

Are Key Populations Really the **'KEY'** to Ending AIDS in Asia?

Putting Asia's HIV response back on track





Are Key Populations Really the **'KEY'** to Ending AIDS in Asia?

Putting Asia's HIV response back on track

Contents

| | |
|---|-----------|
| Foreword by the Regional Director | v |
| 1. Background | 1 |
| 2. Global commitments | 3 |
| 2.1 Sustainable Development Goals | 3 |
| 2.2 Universal health coverage | 5 |
| 3. How Asia's HIV epidemics work | 8 |
| 3.1 Asia's HIV epidemics are diverse | 8 |
| 3.2 What sustains HIV epidemics in Asia? | 11 |
| 4. Flirting with danger | 17 |
| 4.1 Mixed results for HIV prevention programmes ... | 17 |
| 4.2 ... and for testing and treatment programmes | 21 |
| 4.3 "More of the same" will not work | 24 |
| 4.4 Redefining AIDS in Asia | 25 |
| 4.5 A chance to make up lost ground | 26 |
| 5. A huge opportunity | 28 |
| 5.1 Build stronger political will | 28 |
| 5.2 Understand the epidemic | 28 |
| 5.3 Scale up interventions that are most effective | 30 |
| 5.4 Put people and their communities at the centre | 30 |
| 5.5 Join services and systems for different diseases together | 31 |
| 5.6 Make financing sustainable | 31 |
| 5.7 Put innovations to use | 32 |
| 6. Transformative actions | 33 |
| 6.1 Follow the evidence and keep key populations as the central focus | 33 |
| 6.2 Align AIDS governance structures with the SDG and UHC agendas | 33 |
| 6.3 Fully fund the key population response programmes to end AIDS | 34 |
| 6.4 Boost the impact of programmes | 35 |
| 6.5 Continuously improve programmes | 35 |
| 6.6 Engage communities throughout | 36 |
| 6.7 Create an enabling environment | 36 |
| 6.8 The next steps | 36 |
| 7. References | 37 |

Abbreviations

| | |
|--------|--|
| AEM | Asian Epidemic Model |
| AIDS | acquired immune deficiency syndrome |
| ART | antiretroviral therapy |
| ASEAN | Association of Southeast Asian Nations |
| CBO | community-based organization |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| FSW | female sex worker |
| GARPR | Global AIDS Response Progress Report |
| HIV | human immunodeficiency virus |
| HSS | HIV Sentinel Surveillance |
| IDU | injecting drug user |
| IBBS | Integrated Biological and Behavioural Surveys |
| KP | key population |
| M&E | monitoring and evaluation |
| MSM | men who have sex with men |
| MSW | male sex worker |
| NGO | nongovernmental organization |
| PLHIV | people living with HIV |
| PMTCT | prevent mother-to-child transmission |
| PrEP | pre-exposure prophylaxis |
| PWID | people who inject drugs |
| SAARC | South Asian Association for Regional Cooperation |
| SDG | Sustainable Development Goal |
| STI | sexually transmitted infection |
| TB | tuberculosis |
| TG | transgender |
| TRIPS | Agreement on Trade-Related Aspects of Intellectual Property Rights |
| UHC | universal health coverage |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| WHO | World Health Organization |

FOREWORD BY THE REGIONAL DIRECTOR



The world is on a mission to end the AIDS epidemic as a public health threat by 2030. Though this goal is ambitious – in keeping with the wider Sustainable Development Agenda – it is achievable.

Recent history shows why. Across the WHO South-East Asia Region, the number of new infections has reduced. Access to treatment has expanded. AIDS-related deaths have declined. And in line with Millennium Development Goal 6 the epidemic's trajectory has been halted and reversed.

Two factors were key to achieving this success, especially in concentrated epidemic settings: first, our focus on key populations; and second, our drive to harness community engagement. Noting the critical role these interventions played is especially important as we arrive at a crossroads in the broader AIDS response. Indeed, though we are now striving to eliminate HIV, global focus on and funding for the AIDS response is declining. So too is leadership and governance as it relates to HIV. This poses a significant challenge to the AIDS response.

This publication documents the current scenario and future trajectory of the AIDS epidemic, with a special focus on the role of key populations and the recommendations of a brainstorming session in which participants engaged in "out-of-the-box" thinking aimed at ending the AIDS epidemic by 2030. Convened by WHO South-East Asia, along with key stakeholders, experts and community representatives, and held in New Delhi, India, the meeting examined the latest trends in Asia's HIV epidemic and response, discussed ongoing and emerging challenges, and proposed a series of actions that would put all countries on track to end the HIV epidemic by 2030.

Notably, the New Delhi meeting came a decade after the publication of the landmark Report of the Commission on AIDS in Asia: *Redefining AIDS in Asia*, making it an opportune time for participants to review the progress made since 2008, especially in prioritizing programmes for preventing and treating HIV infection in populations that are most at risk. Informing deliberations was a set of thematic papers that focused on current and anticipated trends of the HIV epidemic in Asia; the effectiveness of current programmes and service delivery approaches in reaching key populations; the suitability of current governance models for the HIV response; the roles of communities and community-based organizations (CBOs); funding, resource mobilization and cost-effectiveness; the collection and use of data for programme improvement; the need for independent accountability mechanisms, alongside other salient issues.

It gives me great pleasure to share the recommendations contained in the following pages, and I invite all stakeholders, including national programmes and those from affected communities themselves, to implement these recommendations as together we strive to sustain an effective AIDS response.

A handwritten signature in black ink, reading "P. Khetrapal".

Dr Poonam Khetrapal Singh
Regional Director
WHO South-East Asia Region

1 BACKGROUND



Countries in Asia are often praised for successfully controlling their HIV epidemics and for bringing life-saving treatment to millions of PLHIV (PLHIV) – so much so that it is assumed in some quarters that the end of AIDS is imminent in this region.

But how valid is that assumption? How accurate is the prevailing understanding of the region’s HIV epidemic and its likely trajectory? How suitable are the current programmes, governance arrangements, service delivery approaches and funding provisions in the era of Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC)? Will “more of the same” really lead to the end of AIDS in Asia?

These were some of the questions examined during a Think tank meeting on “Revisiting strategies for intervention among key Populations for HIV” involving all key stakeholders, partners, community participants and other experts from across the Region in February 2018. Convened by World Health Organization, South-East Asia Regional Office (WHO SEARO) and held in New Delhi, India, the meeting examined the latest trends in Asia’s HIV epidemic and response, discussed ongoing and emerging challenges and proposed actions that would put all countries in the Region on track to end the HIV epidemic by 2030.

The New Delhi meeting came a decade after publication of the landmark *Report of the Commission on AIDS in Asia: Redefining AIDS in Asia*, making it opportune for participants to also review the progress made since 2008, especially in prioritizing programmes for preventing and treating HIV infection in the populations that are most at risk.

Informing discussions was a set of thematic papers reviewing recent developments and likely prospects. These focused on

- current and anticipated trends of the HIV epidemic in Asia;
- the effectiveness of current programmes and service delivery approaches in reaching key populations that are at highest risk of HIV infection;
- the suitability of current governance models for HIV response;
- the roles of communities and community-based organizations (CBOs);
- funding, resource mobilization and cost-effectiveness;
- the collection and use of data for programme improvement; and
- other salient issues.

There have been significant developments since 2008. Successes in reducing new HIV infections and in expanding access to HIV treatment have seen the focus shift from controlling the epidemic to ending it. That goal is now exemplified in a 2016 declaration of the United Nations General Assembly, adopted as resolution A/RES/70/266, which commits Member States to end the AIDS epidemic by 2030. It is also showcased in SDG 3.3, along with the goal of ending the tuberculosis (TB) and HIV epidemics by the same year.

Newer challenges are emerging that may affect the pace of progress. Donor funding for HIV programmes in Asia has levelled off. Domestic financing is increasing, but much of it is allocated to treatment programmes, leaving prevention services, especially those serving key populations, reliant on unpredictable external assistance. Increased integration of public health services as part of a broader push towards UHC means that stand-alone disease programmes are being superseded. At the same time, epidemiological evidence shows new HIV infections rising at alarming rates in specific populations, even in countries which are seen as overall “success stories”. Yet, a strong shift towards political and social conservatism has depleted the political commitment that have characterized HIV responses in the Region.

The upshot is that Asia’s HIV epidemic is far from over. This publication spotlights major misconceptions about the epidemic and shows why programmes that merely go through the motions will have a diminishing impact and will see the goal of ending the epidemic recede from reach.

Drawing on the review papers and guided by the in-depth discussions at the meeting, the document examines the patterns and likely trajectories of the epidemic in Asia, describes the key shifts affecting HIV responses and highlights the main threats and opportunities. It concludes by recommending a set of transformative actions that can reboot push to end AIDS in Asia by 2030.

2 GLOBAL COMMITMENTS



Asian countries, like all UN Member States around the world, have made a series of commitments over the past two decades to control the HIV epidemic. These commitments have spurred national HIV programmes towards some remarkable achievements – so much so that in 2016, as part of the SDGs, countries committed to eliminate AIDS and other major infectious diseases by 2030.

2.1 Sustainable Development Goals

SDG target 3.3 states specifically that countries will, by 2030, “end the epidemics of HIV, TB, malaria and neglected tropical diseases and combat hepatitis and other communicable diseases” (1). This commitment is reiterated in the UN Political Declaration on Ending AIDS (2), which UN Member States adopted at the UN General Assembly High-level Meeting held in 2016.

Equity is a central theme in the SDGs, including in SDG 3, which commits countries to “ensure healthy lives and promote well-being for all at all ages”. The underlying principle is vitally important, i.e. the right to health is universal.

This principle also holds enormous practical importance. The report of a decade ago of the Commission on AIDS in Asia showed clearly that the people most at risk of HIV infection in Asia were preponderantly members of key populations, such as people who inject drugs (PWID), sex workers and their clients, men who have sex with men (MSM), transgender persons and prisoners.

These populations are routinely ostracized, harassed and deprived of resources and services that the “mainstream” society takes for granted. Yet, communicable diseases such as HIV, TB and

hepatitis B and C can only be controlled by working with the people who are most at risk to ensure that their basic needs are met and that their basic rights are protected.

This approach typifies the programmes in countries that have successfully reversed HIV epidemics in Asia. They have relied on local organizations with strong links to key population communities and have sought to address the factors that influence people's health and vulnerability that put them at risk of disease. Explicitly or otherwise, these programmes adhere to the principle that "no one should be left behind".

Box 2.1. HIV response and SDGs are intertwined

A great many of the actions needed to overcome the HIV epidemic also boost progress towards the SDGs, and vice versa.



SDG 1 – End poverty. Households affected by HIV are more vulnerable to falling into and remaining in poverty. Poverty is also a factor in sex work and drug use, behaviours that can increase the risk of acquiring HIV infection.



SDG 2 – End hunger. Advanced HIV-related illness impairs nutritional status and undermines household food security by reducing productivity.



SDG 3 – Ensure healthy lives. Lack of UHC, including sexual and reproductive health services, restricts access to HIV prevention and treatment. HIV-sensitive UHC can play a vital role in promoting health equity, while integration with rights-based services for sexual and reproductive health, noncommunicable diseases, TB and other conditions including drug dependence can improve broad health outcomes.



SDG 5 – Achieve gender equality. Gender inequalities, discrimination, violence and harmful practices negatively affect women and girls, and men and boys, and increase the risk of HIV infection and its impact.



SDG 8 – Promote economic growth. Safe and secure working environments facilitate access to HIV services, especially for workers in informal employment such as undocumented migrants and sex workers.



SDG 10 – Reduce inequality. HIV affects vulnerable and excluded communities most severely. Stigma and discrimination against key populations lead to legal and social barriers that disadvantage these populations and are major contributors to high HIV prevalence among them. Stigma and discrimination are also linked to lower access to health care and social services.



SDG 16 – Promote peaceful and inclusive societies. Exclusion, stigma, discrimination and violence fuel the HIV epidemic among both adults and children. The HIV response, led by people living with and affected by HIV, has demanded access to justice and has pioneered people-centred accountability mechanisms for health programmes.



SDG 17 – Strengthen means of implementation. The HIV movement has led advocacy for the reform of patent laws and regulatory systems, full use of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) flexibilities, monitoring free-trade agreement negotiations and taking legal action.

Wherever HIV programmes have succeeded, it has been because they have tackled chauvinistic social norms, challenged discriminatory laws and confronted practices that deprive people of their basic rights and undermine their health and development. This has meant working across sectors and issues, and shifting from technocratic approaches to people-centred ones.

For many years, therefore, the HIV response has exemplified the multidimensional nature of SDGs and their central focus on equity. The wider relevance of HIV programmes and their benefits across the health and other sectors are evident in many ways.

