibitors for high blood pressure, and so on. This U-shaped pattern of pill burden is just one of many emerging issues that affect an ageing population of people living with HIV.

Although many patients with HIV will live healthy lives into old age, some will develop physical and mental care needs. Stigma and discrimination are also major issues for an older population whose peers might be less aware of advances in the understanding and treatment of HIV, with patients concerned about their status causing social isolation in care homes and poorer wellbeing. Additionally, concerns are also raised with the possible interaction of HIV and the ageing process, in which chronic inflammation might promote faster ageing.

It is not just patients with HIV infection living longer, but older individuals are also being newly infected and diagnosed with HIV infection. For example, in the UK, 1018 individuals aged 50 years or older were diagnosed with HIV infection in 2015. Late diagnosis of HIV infection in old age—older people diagnosed with advanced HIV infection—is also associated with poorer clinical outcomes, with a 16-times increase in

risk of death within the first year of diagnosis in those aged 50 years or older compared with those diagnosed promptly. However, public health efforts are commonly targeted to high risk groups such as young men who have sex with men; and sexual activity, drug use, and risk reduction might not be regular aspects of medical conversations with older people, who despite potential exposures might never consider asking about HIV tests.

Taken together, these issues present a largely uncharted territory. In the UK, a report published in January, 2017, by the Terrence Higgins Trust echoes these concerns of an ageing population with HIV infection. 307 people with HIV aged 50 years or older were interviewed: a third reported being socially isolated, 82% had experienced moderate to high levels of loneliness, and 58% reported HIV self-stigma. Although this report provides invaluable information, it is limited to the UK and not generalisable to other countries, especially low-income countries.

In low-income countries, HIV in older people can cause financial constraints, stigma, and violence as shown in a case-study by WHO in Zimbabwe. UNAIDS estimated in 2014 that more than 2 million people in sub-Saharan Africa are aged 50 years or over and living with HIV infections; in South Africa, 10-8% are aged 50–54 years, 4-5% are aged 55–59 years, and 3-9% are aged 60 years or older. However, patients with HIV infection who are enrolled on good treatment and control programmes can live longer than those without HIV infection as a result of being enrolled in health-care with regular consultations and routine medical care unavailable to the general population.

Reports on and studies of long-term survival of HIV infection, such as those of the Terrence Higgins Trust and UNAIDS, are important in preparing for a demographic shift in the HIV epidemic. But further close observation of the ageing populations of people living with HIV in various settings are needed to better understand the interaction between ageing, infection, treatment, and comorbidities. And ongoing efforts to understand and manage HIV in old age must not overlook risk factors for new infections and approaches to target testing to those at risk, even if this is not a population in which health programmes regularly consider such risk factors.

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For more on **HIV Long-Term Survivors Awareness Day** see http://hltsad.org

For the 2017 Terrence Higgins Trust report see http://www.tht.org.uk/~/ media/Files/Publications/ Policy/uncharted_territory_ final_low-res.pdf

For more on the **impact of HIV/AIDS on older people in Africa** see http://www.who.
int/ageing/projects/hiv/en

For the UNAIDS gap report 2014 see http://www.unaids. org/sites/default/files/media_asset/12_Peopleaged50years andolder.pdf