- They help in strengthening health system capacities, especially at local levels, leading to better quality services that reach further than before.
- They introduce improved models of governance for administering public health programmes.
- They pioneer changes in the ways health services are delivered through decentralized and linked services, task shifting and sharing and stronger collaboration across sectors.
- They centre on people and emphasize equitable access to services.
- They engage communities in planning, implementing and evaluating HIV interventions.
- They improve the reach and appeal of health services by linking the community and formal health sector resources together.
- They strengthen procurement and supply systems, sharpen strategic information and analysis and ensure that monitoring and evaluation (M&E) processes feed back into efforts to enhance interventions.
- They support new financing models that reduce both the prices of health commodities and the financial burden on individuals and communities.
- They bring into play synergies with other health and disease programmes^a such as those around financing, platforms for delivering and monitoring services, systems for gathering strategic information and the management of programme components (3).

The approaches that are being used successfully in HIV responses therefore also support progress across a range of other SDGs besides SDG 3.3. This is because HIV response entails acting on an array of interlinked issues: realizing the universal right to health; building equitable and professionally managed health systems; promoting gender equality; countering social and institutional discrimination; strengthening community systems and resilience; enabling fair access to technologies; facilitating basic services to marginalized communities and bolstering social protection; supporting people's access to legal redress and much more.

2.2 Universal health coverage

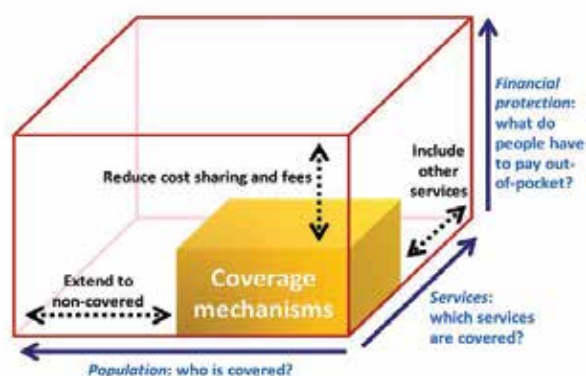
The emphasis on equity also links the HIV response and the SDGs to another vital initiative: the push toward UHC,^b as called for in SDG 3.8 (4). The concept of UHC is rooted in the right to

a For example, relating to family planning, sexual and reproductive health, TB, viral hepatitis, mental health, various forms of social and gender-based violence, social protection and more.

b UHC refers to the right of all people to receive the health services they need and that are of sufficient quality to make a difference, without incurring financial hardship.

health, as set out in the International Covenant on Economic, Social, and Cultural Rights (5). Its guiding principle is health equity: everyone, irrespective of race, gender or social status should receive the health services they need without suffering financial hardship (Fig. 2.1).

Fig. 2.1. The dimensions of coverage in UHC



Source: World Health Organization

UHC encompasses all components of the health system: financing mechanisms, service delivery systems, the workforce, health facilities, information systems, access to technologies, quality assurance, governance and more. UHC therefore provides a framework for strengthening disease prevention and control and improving health outcomes in an equitable manner. It also offers a framework for pragmatically linking together resources and interventions to eliminate major public health threats such as the overlapping epidemics of HIV, TB and hepatitis B and C.

Improving people’s access to health services requires the removal of other barriers as well, such as human rights violations, stigma and discrimination, and laws that criminalize sex work, drug use or same-sex relations. UHC thus affects much more than formal health services. It links with steps to strengthen equity and improve social well-being. It is a tool that countries can use as part of a wider bid to achieve the highest possible standards of health and well-being for all people. It also can help reduce poverty,^c improve productivity and promote economic growth.^d Like effective HIV responses, UHC supports the achievement of a range of other SDGs.

The kinds of changes needed to bring about UHC therefore align closely with the success elements of HIV responses and the improvements that can make the end of the HIV epidemic a reality. They include strong, equitable health systems; enabling environments; efficient governance structures and financing mechanisms that protect the least privileged parts of societies (for example, by pooling funds from compulsory funding sources such as mandatory insurance contributions); health services, including community services, that reach marginalized communities; and health-care approaches that serve the needs and fit the lived realities of

c Out-of-pocket health spending drives more than 100 million people into poverty each year and reduces people’s ability to purchase food and basic amenities. See: Kruk ME, Goldmann E, Galea S. Borrowing and selling to pay for health care in low- and middle-income countries. *Health Affairs*. 2009;28(4):1056–66.

d The Lancet Commission on Health found that each US\$ 1 invested in health services yields a return of US\$ 10 across the life span. Each year of added life expectancy across a population increases gross domestic produce by about 4%. See: Jamison D, Summers LH, Alleyne G, Arrow KJ, Berkley S, Binagwaho A et al. Global health 2035: a world converging within a generation. *Lancet*. 2013;382(9908):1898–955.

people and communities. At the same time, HIV response offers a template for many of the enhancements that UHC requires. For decades, HIV programmes have exemplified core UHC principles, for example by:

- emphasizing rights-based and people-centred strategies;
- demanding universal, free-of-charge access to essential interventions, particularly HIV testing and antiretroviral therapy (ART);
- challenging stigma and discrimination to enhance equal access to health services;
- campaigning for reduced prices of HIV medicines and other commodities;
- integrating the knowledge and work of community organizations in HIV programmes;
- extending the reach and scope of services in marginalized or remote communities; and
- linking access to services for comorbidities such as TB, viral hepatitis and substance dependence.

HIV programmes therefore support and slot into broader efforts to make essential health services accessible and affordable to all and to realize the universal right to health. That is why many of the actions needed to end AIDS in Asia go hand in hand with the innovations driving the growing global push towards UHC and generally greater health equity. However it needs to be ensured under UHC umbrella that Governments do not neglect interventions for key populations, maintain supportive legal environments that do not criminalize the behavior of key populations, and health-care workforces are trained and willing to deal with key populations in respectful and inclusive ways. A phased and more circumspect approach, discussed in Section 6, seems advisable.

HOW ASIA'S HIV EPIDEMICS WORK 3



Asia^e has the second highest number of PLHIV in the world, and a history of dynamic HIV epidemics. By the late 1980s, these epidemics were already well established in Cambodia, India, Myanmar and Thailand. Within less than a decade, epidemics were underway in China, Indonesia, Lao People's Democratic Republic, Nepal and Viet Nam, after which they took hold in Bangladesh, Pakistan and the Philippines.

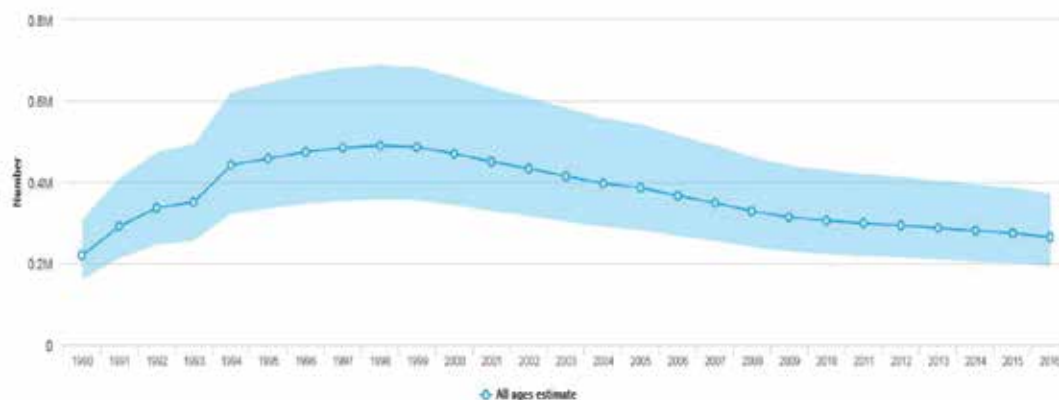
The Asian region was home to about 5.1 million (3.9–7.2 million) PLHIV in 2016, with 270 000 (190 000–370 000) new HIV infections occurring in 2016 (Fig. 3.1), according to the Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates. The annual number of new HIV infections in Asia has declined by 13% since 2010, when an estimated 310 000 (220 000–430 000) people acquired HIV. At the same time, increasing access to life-saving ART means that the total number of PLHIV keeps rising (Fig. 3.2).

3.1 Asia's HIV epidemics are diverse

About 90% of all PLHIV (and new HIV infections) in Asia are from 11 countries: India, China, Indonesia, Thailand, Myanmar, Pakistan, Malaysia, Cambodia, the Philippines, Nepal and Viet Nam (Fig. 3.3). The epidemic sizes and trends vary widely across countries.

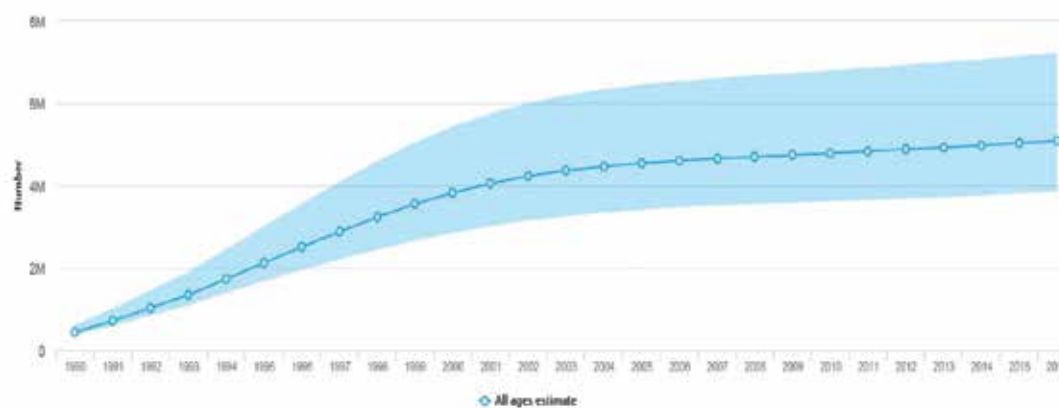
^e "Asia" in this report refers to the countries typically deemed part of South, South-East and East Asia. However, unless stated otherwise, region-wide estimates cited in the text or shown in graphics are for Asia and the Pacific. This is because those estimates are based on aggregated data compiled and analyzed by UNAIDS for the countries of South, South-East and East Asia and the Pacific. Since countries in the Pacific contribute a very small proportion of HIV infections, this aggregation does not distort the epidemic trends in Asia as described in the report.

Fig. 3.1. New HIV infections in Asia and the Pacific (1990–2016)



Source: aidsinfo.unaids.org

Fig. 3.2. Total number of PLHIV in Asia and the Pacific(1990–2016)



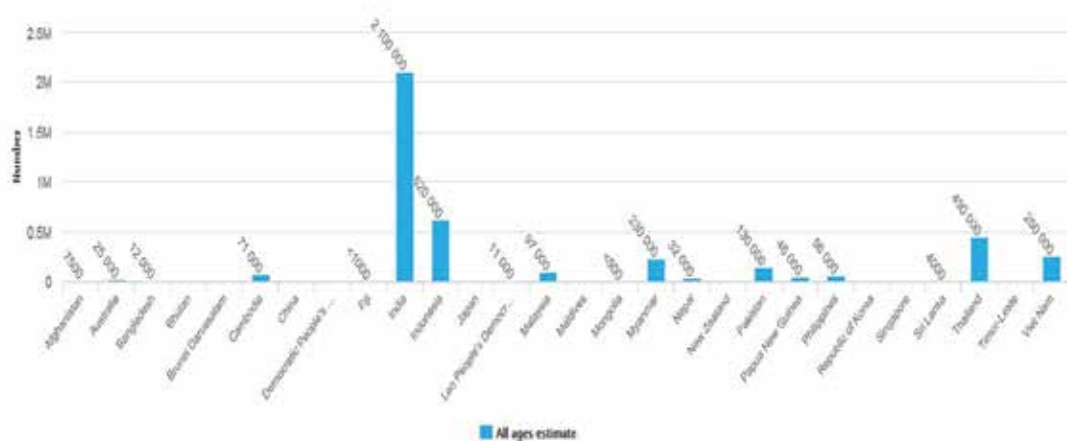
Source: aidsinfo.unaids.org

Major reductions in annual new HIV infections occurred in Cambodia (– 58%), Thailand (– 51%), Myanmar (– 27%) and Viet Nam (– 35%) between 2010 and 2016. In India’s diverse epidemic, new HIV infections decreased by about 20% during that period. The declines have been due primarily to prevention programmes among key populations. Meanwhile, new infections increased in Pakistan (+ 36%) and the Philippines (+ 133%) over the same period.^f

Region-wide pictures of the HIV epidemic are therefore inaccurate guides to the actual state of affairs in countries. This diversity extends all the way down to state, provincial and district levels. India illustrates this intra-country variation well. While national and regional trends in HIV infections trend downward, a number of Indian states are observing rising HIV prevalence among women attending antenatal clinics, such as Gujarat and Uttar Pradesh. HIV prevalence among antenatal clinic attendees varies greatly, from 0% in four states to 1.2% in Mizoram, and the variations from district to district are even greater (6).

^f UNAIDS/WHO estimates

Fig. 3.3: Estimated numbers of PLHIV in 2016 in the countries of Asia

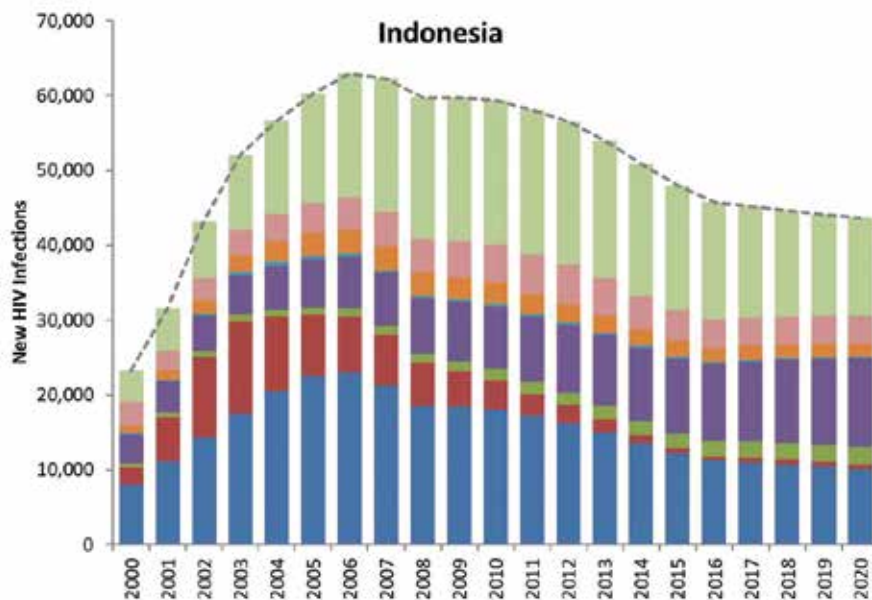


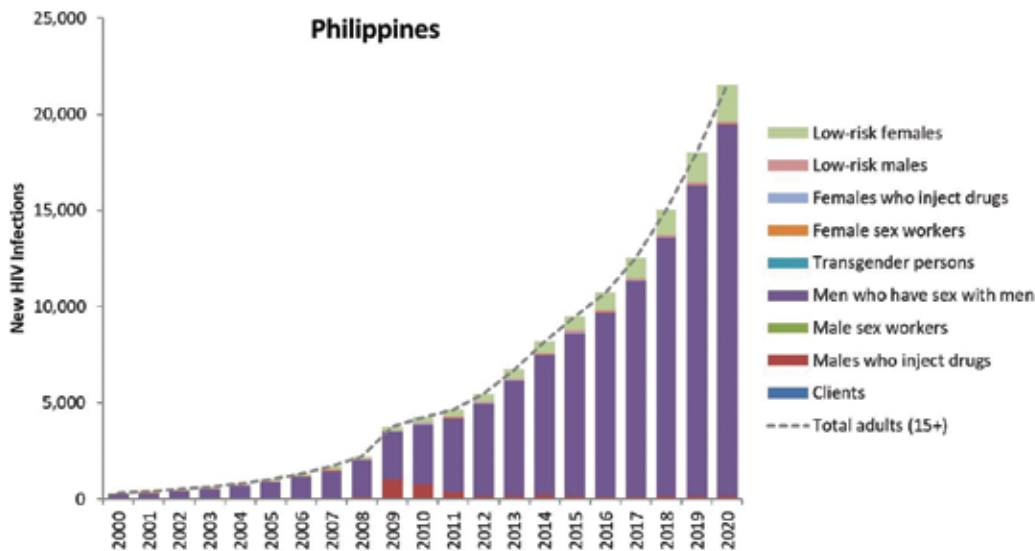
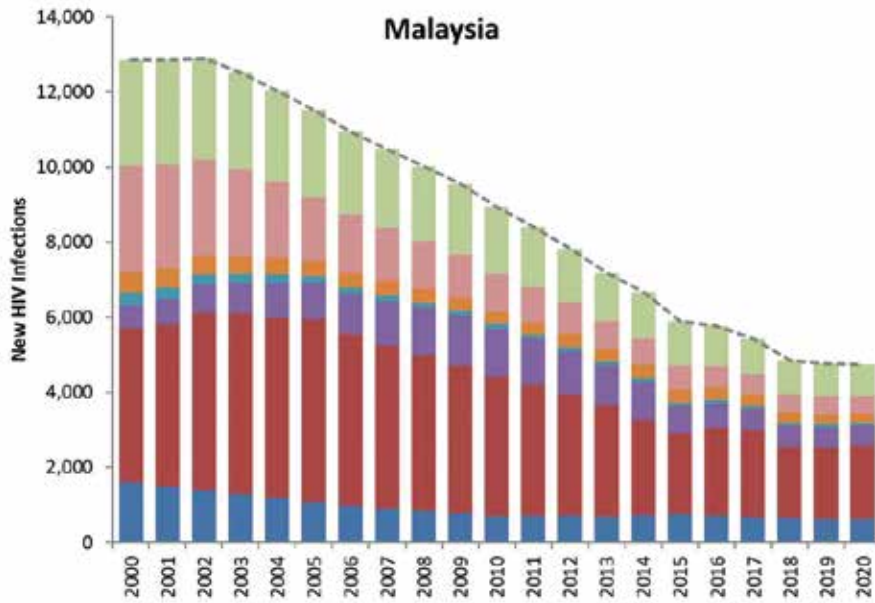
Source: UNAIDS estimates through aidsinfo.unaids.org.

Note: There are no current official HIV data for China. The most recent published estimate was in 2017, which indicated that 850 000 were PLHIV in 2015. See Wu Z (ed.). HIV/AIDS in China: Beyond the Numbers. Singapore: Springer Nature; 2017.

In a particular province or state, HIV prevalence may be falling among sex workers, rising among MSM and stable among PWID. In another province, the situation may be entirely different. In some cases, these variations extend down to district level. The distribution of HIV infections among different populations also varies significantly between countries and over time, as Fig. 3.4 illustrates. Hence it is important not to generalize too broadly.

Fig. 3.4. Sources of new HIV infections in Indonesia, Malaysia and the Philippines – diversity of epidemic trends





Source: National baseline AIDS epidemic models.

Note: Large proportions of PLHIV who are considered at lower risk of infection are themselves former members of a key population or are intimate partners of former/current members of a key population.

3.2 What sustains HIV epidemics in Asia?

Key populations have been central to all HIV epidemics in Asia. This was recognized in the early 1990s, when researchers documented how the epidemics began among PWID, then spread to sex workers and their clients, and then to the wives and girlfriends of those clients (see Box 3.1) (7). The earliest successes against HIV in Asia emerged from that knowledge. Prevention programmes focused on key populations, especially sex workers and clients and PWID, and contributed to national prevention success stories in Cambodia, Myanmar, Thailand, Viet Nam and the high-prevalence states of India, e.g. Tamil Nadu.

In the mid-2000s, a regional epidemic among MSM became apparent. However, few prevention programmes for this population were put in place and the epidemic spread rapidly, and continues to do so (8,9).

Box 3.1. Typical patterns of HIV transmission in Asia

Significant levels of HIV infection are typically detected first among PWID. The high risk of HIV transmission through the sharing/reuse of contaminated injecting equipment can propel rapid growth of the epidemic in this population.

Since some PWID buy or sell sex, and some sex workers also inject drugs, the epidemic is then introduced into the population of sex workers and clients. Here, high levels of other sexually transmitted infections (STIs) have an enhancing effect on HIV transmission and the epidemic spreads quickly in and between these two populations. Sex workers, clients and PWID may then transmit HIV to their wives and other sex partners, which in turn may put their children at risk of infection.

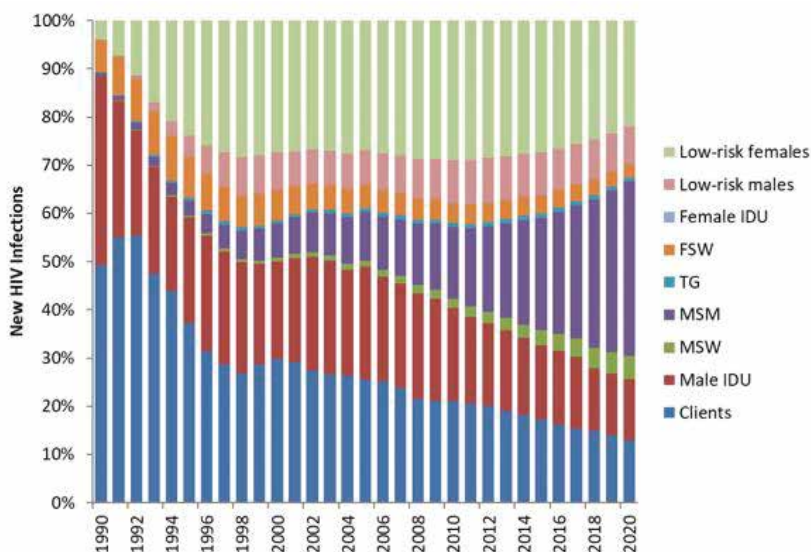
In the early days of the HIV epidemic in Thailand, for example, large numbers of men frequented sex workers in the years prior to marrying, but did so less frequently after marriage. The men who acquired HIV could then pass it to their wives or partners. This onward transmission of HIV tends to take a long time, largely because the prevalence of other STIs (which increase the risk of HIV transmission) is very low in the general population.

There is often a parallel epidemic among MSM, which tends to grow rapidly because of the high risk of HIV transmission during unprotected anal sex. Some married MSM living with HIV transmit HIV to their wives.

Do those patterns still hold in Asia? If we focus on new HIV infections, the answer is “yes”. As shown in Fig. 3.5, almost all new infections arose among key populations in the early stages of the HIV epidemic in Asia. As the epidemic progressed, their contribution declined slowly before stabilizing at about 65–70%. Fig. 3.5 also shows the important shifts within that broad trend. As a proportion of annual new HIV infections, those related to sex work have decreased, due mainly to prevention programmes, while there was a less dramatic decrease in infections related to injecting drug use. New HIV infections due to unprotected sex between men, however, constitute a rapidly growing share of all new infections.

As for the total number of PLHIV, the distribution of infections looks different: about one third of current infections are among key populations, while two thirds are in the “low-risk” population (Fig. 3.6). This is sometimes interpreted to mean that prevention programmes should now focus on the general population. But the dynamics of Asia’s HIV epidemics do not support such an interpretation.

Fig. 3.5. The distribution of new HIV infections by sub-population in Asia among key populations (1990–2020)



Source: AIDS Epidemic Model

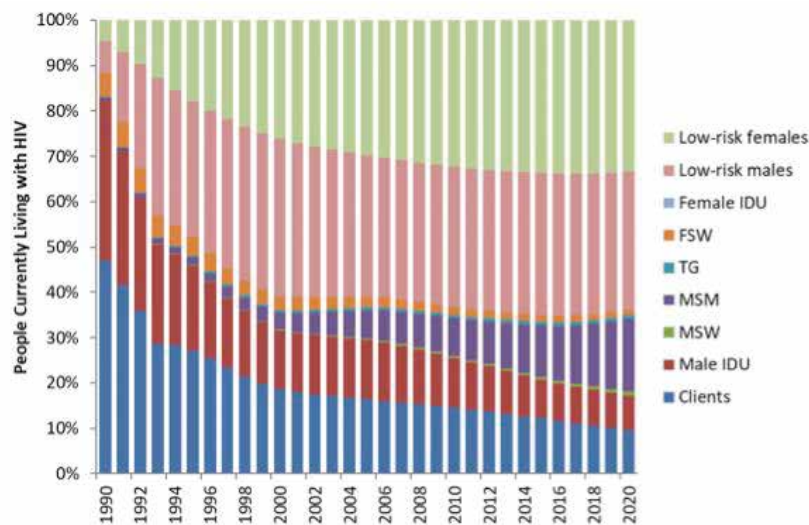
Note: The graph shows combined data for the 11 countries (Cambodia, Thailand, Lao PDR, Nepal, Viet Nam, Indonesia, Bangladesh, Myanmar, Malaysia, Pakistan and Philippines) using the AIDS Epidemic Model as their national model. Large proportions of PLHIV who are considered at lower risk of infection are themselves former members of a key population or are intimate partners of former/current members of a key population.

The AIDS Epidemic Model⁹ shows that of the estimated 4 million infections that occurred during 1990–2017 in the 11 countries studied, only 100 000 infections (2.5%) were attributable to casual sex among people considered to be at “low risk” of HIV infection. At first glance that seems a contradiction: if most new infections were among key populations, then how could most PLHIV be in the “low-risk” population?

The answer is simple. Key populations are not sealed off and unchanging: people move in and out of them. Many people belong to key populations for relatively short periods of their lives. Research shows, for example, that female sex workers in many Asian countries tend to shift to other forms of work after a few years (10), while their male clients tend to buy sex much less frequently once married. However, if they acquire HIV infection, former members of key populations can transmit the virus to their wives or other sexual partners long after they have ceased the risk behaviour that led to their HIV infection. Hence, it is a mistake to assume that because a large percentage of PLHIV today are considered to be in the “general” or “low-risk” population, HIV transmission in Asia now occurs primarily between “low-risk” individuals.

⁹ Countries in Asia currently using the AIDS Epidemic Model for modelling their national epidemics include: Bangladesh, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Thailand and Viet Nam. See Brown T, Peerapatanapokin W. The Asian Epidemic Model: a process model for exploring HIV policy and programme alternatives in Asia. *Sex Transm Infect.* 2004;80(1):i19–24.

Fig. 3.6. Distribution by sub-population of PLHIV in Asia (1990–2020)



Source: AIDS Epidemic Model

Note: The graph shows combined data for the 11 countries (Cambodia, Thailand, Lao PDR, Nepal, Viet Nam, Indonesia, Bangladesh, Myanmar, Malaysia, Pakistan and Philippines) using the AIDS Epidemic Model as their national model. Large proportions of PLHIV who are considered at “lower risk” of infection are themselves former members of a key population or they are intimate partners of former/current members of a key population.

The latest iteration of national models using the AIDS Epidemic Model shows clearly that the following trends prevail:

- Key populations remain central to Asia’s HIV epidemics. Most new HIV infections in Asia continue to occur among key populations and their immediate sexual partners. Prevention and treatment programmes will have the greatest impact if they focus on those populations.
- Most HIV infections in “low-risk” individuals still result from earlier risk behaviour in key populations. The majority of HIV-positive people in “low-risk” populations acquire HIV in one of two ways – they themselves are former members of key populations who acquired HIV while in those populations (but were only diagnosed later), or they are sexual partners of people who are current or former members of key populations. Approximately 30% of new HIV infections occur among the intimate partners of current or former members of key populations. The risk of HIV transmission among people in the general population is extremely low, unless the person is having unprotected sex with a current or former member of a key population. Casual sex outside of sex work contributes a very small proportion (less than 3%) of new HIV infections in Asia.

Implications for HIV programmes

The epidemic pattern of HIV in the region as described above has crucial implications for HIV programmes in Asia:

- **Prevention services for key populations must remain at the core of the HIV response in Asia.** Policymakers in Asia must avoid misinterpreting the data on HIV

prevalence in the general/“low-risk” population to mean that prevention efforts should shift to that population. Nor should they use those data as a pretext to avoid allocating essential prevention resources for key populations. Almost all HIV infections in Asia are directly related to current or former key populations. Key populations should remain at the core of Asia’s prevention response. Shifting prevention and treatment efforts away from key populations to the general population in Asia will avert a few HIV infections. However, it will result in hundreds of thousands, if not millions of additional infections in years to come among key populations, and even more infections among their current or future intimate partners.

- **Prevention that focuses on key populations is the most effective way to protect “low-risk” women from HIV.** Because the bulk of new HIV infections among women in the “low-risk” population originate from partners who are or at some point were members of key populations, the most effective way to protect “low-risk” women is by focusing prevention efforts on key populations. This points to three urgent courses of action:
 - Prevent infections among key population members, which would completely avert the risk of them transmitting HIV to their partners;
 - Add or strengthen components in programmes for key populations to also focus on the spouses and regular partners of people in those populations;
 - Develop approaches to encourage former members of key populations to take HIV tests and, should they test HIV-positive, to initiate ART. The individuals who test HIV-positive should also encourage their partners to be tested.
- **Unprotected sex between men is an increasingly important factor in many of Asia’s HIV epidemics.** MSM should be a priority for prevention and treatment programmes. Regional data show ongoing declines in the numbers of new HIV infections among PWID and sex workers and their clients (Fig. 3.5). This results in large part from the focus on sex work in prevention, testing and treatment programmes and on the expansion of harm reduction, testing and treatment programmes for PWID. However, shadowing those declines is the expanding HIV epidemic among MSM. Modelling based on the Asian Epidemic Model (AEM) indicates that it will take a combination of scaled-up prevention (possibly including pre-exposure prophylaxis) and ART programmes to reverse the current trend for MSM. If that is not done, new overall HIV infections in Asia will rise again by 2020.
- **HIV testing strategies must focus heavily on key populations and their partners.** Widespread HIV testing in the general population will have exceedingly low yields and will be largely wasteful. Instead, testing programmes must prioritize reaching current and former key population members. Such efforts must make testing for key populations readily available and easily accessible. This can be done through community-based testing approaches or self-testing where appropriate, rather than by relying on clinic-based testing, where staff frequently neglect or ignore the needs and concerns of key populations. People who test HIV-positive should be linked immediately to HIV treatment and care, and should be engaged to assist in getting their current and former sexual partners tested as well.

- ◉ A range of partner testing and partner notification approaches are available. In addition to saving lives and improving people's health, scaled-up ART among key populations will have major prevention benefits by reducing new infections in both key populations and the "lower-risk" population, including infants. A big challenge is that more than half of the key population members living with HIV in Asia do not even know that they are HIV-positive. By extension, even fewer of their regular partners or spouses are likely to have received HIV tests and know their status.
- ◉ **Focusing and scaling up HIV programmes for key populations only works with the close engagement of community organizations.** Actively involved communities are crucial for the success of HIV responses among key populations. It is important to engage communities meaningfully in designing and implementing prevention, testing and treatment programmes and in strengthening treatment retention and adherence.

Asia's achievements thus far against the HIV epidemic have shown that successful HIV programmes focus on the populations and places where HIV risk is highest, and they build and support partnerships with community organizations so that health and other basic services can reach those key populations. They have also shown that success requires tackling the social, cultural and institutional dynamics that render populations vulnerable to HIV and its impact—hence the importance of combating stigma and discrimination, pushing for legal reforms and institutional practices that can protect people's physical security and health, and promoting gender and other forms of equality.

4 FLIRTING WITH DANGER



Several countries in Asia have made major inroads against the HIV epidemic in the past two decades. Some countries have reversed burgeoning epidemics, among them Thailand, which in 2016 also became one of the first countries in the world to eliminate mother-to-child transmission of HIV, as certified by WHO (see Box 4.1).

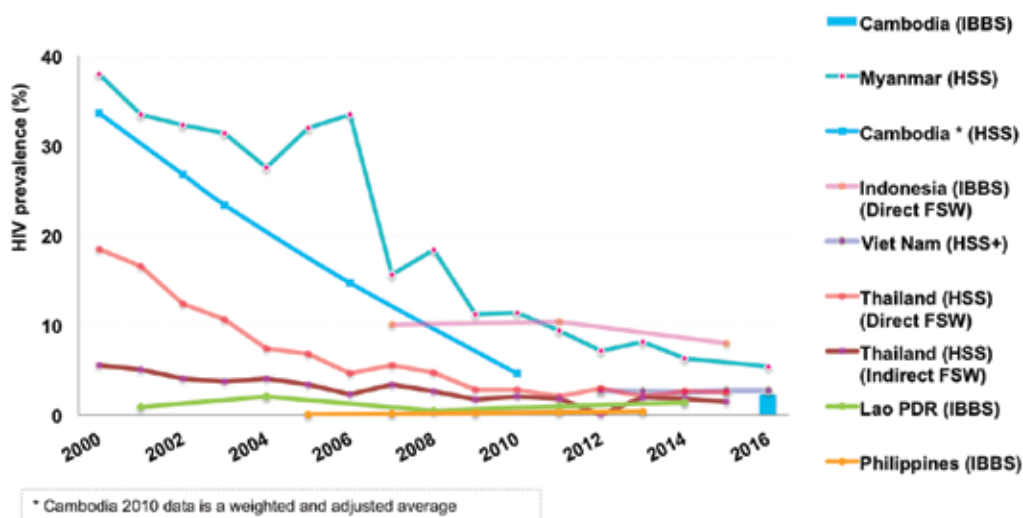
Thailand brought its spiralling epidemic under control in the 1990s by promoting safer sex in the sex industry, at the time the main source of new HIV infections in the country (11,12). In parts of India, programmes that promoted and supported female sex workers' right to health reversed the epidemics in several states (13,14). Later, HIV programmes in Cambodia (15) and Myanmar drew on those lessons to bring their epidemics under control (16).

A good deal of the momentum has been sustained. Since 2010, new HIV infections have decreased in Cambodia, India, Malaysia, Nepal, Thailand and Viet Nam. National modelling work shows that most of the prevention successes in Asia can be attributed to programmes among key populations, especially those focused on female sex workers and their clients (17).

4.1 Mixed results for HIV prevention programmes ...

Generally, programmes focused on sex workers and clients have been successful in Asia when they have been implemented at scale in a supportive context and with the active involvement of sex workers themselves. These programmes have led to increased condom use with clients and steady declines in HIV prevalence among female sex workers in many countries (Fig. 4.1).

Fig. 4.1: HIV prevalence among female sex workers in countries in Asia



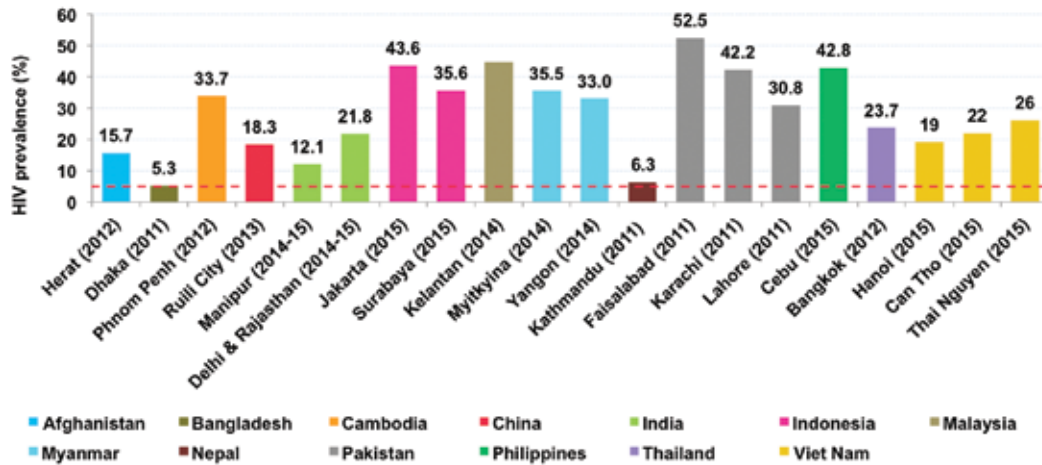
Source: HIV and AIDS Data Hub for Asia-Pacific, based on Integrated Biological and Behavioural Surveys, HIV Sentinel Surveillance Surveys, and www.aidsinfo.

However, not all countries have adopted such approaches. HIV infection levels among female sex workers have changed little in Indonesia (where HIV prevalence was about 8% in 2015) and Viet Nam, for example. Similarly, the HIV epidemic among PWID shows mixed trends in different countries in Asia.

Where harm reduction programmes have been provided at scale, they have produced declines in HIV prevalence in this key population, e.g. in Malaysia. But weak or non-existent efforts to provide even basic harm reduction services such as clean needles, syringes and condoms have allowed very high HIV prevalence to continue in several countries (Fig. 4.2) (18, 19). Fourteen countries across Asia were implementing needle and syringe programmes in 2016, and very few of them have reported increases in the scale of those programmes since then. Several countries report dwindling support for harm reduction programmes (20). As a result, large proportions of new HIV infections are still occurring among PWID in countries like Bangladesh, Malaysia, Myanmar and Viet Nam. Eleven countries in the region were still operating compulsory detention centres for PWID in 2014. Although UN agencies and Member States increasingly advocate for an end to the death penalty for drug offences, some Asian countries continue to execute people for such offences such as China, Indonesia, Malaysia, Singapore and Viet Nam (20). Summary executions of alleged drug dealers or users in the Philippines have been widely reported in recent years.

Changing patterns of drug use pose additional challenges for prevention programmes, as people shift from predominantly injecting opioids (such as heroin) to using stimulants (such as methamphetamines).

Fig. 4.2: HIV prevalence among PWID in Asia

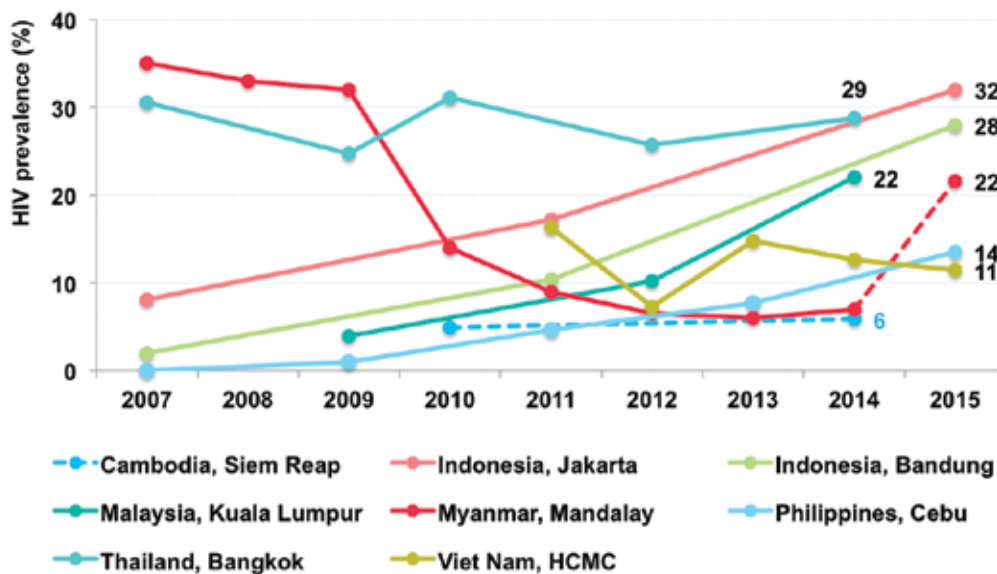


Source: HIV and AIDS Data Hub for Asia-Pacific, based on Integrated Biological and Behavioural Surveys, HIV Sentinel Surveillance Surveys, and www.aidsinfo.

Note: HIV surveys among PWID are not frequent in Asia, and recent HIV prevalence data for this key population therefore are scarce, e.g. the prevalence of HIV in PWID in Bangladesh in the latest survey is around 20%.

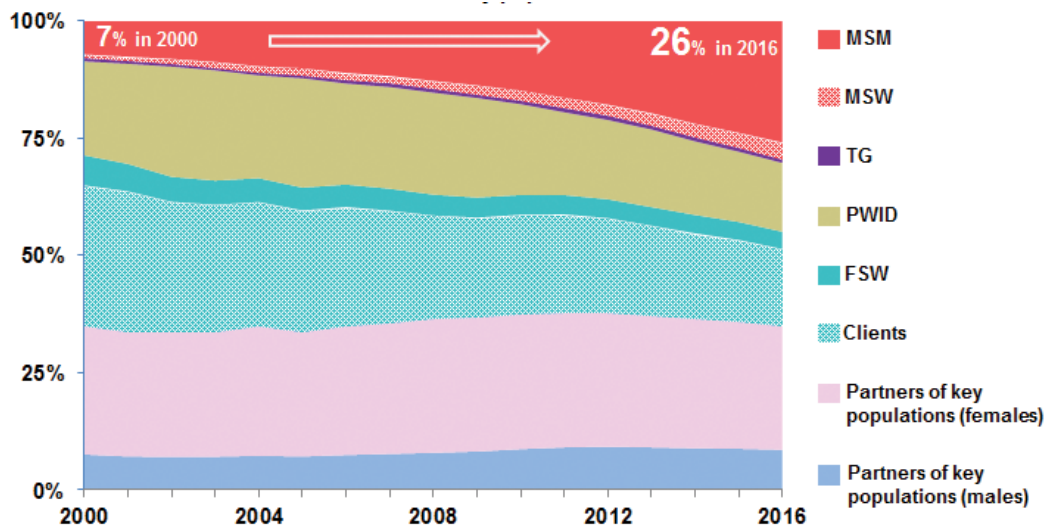
The region has seen hardly any success in reversing the HIV epidemic among MSM. Coverage of programmes for this population remains low and tends to be focused in large cities. As a result, consistent condom use is far short of the 80% needed to contain HIV transmission, and HIV prevalence is on the rise in several places (Fig. 4.3(a)). The latest modelling data suggest that unless halted, this trend in particular will cause HIV epidemics in several countries to rebound as the share of infections among MSM has increased from 7% in 2010 to 26% in 2016 (Fig.4.3(b)).

Fig. 4.3(a): HIV prevalence among MSM in Asia



Source: HIV and AIDS Data Hub for Asia-Pacific, based on HIV Sentinel Surveillance Reports and Integrated Biological and Behavioral Surveillance Reports and Global AIDS Response Progress Report (GARPR)

Fig. 4.3(b): Share of new infections by population, 2000–2016

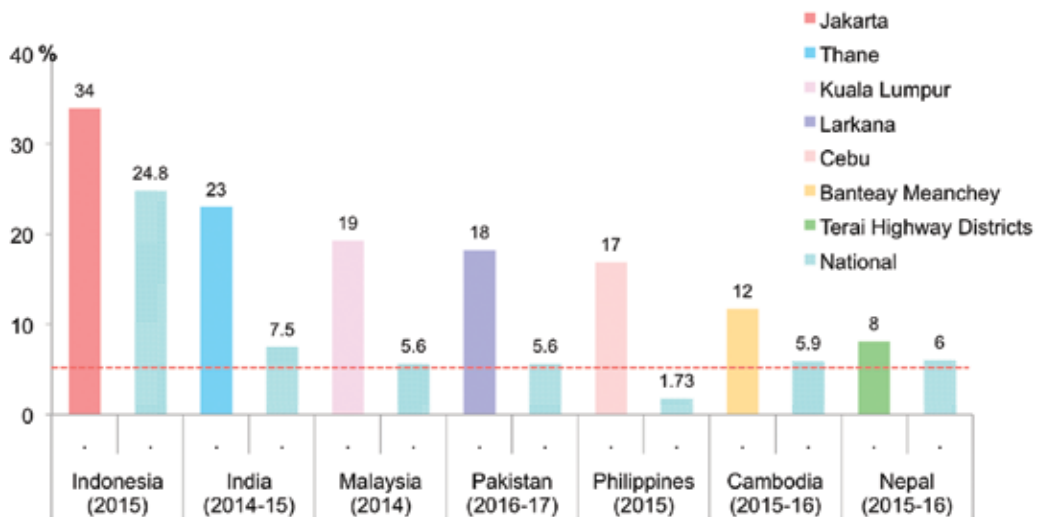


Based on data from 11 countries: Bangladesh, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Thailand, Viet Nam

Source: aidsdatahub.org

The situation among transgender populations is similar. While a significant portion of transgender women report selling sex to male clients, HIV services are unevenly available and consistent condom use with clients is far from routine. The result is some of the highest prevalence rates seen among key populations in Asia (Fig. 4.4).

Fig. 4.4: HIV prevalence among transgender populations in Asia



Source: HIV and AIDS Data Hub

Box 4.1: How UHC helped Thailand eliminate mother-to-child transmission of HIV



The Government of Thailand stepped up its programme to prevent mother-to-child transmission (PMTCT) of HIV in the mid-1990s when data showed that HIV prevalence among women using antenatal services had passed the 2% mark, the highest ever recorded in Asia (21,22). By 2001, about two thirds of pregnant women were being offered PMTCT services (23).

A decisive breakthrough was the Government's decision in 2001 to guarantee universal access to PMTCT services, which were then integrated into Thailand's new UHC scheme (launched the following year) (23). Universal health care was made free in 2007. By 2009, 94% of pregnant women were being counselled and tested for HIV, and 94% of the women who tested HIV-positive received antiretrovirals (24). Virtually all Thai citizens were covered under government-supported health insurance schemes. The schemes were extended in 2013 to non-Thai residents, including undocumented migrant workers, ensuring that virtually everyone resident in the country has health insurance (25).

With the public health system accessible everywhere, including for migrant communities, almost every infant born to an HIV-positive mother in Thailand was receiving antiretroviral prophylaxis by 2015 (26). WHO and UNAIDS estimate that Thailand's efforts on PMTCT prevented nearly 17 000 new HIV infections in infants between 2000 and 2015 (24).

4.2 ... and for testing and treatment programmes

When it comes to HIV testing and treatment, the region shows a similar mix of success and disappointment. Both Malaysia and Thailand have reached the first of the UNAIDS "90-90-90" targets, i.e. at least 90% of PLHIV have been diagnosed.^h Knowledge of HIV status among PLHIV was near the regional average in India (about 77%) and Viet Nam (70%) in 2016, but it was much lower in Indonesia (about 35%), Sri Lanka (47%) and Bangladesh (34%) (27). Cambodia has reached the other "90-90-90" targets, with more than 89% of PLHIV accessing ART and about 75% of PLHIV having successfully suppressed their HIV infections.ⁱ Fewer than half of the PLHIV were receiving ART in India (49%) and Viet Nam (47%) in 2016, while treatment coverage was only 13% in Indonesia and 7% in Pakistan.ⁱ

The national averages hide very low treatment coverage among key populations living with HIV in several countries. For example, less than 30% of PWID and MSM who were living with HIV were receiving HIV treatment in India and Thailand in 2015. Cambodia was an encouraging exception, with coverage of over 60% and 80% in those populations, respectively (28). Even among female sex workers living with HIV, estimated HIV treatment coverage was less than 40% in Cambodia, India, Myanmar, Philippines, Thailand and Viet Nam, and it was less than 10% in Pakistan (28).

^h aidsinfo.unaids.org based on UNAIDS 2017 estimates

Some key observations based on the epidemic analysis are as below:

Not a sunny outlook

While the overall HIV epidemic trends in Asia seem encouraging, a closer look at the evidence reveals a less uplifting picture. Earlier declines in annual new HIV infections have slowed or halted in some countries. In others, new infections are increasing steeply, notably in the more recent epidemics of Pakistan and the Philippines.⁹

In almost every country in the region, key populations continue to be left behind, despite the commitments in the SDGs. This trend speaks to a wider reality: efforts to safeguard the universal right to health and give life to the principle of health equity are wavering. This is occurring against a backdrop of faltering political will and an uncertain funding outlook for HIV responses in the region.

Political will has weakened

Across Asia, political commitment for HIV responses has weakened and the earlier sense of urgency has dropped off. A raft of other concerns have pushed the HIV epidemic back into the shadows. For many politicians, economic growth, national security and social stability appear to be much higher on the list of priorities than AIDS and other public health threats.

This lack of resolve is possibly also a side effect of the successes seen in some countries, which may be encouraging the mistaken view that the epidemic has been overcome. In some cases, this is a convenient misunderstanding: the rise of social conservatism is making it tougher for politicians to champion government support for programmes that protect the health and lives of marginalized and denigrated communities. This is also influencing the kinds of HIV programmes that are funded domestically and the scale of that funding.

Funding is at risk

Globally and in Asia, earlier increases in international funding for HIV programmes have run their course. The approximately US\$ 3.6 billion that was available for HIV response in 2016 was more than one third short of the annual resources needed by 2020 to reach the Fast-Track Targets (27). Increasing domestic investment has somewhat offset shifts in international contributions, which have been erratic. Domestic funding increased from almost US\$ 1.8 billion in 2010 to US\$ 2.7 billion in 2016, and accounted for about three quarters of total HIV spending in Asia in 2016 – an admirable development (Fig. 4.5).ⁱ

Two aspects of the funding picture give special cause for concern. Firstly, the bulk of domestic funding is going toward HIV treatment and care. Secondly, prevention programmes that focus on key populations are heavily dependent on external donor funding. That support seems increasingly less likely to continue in the years ahead, as growing economies see countries transitioning to higher income categories and donor assistance shifts to other sectors and priorities.

ⁱ AIDS Data Hub for Asia-Pacific.

Fig. 4.5. Resource availability and project needs in Asia-Pacific



Source: Global AIDS Monitoring 2017 and UNAIDS estimates on HIV resource availability

Governance structures have weakened

The governance framework of HIV programmes – one national authority, one national programme and one M&E structure – has served HIV responses well. Multisectoral national AIDS authorities were set up and they have been highly effective in mobilizing political commitment and resources, developing and overseeing HIV strategies, managing funding flows to implementing structures and M&E.

However, these national AIDS authorities have weakened in the past decade, as governments became more complacent in a period of declining new HIV infections and HIV-related mortality. In some countries, management responsibilities have been ceded to provincial or state structures and accountability has eroded. In addition, collaboration and trust between government structures and community-based and other civil society organizations has suffered, along with the active recognition of the centrality of key populations in the HIV response.

Stigma and discrimination persists

The resurgence of social conservatism – often marshalled by political parties – is threatening progress in other respects as well. Despite some improvements, HIV-related stigma and discrimination remain widespread, including in health-care settings, and punitive laws and practices persist in many countries in the region. Seventeen Asian countries criminalize same-sex relations, 37 impose criminal penalties for sex work, 15 impose the death penalty for certain drug-related offenses, and 11 operate compulsory detention centres for PWID (29). Some countries are introducing new discriminatory laws and intensifying the harassment of key populations. Such laws and the intolerance they sanction deprive people of life-saving prevention and treatment services (30), not to mention other basic human rights. In the Philippines, large-scale state violence has been unleashed against people suspected of using or dealing drugs. In Indonesia, proposed changes to the penal code would outlaw same sex relations and sex outside of marriage (31).

If left to continue, these negative trends will spark a resurgent epidemic.

4.3 “More of the same” will not work

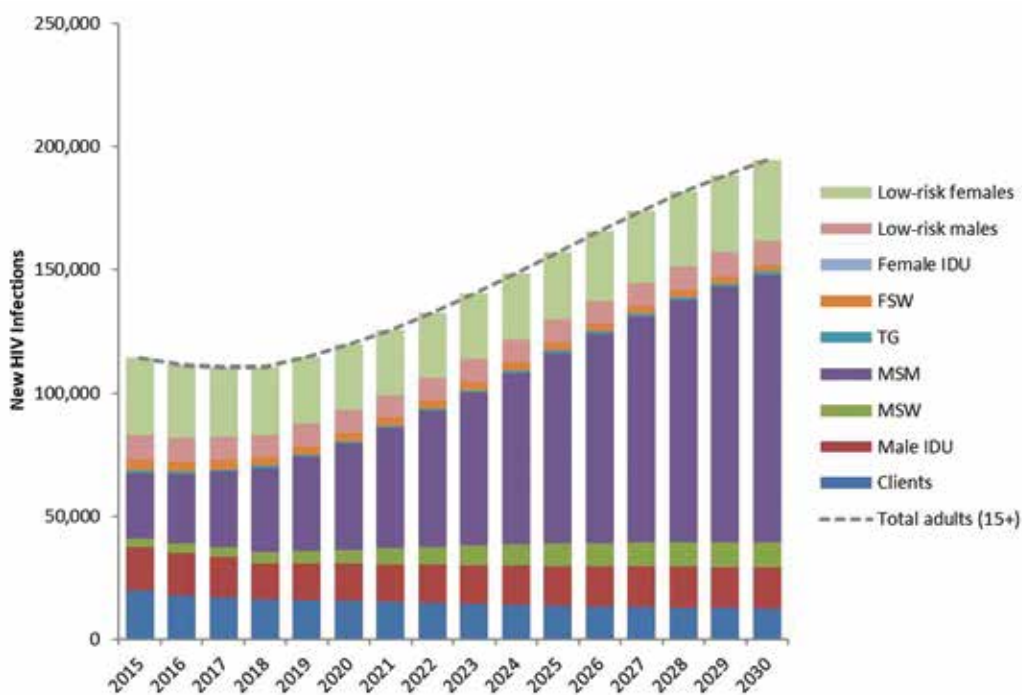
A basic misconception about the HIV epidemic circulates in Asia: the idea that current HIV programmes have achieved sufficient momentum to inexorably end the AIDS epidemic. The evidence does not support such an outlook.

Epidemics are dynamic and they capitalize on complacency. Malaria is an instructive example. There have been 75 episodes of malarial resurgence in 61 countries since the 1930s in areas where the disease was considered “under control”. Most cases were linked to a weakening of malaria control programmes (32).

A set of scenarios commissioned for this report shows that current HIV programmes in Asia, if left unchanged, will lead to a steady rise in new HIV infections and in the total number of people requiring treatment and care in coming years. This can challenge economic stability and increase poverty. Two factors are driving such a trend. Firstly, the sizes of key populations are growing as national populations increase. If other factors such as risk behaviours, etc. stay unchanged, this leads to an increase in the number of people acquiring HIV each year. Secondly, the inadequacy of prevention programmes for MSM has led to a steep rise in HIV prevalence in this key population. Unless averted, this increase will fuel resurgent HIV epidemics (Fig. 4.6).

Condom use levels among MSM have to be in the 70–80% range to stabilize the epidemic in this population. Few countries have reached this level of condom use. Programmes for sex workers have been much more successful and stable, and the contribution of clients and sex workers to new infections will continue to decline slowly over the projection period.

Fig. 4.6. Modelling for 2015–2030 showing new HIV infections in key populations in Asia



Source: AIDS Epidemic Model – which year

The upshot in the “more of the same” scenario will be at least 440 000 more PLHIV in 2030 as compared with 2017 in the 11 countries modelled (not including China and India) and over 2.1 million new HIV infections during this period.

Carrying on with the HIV programmes as they are today will reverse the major progress the region has made against the HIV epidemic. Instead of closing in on the elimination target (and SDG 3.3), Asia will again be struggling with a growing HIV epidemic – and all the social and economic costs that such a scenario entails.

4.4 Redefining AIDS in Asia

The findings in this report build on the analysis and recommendations of the Commission on AIDS in Asia presented in its landmark 2008 report (33). The outcome of extensive consultations and analyses of evidence (more than 5000 studies were reviewed), that report showed that the HIV epidemics in Asia centred mainly around unprotected paid sex, the use of contaminated needles and syringes by PWID, and unprotected sex between men. This led to a set of core findings:

- By pragmatically focusing and scaling up programmes to prevent HIV transmission in the key populations at the heart of the epidemic, governments can reverse their HIV epidemics;
- Adequate funding has to be secured for focused prevention programmes;
- Everyone living with HIV should receive ART;
- Enabling legal, social and institutional environments had to be fostered;
- Community and civil society involvement is vital at all stages of policy, programme design, implementation and M&E.

The report warned of a lack of urgency in several countries and called on governments to assume stronger leadership roles in their national HIV programmes. It laid special emphasis on the importance of such leadership for tackling the structural and social factors that render people vulnerable and at risk of HIV infection, such as the criminalization and marginalization of key populations, human rights violations, stigma and discrimination.

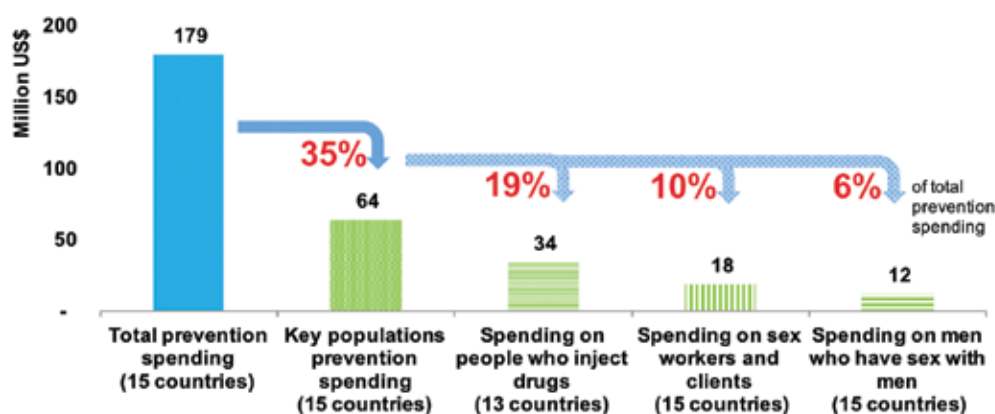
Some countries in Asia acted on the recommendations and they are still reaping the benefits. However, in recent years there has been an increasing reluctance to heed the central principle in the Commission’s report, i.e. the right of every person to a healthy life. The principle of UHC is centred on this theme and most countries are adopting UHC that is likely to increase coverage of treatment but we need to be cautious that prevention efforts do not get diluted in the approach

The criminalization and harassment of populations severely affected by the HIV epidemic are worsening in some areas. Political support for legal reforms and institutional practices that can protect these populations’ right to health has diminished. Moreover, the political will to fund HIV and other health programmes that benefit these populations has weakened, even though it would hugely boost the chances of eliminating infectious disease epidemics such as AIDS, TB and hepatitis B and C.

Much of HIV prevention spending in Asia appears to be directed to noncore programmes that are low in effectiveness and efficiency. Key populations account for about two thirds of new

HIV infections in the countries of Asia, yet on average only about one third of HIV prevention budgets are being allocated to interventions that are focused on these populations (Fig. 4.7).^j As shown in Sections 3 and 4, continuing in this manner will not only see the goal of elimination slip beyond reach, but will also lead to a resurgent HIV epidemic. It will also sabotage Asia's efforts to reach a range of other SDG targets. The countries of Asia have a huge opportunity to act on the evidence and avert those outcomes.

Fig. 4.7: Proportion of prevention spending on key populations in Asia and the Pacific



Source: aidsdatahub.org based on GARPR

4.5 A chance to make up lost ground

An ambitious scenario would see countries achieve prevention coverage of 90% among key populations by 2020; and treatment coverage of 81% by 2020 and 90% by 2030. Such a "fast scale-up" would have a huge impact (Table 4.1).^k

Table 4.1: Total number of PLHIV, annual new HIV infections and AIDS deaths by 2030 in the "more of the same" and "fast scale-up" scenarios

| Scenario | PLHIV in 2030 | New HIV infections by 2030 | HIV-related deaths by 2030 |
|------------------|---------------|----------------------------|----------------------------|
| More of the same | 2.36 million | 194 000 | 134 000 |
| Fast scale-up | 1.72 million | 21 800 | 43 000 |

Source: AIDS Epidemic Model

^j Based on Global AIDS Response Progress Reporting data for 15 countries: Afghanistan, Bangladesh, Cambodia, Indonesia, Lao Peoples Democratic Republic, Malaysia, Myanmar, Nepal, Palau, Pakistan, Philippines, Solomon Islands, Sri Lanka, Thailand and Viet Nam.

^k These scenarios are based on the 11 countries currently using Asian Epidemic Model as their national model (Bangladesh, Cambodia, Indonesia, Lao Peoples Democratic Republic, Malaysia, Myanmar, Nepal, the Philippines, Pakistan, Thailand and Viet Nam). While India and China are not included because they do not use the Asian Epidemic Model, their trends are similar to those seen in these countries, with declining HIV prevalence among sex workers and stable or growing HIV prevalence among PWID and MSM. The diversity of epidemics within these large countries is similar to that seen among the countries modelled. While the epidemics among the different key populations are in decline in some states/provinces, they are stable or rising in others.

Currently, prevention resources, especially from domestic sources, fall well short of what is needed for the “fast scale-up” scenario, and much of that shortfall is for ensuring adequate coverage of prevention interventions for key populations. As a result, behaviours that drastically reduce the risk of HIV infection are not yet widespread enough to reverse epidemic growth. The HIV epidemic among MSM therefore continues to expand, and high HIV prevalence continues to be found among PWID.

A HUGE OPPORTUNITY 5



Asia can eliminate its overlapping AIDS, TB and hepatitis B and C epidemics if countries revive the political will and secure the financing that is needed to scale-up prevention programmes that reflect the evidence. These programmes would prioritize the populations that are most at risk, be geared for equity and capitalize on the interlinked nature of these epidemics.

There are huge opportunities for making this leap toward eliminating several of the biggest public health threats in the region.

5.1 Build stronger political will

It is the responsibility of governments to uphold the right to health which is already an accepted principle and ensure that everyone has access to health services. This duty starts with championing and supporting public health programmes that leave no one behind, safeguarding enabling environments where discrimination and stigma (including in health-care settings) are reduced, and where discriminatory or exclusionary laws and practices are removed.

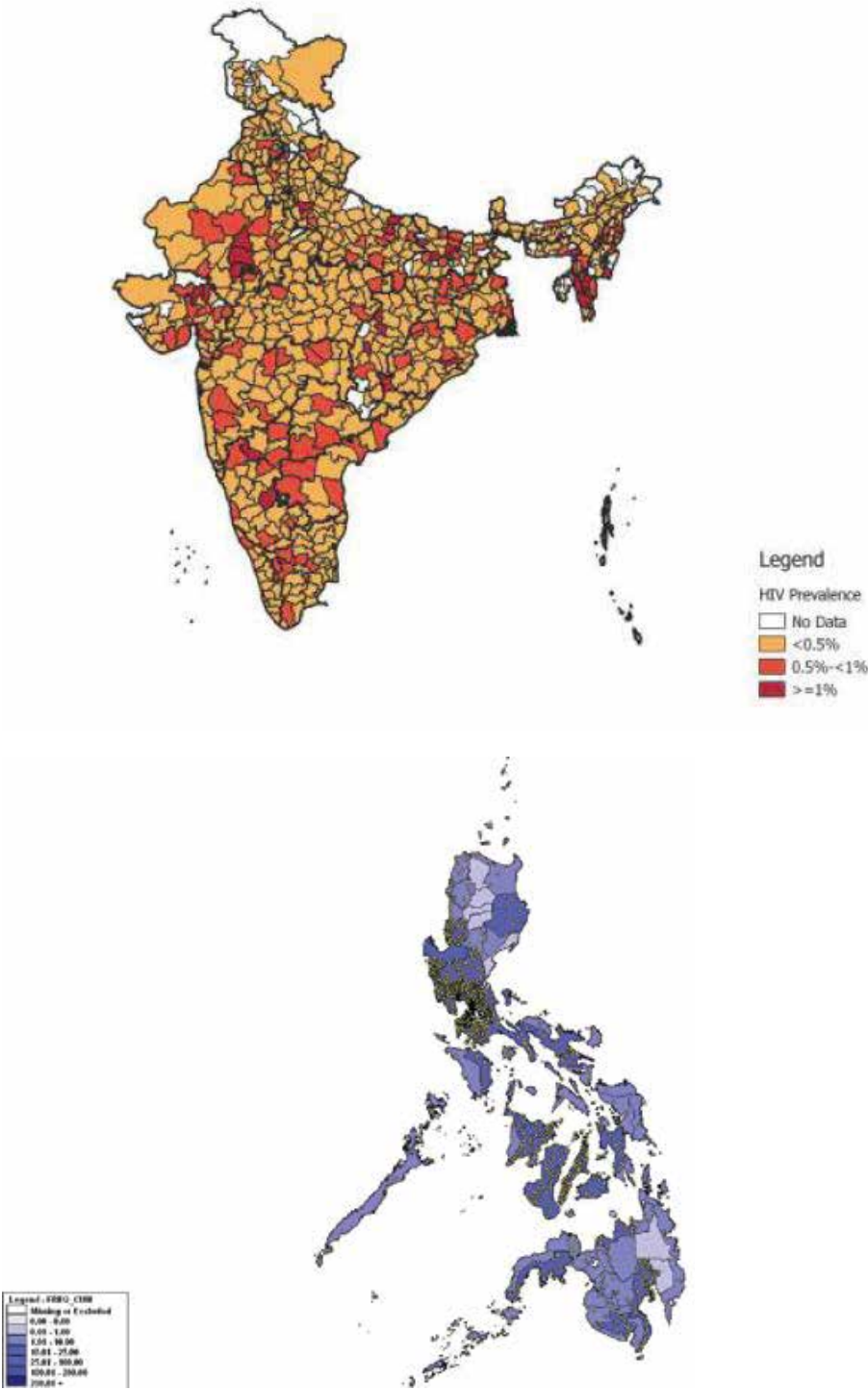
Strengthened political will is also essential for raising adequate, sustainable funding for these programmes and for managing funding flows that allow the money to reach the services and implementers that can achieve the greatest impact. Creating space and support for civil society partners is a core element of successful disease programmes.

5.2 Understand the epidemic

Since HIV infections are never uniformly distributed across a country (Fig. 5.1), strategic information systems need to collect the data

that can pinpoint the places and populations where most disease transmission is occurring and where public health interventions would have the greatest impact.

Fig. 5.1: District-level HIV prevalence among antenatal clinic attendees in India (top) and the distribution of HIV in the Philippines (bottom) showing the diversity of the epidemic in countries



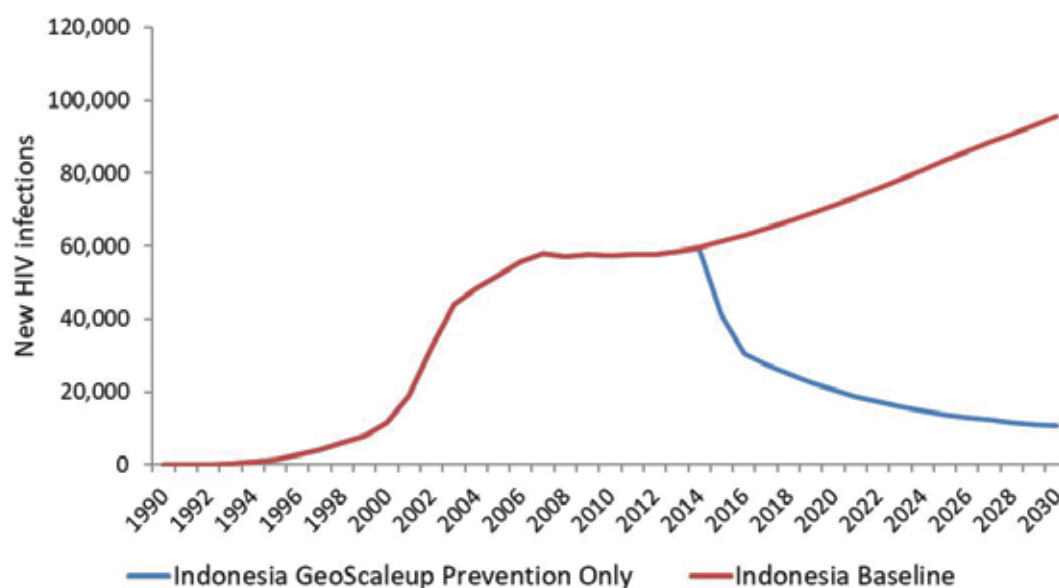
Source: NACO, 2017; Philippines AIDS Registry

Such systems should capture and use granular data to detect gaps and neglected populations or locations and accordingly focus interventions. This strategic information can then be used to advocate for resources and to allocate them in line with epidemic realities at subnational levels. Data systems should also identify the subgroups of key populations with the highest risk of HIV infection so that prevention services can be intensified among them. For example, HIV risk is higher for young sex workers and for young MSM (1,2). Budgetary and funding allocation processes should be flexible enough to permit rapid reallocation of resources in line with changing programme needs.

5.3 Scale up interventions that are most effective

Modelling can be used to explore the impact of focused interventions in specific locations. In Indonesia, for example, close analysis has found that about 80% of all PLHIV and 70% of all key populations are in 10 of the country's 34 provinces. A simple model shows that a dramatic reversal of the country's epidemic can be achieved by scaling up HIV prevention coverage to 80% among key populations in those 10 provinces (Fig. 5.2).

Fig. 5.2: Prevention coverage of 80% coverage among key populations in 10 provinces in Indonesia showing rapid reversal of the country's HIV epidemic



Source: AIDS Epidemic Model

5.4 Put people and their communities at the centre

Communities are fundamental parts of the public health system and they play particularly important roles in successful HIV programmes (3). Indeed, key populations are typically best served by community organizations. The special value of community-led or community-based services is recognized in the UHC model and should be fully legitimized and supported. Services can be decentralized and certain tasks can be shared or shifted to lay personnel in communities.

To fulfil their potential, community organizations need reliable, structured support such as training, mentoring, technical assistance and funding, along with arrangements that ensure the smooth flow of funding to community-based service providers (as seen in the decentralization of budgets and implementation to local administrative levels in Thailand, for example).

5.5 Join services and systems for different diseases together

Public health programmes must adapt to new realities and opportunities. The HIV model of a stand-alone, discrete disease-specific response (albeit with multisectoral components) is no longer a sustainable option, particularly in the light of SDG 3.3, where AIDS is grouped with TB, malaria, viral hepatitis and STIs. A discrete response is also becoming less viable financially, not in the least because it risks unnecessary duplication of systems and services.

Diseases that are targeted for elimination need to be brought under a common management system. This could take the form of a “national public health agency” (see Section 6) that is mandated to implement and oversee programmes aimed at eliminating specific epidemics. Currently, several of these programmes are subsumed in various countries’ overall health systems and tend to be managed in routine ways that limit their potential impact.

With regard to HIV programmes, certain components are best managed through the health system, e.g. blood safety precautions, screening for various diseases, elimination of mother-to-child transmission, etc. Such services would be integrated with the overall health system, in line with the UHC framework. Other elements of HIV programmes, e.g. prevention, testing, treatment and related services would be the responsibility of the national public health agency, along with other disease programmes. This would also allow for the sharing of innovations and improvements across disease programmes, e.g. in relation to procurement and supply chains, data collection and management, case monitoring and quality assurance.

In considering such arrangements, it is important to keep in mind the kinds of challenges that key population-focused services encounter. When implemented by CBOs, these services are often well accepted and can achieve impressive results. On the other hand, integrating services for key populations with general health services can be counterproductive when stigma and discrimination remain rife, and when health workers lack the understanding and training to provide respectful and inclusive services to members of key populations. While full integration remains a mid to long-term goal, a mix of community-based and facility-based programmes may be more appropriate in the interim. Ultimately, the aim is to develop systems that are capable of delivering acceptable and effective HIV services to all who need them (including key populations) as a part of UHC coverage.

5.6 Make financing sustainable

As international financing for programmes declines, additional national funding must be allocated to sustain and expand key population programmes. The dependence on external funding for key population prevention programmes in many countries is untenable. Plans must be put in place urgently to expand national contributions and transition away from international support for these programmes. Government financing schemes should remove barriers that impede funding for CBOs and other nongovernmental organizations (NGOs), and funding mechanisms

should ensure that financing reaches frontline communities. Government structures need to develop closer and more trusting working relationships with communities.

If resources are allocated as efficiently as possible, e.g. by focusing services where they have the biggest impact, it would boost sustainability. The most affected key populations differ substantially between and within countries. This diversity requires that prevention resources for key populations in each country be allocated appropriately to produce the biggest reduction possible within a given resource envelope.

5.7 Put innovations to use

Since the Commission on AIDS in Asia's 2008 report, several technological advances have been made. If used judiciously, they could have an important impact on the region's HIV epidemic.

For example, pre-exposure prophylaxis (PrEP) is highly effective in preventing HIV; and there is increasing interest and demand for PrEP in many countries. In some settings in Europe, North America and Australia, PrEP programmes along with ART are contributing to significant decreases in new HIV infections (4,5,6). There is growing interest in PrEP in Asia among MSM, but programmes are currently small, e.g. in Malaysia, Thailand and Viet Nam. These programmes can be scaled-up progressively to levels where they can significantly reduce new HIV infections in the affected populations.

Community-based testing approaches (often focused on key populations) have also advanced, though many countries still do not allow lay testing or point-of-care diagnosis, which limits access to testing and hinders linkages to immediate ART. Similarly, HIV self-testing has been shown to be acceptable and feasible for key populations in many settings in Africa, North America and Europe, yet it is in limited use in Asia (Viet Nam is piloting this approach). Greater access to self-testing, along with secondary distribution to partners and social networks and partner notification could increase the yield of HIV testing programmes.

Social media and the Internet are transforming the ways people meet sexual partners, including for sex workers and MSM. This presents both challenges and opportunities. Traditional venue-based prevention is likely to become increasingly ineffective, while the broad reach and inexpensive nature of social media may allow for more cost-effective approaches. Social media could be used to increase awareness of HIV services and perhaps even facilitate scheduling of services. The Internet can be used to expand access to and support the purchase of HIV self-testing kits and PrEP, while dating apps can be used to gauge the population sizes of MSM, for example.

6 TRANSFORMATIVE ACTIONS



The analysis presented in this report points to a set of transformative actions that can reboot Asia's push to end AIDS as a public health threat by 2030.

6.1 Follow the evidence and keep key populations as the central focus

Latest epidemiological and behavioral evidence shows that interventions with key populations with the highest risk and vulnerability in select geographical areas will have the maximum impact in preventing new HIV infections. This is the only way for countries to avert new infections and move towards elimination.

- Keep the central focus of combination HIV prevention on key populations and their intimate partners. This approach will avert most new infections and will enable countries to close in on elimination.
- Use up-to-date epidemiological and behavioural evidence to select and focus interventions and resources on geographic areas and key populations with the highest risk and vulnerability (especially young members of key populations), thereby maximizing their impact.

6.2 Align AIDS governance structures with the SDG and UHC agendas

A key principle of UHC is "leaving no one behind". The HIV response to date has been a successful example of reaching hidden and marginalised populations and must be sustained and built upon as

countries prepare to achieve UHC. Aligning AIDS response with the SDG agenda is essential for bringing it out of isolation and sustaining it.

- To enhance activities essential to achieving SDG 3.3, consider constituting a separate disease control (public health) national authority. This would bring all the eliminable disease control programmes under one common management structure with functional autonomy and pooled resources. Divide areas of responsibility appropriately between the new authority and the general health-care system.
- Given the current hostility towards key populations in many societies and service settings, include enabling components (legal, institutional, financial, etc.) in HIV programmes and in UHC arrangements, build political support for them and ensure funding. Redouble efforts to strengthen linkages between communities and health services, and address stigma and discrimination. Combat the rise of social conservatism and avert the damage it does to public health programmes.
- Make sure that the UHC agenda adequately supports and fully incorporates key population-focused programmes to ensure that “no one is left behind”. Use an independent accountability and audit mechanism to track progress in this regard. WHO should work with countries to ensure that key populations are explicitly considered and included in UHC discussions and in the development of core packages.
- As countries adopt UHC, adjust governance and funding mechanisms to include, legitimize and fund community services. Ensure meaningful community participation in policy-making, planning, implementation and monitoring of HIV programmes.
- WHO, UNAIDS and key partners should consider developing a regional mechanism for the eliminable diseases like HIV, TB, Malaria and hepatitis under SDG 3.3. This mechanism should focus chiefly on advocacy and accountability for reaching the SDG 3.3 targets and the intermediate targets for 2020, and track country progress on implementing the recommendations.

6.3 Fully fund the key population response programmes to end AIDS

With key populations as the central focus, resources should therefore flow into programmes with key population subgroups that are at highest risk of HIV infection for efficient service delivery and maximum effectiveness.

- Use up-to-date modelling and other data to determine the resources (service packages and costs) that are needed for programmes that can end AIDS. Develop HIV investment cases that are based on those needs estimates as well as essential enabling interventions, including for CBOs. Use the investment cases to advocate for sufficient domestic funding.
- Shift away from reliance on external donor assistance for key population-focused programmes by increasing domestic funding for such programmes. Donors should consider using co-financing or “matching funds” approaches with governments to ensure a stable transition to sustainable domestic financing mechanisms.
- Develop additional financing models and mechanisms that can support fully-funded HIV and other infectious disease programmes, e.g. social health insurance, new development assistance approaches and earmarked tax or duty initiatives.

6.4 Boost the impact of programmes

Getting the most out of every dollar spent on HIV requires effective service packages, ensuring they suit current realities, focusing them for maximum effect and tracking their impact.

- Select an essential package of evidence-based services for each key population (spanning the full continuum of prevention, treatment, care and enabling activities). Ensure that the services are fully funded and delivered using guidance and tools that are based on good practices. Regularly review their effectiveness.
- Scale up combination prevention programmes for key populations by first prioritizing high coverage among the segments of those populations with the greatest risk of infection, and then steadily expanding those programmes.
- Engage other health and development programmes to ensure that key population-led HIV interventions are incorporated into comprehensive packages that serve the varied needs of key populations, e.g. sexual and reproductive health, education, social protection, etc.
- Develop interventions that address today's risks (including new modes of networking via social media and the Internet) using social science research and proven interventions.

6.5 Continuously improve programmes

Disaggregated local data is pivotal to planning, resource allocation, scaling-up, continuous programme improvement of response and measuring of impact. Ensure that all existing data collection efforts are adapted and used for programme improvement. A shift from routine data collection for reporting purposes to local level data analysis and use for programme improvement and planning is essential.

- Shift from routine data collection for reporting purposes to using disaggregated data for continuous programme improvement and resource allocation. Adapt and use existing data collection including integrated bio-behavioural surveys, programme data and cascade data systems (that are currently being rolled out) accordingly.
- Move the focus of data systems from the national to the local level. Use the data in a timely manner to identify gaps and weaknesses, and address these shortcomings to continuously improve interventions. Strengthen capacities – including of CBOs, NGOs and communities – to collect and use data for improving interventions.
- Work with countries and technical partners to define standards, indicators, protocols and analytical procedures for collecting and using programme data (including for coverage, effectiveness and costs). Data can be aggregated at district, regional and national levels for reporting and associated management decision-making.
- Explore the use of local level, real-time monitoring with the main emphasis on continuously improving programme performance. Develop and apply standard operating procedures for monitoring systems (including real-time monitoring) to address ethical issues and confidentiality concerns. Once the approach is proven and acceptable, roll it out.

6.6 Engage communities throughout

Communities are central to Asia's HIV successes. Their active involvement in HIV response must be assured and supported.

- ◉ Ensure meaningful community participation in the national and subnational structures that set policies and that plan, implement and monitor programmes focused on key populations.
- ◉ Develop a CBO support hub (perhaps hosted at an academic institution) to provide capacity building and technical support. This hub would also facilitate operational and other research, and support CBOs in mobilizing resources and in networking to address legal and structural barriers that block health equity.
- ◉ Ensure ongoing community engagement by creating an institutional mechanism at country level for key population interventions. A central goal should be to achieve reliable and streamlined funding flows to CBOs at implementation levels while transitioning to UHC.

6.7 Create an enabling environment

- ◉ Include structural and enabling components (legal, institutional, financing etc.) in programmes and build political support for them and ensure funding. Combat the rise of social conservatism by building partnerships with other social movements and mainstream civil society. Continue to advocate for decriminalising sex work, same sex relations and drug use by highlighting the damage it has done to public health, and access to services and the right to dignity and health.
- ◉ Develop a CBO hub, hosted at an academic or similar institution and supported by WHO, to provide technical and capacity building support, facilitate operational and other research, and advocate for the removal of structural barriers and other barriers that block HIV responses in Asia.

6.8 The next steps

With the 2020 deadline for HIV targets fast approaching, the recommendations need to be put into action swiftly.

- ◉ National governments should integrate the recommendations into their national HIV plans and act to ensure that key population-focused programmes are fully funded and supported by appropriate governance reforms.
- ◉ Intergovernmental agencies such as the Economic and Social Commission for Asia and the Pacific (ESCAP), the Association of Southeast Asian Nations (ASEAN) and the South Asian Association for Regional Cooperation (SAARC) should be urged to support the recommendations and to recommend that member countries implement them.
- ◉ Regional committees of WHO Regional Offices for South-East Asia and Western Pacific should advocate and support Member Nations' adoption of the recommendations.

REFERENCES

1. Sustainable development goals: 17 goals to transform our world. New York: United Nations; 2016 (<http://www.un.org/sustainabledevelopment/health>, accessed 27 June 2018).
2. Political declaration on HIV and AIDS: on the fast-track to accelerate the fight against HIV and to end the AIDS epidemic by 2030. New York: United Nations; 2016 (http://www.unaids.org/sites/default/files/media_asset/2016-political-declaration-HIV-AIDS_en.pdf, accessed 27 June 2018).
3. De Cock K, El-Sadr WM, Ghebreyesus TA. Game changers: why did the scale-up of HIV treatment work despite weak health systems? *J Acquir Immune Defic Syndr*. 2011;57(Suppl 2):S61–S63.
4. Sustainable Development Goals: 17 goals to transform our world. New York: United Nations; 2016 (<http://www.un.org/sustainabledevelopment/health/>, accessed 27 June 2018).
5. Anchoring universal health coverage in the right to health: What difference would it make? Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/199548/1/9789241509770_eng.pdf, accessed 27 June 2018).
6. HIV sentinel surveillance 2016–2017. Technical brief. New Delhi: National AIDS Control Organisation; 2017.
7. Weniger BG, Limpakarnjanarat K, Ungchusak K, Thanprasertsuk S, Choopanya K, Vanichseni S et al. The epidemiology of HIV infection and AIDS in Thailand. *AIDS*. 1991;5(2):S71–S85.
8. de Lind van Wijngaarden JW, Brown T, Girault P, Sarkar S, van Griensven F. The epidemiology of human immunodeficiency virus infection, sexually transmitted infections, and associated risk behaviors among men who have sex with men in the Mekong Subregion and China: implications for policy and programming. *Sex Transm Dis*. 2009;36(5):319–24.
9. van Griensven F, de Lind van Wijngaarden JW. A review of the epidemiology of HIV infection and prevention responses among MSM in Asia. *AIDS*. 2010;24(3):S30–40.
10. Fazito E, Cuchi P, Mahy M, Brown T. Analysis of duration of risk behaviour for key populations: a literature review. *Sex Transm Dis*. 2012;88:i24–i32.
11. Rojanapithayakorn W, Hanenberg R. The 100% condom program in Thailand. *AIDS*. 1996; 10(1):1–7.
12. Phoolcharoen W, Ungchusak K, Sittitrai W, Brown T. Thailand: lessons from a strong national response to HIV/AIDS. *AIDS*. 1998;12(Suppl B):S123–35.
13. Alary M, Banandur P, Rajaram SP, Thamattoor UK, Mainkar MK, Paranjape R et al. Increased HIV prevention program coverage and decline in HIV prevalence among female sex workers in south India. *Sex Transm Dis*. 2014;41(6):380–7.
14. Jana S, Basu J, Rotheram-Borus MJ, Newman PA. The Sonagachi Project: a sustainable community intervention program. *AIDS Educ Prev*. 2004;16(5):405–14.
15. Buhler M, Wilkinson D, Robert J, Catalla T. Turning the Tide. Cambodia’s response to HIV & AIDS 1991–2005. Phnom Penh: UNAIDS Country Office; 2006.
16. Oo HN, Hone S, Fujita M, Maw-Naing A, Boonto K, Jacobs et al. Evolution of the health sector response to HIV in Myanmar: progress, challenges and the way forward. *Jnl Virus Erad*. 2016;2(Suppl 4):20–6.
17. Brown T, Peerapatanapokin W. Key populations in Asia: Prioritizing and modeling for effective responses. Background paper for the WHO think tank meeting on revisiting strategies for intervention among key populations for HIV. New Delhi: World Health Organization; 2018.
18. Larney S, Peacock A, Leung J, Colledge S, Hickman M, Vickerman P et al. Global, regional, and country-level coverage of interventions to prevent and manage HIV and hepatitis C among people who inject drugs: a systematic review. *Lancet Global Health*. 2017;5(12):e1208–20.

19. Stone KA. Reviewing harm reduction for people who inject drugs in Asia: the necessity for growth. *Harm Reduc J*. 2015;12:32.
20. Global state of harm reduction 2016. London: Harm Reduction International; 2016.
21. Sidibé M, Singh PK. Thailand eliminates mother-to-child transmission of HIV and syphilis. *Lancet*. 2016;387(10037):2488–9.
22. Brown T. Understanding HIV prevalence differentials in southeast Asia. Bangkok: East-West Center: Thai Red Cross Society Collaboration on HIV Analysis, Modeling and Policy; 2003.
23. Kandrana S, Simonds R. National program for preventing mother-child HIV transmission in Thailand: successful implementation and lessons learned. *AIDS*. 2002;16:953–9.
24. HIV and AIDS Data Hub for Asia-Pacific. Thailand country review. Bangkok: HIV and AIDS Data Hub for Asia-Pacific; 2012.
25. Elimination of mother-to-child transmission of HIV and congenital syphilis, Thailand validation. New Delhi: WHO Regional Office for South-East Asia; 2016.
26. Validation of elimination of mother-to-child transmission of HIV and syphilis, Thailand 2013–2015 report. Bangkok: Ministry of Public Health, Royal Government of Thailand; 2016.
27. Ending AIDS: progress towards the 90-90-90 targets. Geneva: UNAIDS; 2017.
28. UNAIDS. Key Population Atlas [Internet]. UNAIDS [Updated 2016]. Geneva: UNAIDS, Global Fund to Fight AIDS, Tuberculosis and Malaria, WHO; 2016 (<http://www.aidsinfoonline.org/kpatlas/#/home>, accessed 27 June 2018).
29. Punitive laws hindering the HIV response in Asia and the Pacific. Bangkok: UNAIDS; 2016.
30. Heath AJ, Kerr T, Ti L, Kaplan K, Suwannawong P, Wood E et al. Healthcare avoidance by people who inject drugs in Bangkok, Thailand. *J Public Health*. 2016;38(3):e301–e308.
31. The legal and social environment is becoming more hostile. Reuters. 9 February 2018 (<https://www.reuters.com/article/us-indonesia-lgbt-insight/criminal-code-revamp-plan-sends-chill-through-indonesias-lgbt-community-idUSKBN1FT2IO>, accessed 27 June 2018).
32. Cohen JM, Smith DL, Cotter C, Ward A, Yamey G, Sabot OJ et al. Malaria resurgence: a systematic review and assessment of its causes. *Malar J*. 2012;11:122.
33. The Commission on AIDS in Asia: report of the commission on AIDS in Asia, redefining AIDS in Asia: crafting an effective response. New Delhi: Oxford University Press; 2008.
34. Liu G, Lu H, Wang J, Xia D, Sun Y, Mi G et al. Incidence of HIV and syphilis among men who have sex with men (MSM) in Beijing: an open cohort study. *PLoS One*. 2015;10:e0138232.
35. van Griensven F, Holtz TH, Thienkrua W, Chonwattana W, Wimonsate W, Chaikummao S et al. Temporal trends in HIV-1 incidence and risk behaviours in men who have sex with men in Bangkok, Thailand, 2006–13: an observational study. *Lancet HIV*. 2015;2(2):e64-70.
36. Mabuchi S, Singh S, Bishnu R, Bennett S. Management characteristics of successful public health programs: 'Avahan' HIV prevention program in India. *Int J Health Plann Manage*. 2013;28:333–45.
37. Grulich A, Guy RJ, Amin J, Schmidt H-A, Selvey C, Holden J et al. Rapid reduction in HIV diagnoses after targeted PrEP implementation in NSW, Australia. 25th Conference on Retroviruses and Opportunistic Infections 2018, Abstract 88. 4–7 March 2018, Boston (<http://www.croiconference.org/sessions/rapid-reduction-hiv-diagnoses-after-targeted-prep-implementation-nsw-australia>, accessed 27 June 2018).
38. HIV epidemiology annual report 2016. San Francisco: San Francisco Department of Public Health; 2017 (<https://www.sfdph.org/dph/files/reports/RptsHIVAIDS/Annual-Report-2016-20170831.pdf>, accessed 27 June 2018).
39. HIV in the United Kingdom: decline in new HIV diagnoses in gay and bisexual men in London. London: Public Health England; 2017 (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/648913/hpr3517_HIV_AA.pdf, accessed 27 June 2018).

ACT NOW!

- ☑ Re-focus on key populations in national AIDS programmes
- ☑ Reposition combination prevention for key populations (and not treatment alone)
- ☑ Change governance roles, at global & country levels, to focus on elimination within SDG and UHC agendas
- ☑ Fully fund the key population response & institute streamlined fund flow mechanisms to CBOs
- ☑ Establish agency accountability mechanisms to ensure continued key population focus within programmes
- ☑ Empower communities to collect and utilize local level HIV data

