China has made substantial progress in tackling its HIV epidemic. China’s HIV history has been anything but steady, with national negligence a critical factor in the spread of HIV in the early 1990s. However, significant progress in the last decade and increased national response have stemmed the epidemic across the country as well as increasing the quality of life for people living with HIV.

The HIV epidemic in China is largely characterised by low national prevalence at 0.037%, with certain regions having higher and more severe HIV prevalence rates. China is also faced with the increasing challenge of providing more targeted prevention programmes to key affected populations such as men who have sex with men, people who inject drugs and young people.

Treatment, care and support challenges prevail in China. In 2014 alone, 21,000 people died from AIDS-related causes. The number of people living with HIV receiving treatment has steadily increased across the country. However, progress in reducing mother-to-child transmission rates is still regarded as slow. Progress has also been slow in addressing the high levels of stigma and discrimination people living with HIV experience across the country.

China has made substantial progress with regards to funding its HIV response as 99% of funding came from domestic sources in 2015. This is very encouraging when considering the sustainability and longevity of many of the national HIV and AIDS commitments.

Despite these efforts, in December 2016 the Chinese
Centre for Disease Control and Prevention (CCDC) reported 96,000 new HIV cases in the first nine months of that year. This means the number of new cases in 2016 is likely to exceed 115,000, the number of new cases recorded in 2015.

Key affected populations in China

China has a relatively low national HIV prevalence rate. However, the HIV epidemic is still a major concern for some of the key affected populations within the country. Targeted prevention strategies are critical to curb the epidemic amongst these vulnerable groups as well as addressing the stigma and discrimination many people from key populations face on a daily basis, preventing them from accessing vital HIV services.

Men who have sex with men (MSM)

HIV prevalence among men who have sex with men (sometimes referred to as MSM) has been rising in China. China’s Health and Family Planning Commission officially estimates prevalence among this group to be 7.7%. Men who have sex with men are estimated to represent over a quarter of new reported infections each year.

Homosexual sex was decriminalised in China in 1997 and removed from the official list of mental disorders in 2001. However, economic and cultural factors means men who have sex with men often face stigma and discrimination and hide their sexual identity. This hostile environment is preventing a greater understanding of the epidemic in China among men who have sex with men.

Despite this limitation, some research is being conducted and published. For example, a 2015 study in 11 major Chinese cities of more than 8,900 men who have sex with men showed the average prevalence of HIV infection to be 9.9%, with average incidence of 5.5 per 100 people, which is higher than official figures. Incidence has also been assessed by a 2014 study of young men who have sex with men (aged 18-25) which found incidence to be as high as 18.9, 10.6 and 5.6 per 100 people of this age group in Guiyang, Beijing and Shanghai respectively.

Ignorance of HIV status is a major factor in the rising epidemic amongst men who have sex with men. The 2015 study mentioned above found high-risk behaviour among men who have sex with men in China to be high. Around 45.7% of respondents reported having unprotected sex with male partners and 10.9% with female partners. Around 38% had exchanged money for sexual activities. Data from seven of the 11 cities suggests that districts with highest rates of illicit drug use among men who have sex with men also shared the highest HIV prevalence.

However, a 2013 study in Chongqing City, which has a high HIV prevalence among men who have sex with men, found that HIV testing was actually higher for men who have sex with men (58%) than the average populations (44%).

Strategies such as self-testing have also been explored in China amongst men who have sex with men. A 2014 study found 20% had used self-testing kits for HIV. The increased use of self-testing kits greatly correlated with factors such as the individual being married, having a recent HIV test and if they had engaged in anal sex. It is clear that the HIV epidemic among men who have sex with men is concerning in China but more targeted prevention strategies for this affected population will enable a more effective response that meets this group’s needs.
Young people

One of the growing key affected populations in China is young people. China's National Centre for STD/AIDS Prevention and Control reports 14.7% of new infections in 2015 were among people aged 15 to 24. Despite these figures still being relatively low, there is increasing concern about the impact of the HIV epidemic on younger generations. Indeed, the year-on-year growth rate of new HIV infections among young people is around 35%.15

Understanding the main mode of transmission amongst this population is crucial to providing effective support and services. It has been found that the majority of young people infected are male (95%), and 70% of those infections have been among young men who have sex with men.16 It is therefore vital that HIV services and education are tailored to younger generations and key affected groups within these younger populations.

Sex education faces great challenges in China. At Tsinghua University, students take sex education classes where they learn basic knowledge about sex safety, condom use, etc. As far as I know, this is the first time most of my students have ever taken such a class.

- Jing Jun, a professor of sociology at Beijing’s Tsinghua University17

Including young people in the design and formulation of HIV and AIDS policies and programmes will be important in tackling the epidemic amongst this population in China. Research has found that youth HIV and AIDS policy in China is limited and that more holistic approaches, and including young people in policy development, is an important step in tackling the epidemic.18 This will also challenge stigma and discrimination and also increase knowledge of HIV and AIDS and reduce risk-taking behaviour.

Also of interest is the rise of new infections among people aged 60 and over. Figures from the CCDC show 15% of new infections in 2015 were among this age group. This may reflect a trend in migrant workers for visiting sex workers while away from home.19

People who inject drugs (PWID)

Blood sharing through drug taking equipment has increased the spread of HIV in China. In total, 6% of people who inject drugs (sometimes referred to as PWID) were living with HIV in 2014, compared to 6.33% in 2013.20

China has implemented a number of harm reduction interventions to reduce the transmission of HIV among people who inject drugs. By the end of 2014, 767 methadone maintenance treatment clinics had been set up in 28 provinces serving around 184,000 people. It was estimated that the HIV-positive rate of people receiving methadone dropped marginally from 0.13% in 2013 to 0.12% in 2014.21

In 2014, 814 needle exchange projects were operating across 14 provinces. More than 56,000 drug users participated in the needle exchange programme and more than 11 million needles and syringes were distributed.22 This equates to 204 clean syringes per person. UNAIDS considers 200
syringes per person and above as high coverage.23

A 2014 study found 69% of people living with HIV in Guangxi, a province with one of the highest HIV prevalence’s in China, were infected through injecting drugs.24 Providing targeted intervention programmes for people who inject drugs is vital for reducing their risk to HIV.

**HIV testing and counselling (HTC) in China**

China has intensified HIV testing efforts since the beginning of the millennium, tailoring its approach depending on the type of group or population being targeted.25

An active-testing approach has largely been adopted across the country, inviting high-risk groups such as people who inject drugs, pregnant women and men who have sex with men to take an HIV test. This approach has shown a low refusal rate in certain provinces and has been found to be an effective approach for key affected populations. For example, active testing was initiated in Yunnan province in 2004; 424,000 people were invited to be tested and only 1.3% refused. However, there have been concerns that active HIV testing can result in social pressure, leaving people feeling unable to refuse a test.26

In 2014, 21,210 health service facilities were conducting HIV testing and counselling (HTC), around 2,800 more than in 2013. The increase in availability has been instrumental in more people being diagnosed than ever before.27 China has also put significant effort into establishing and developing HIV and AIDS labs, which is crucial for both prevention and treatment programmes.28

**HIV prevention in China**

Sexual transmission is the main mode of HIV transmission in China therefore reducing this transmission route has been a critical concern of China’s HIV response.29

**Prevention programmes**

HIV prevention programmes have consistently developed across the country in the last decade.30 Reducing sexual transmission of HIV has largely been tailored to the key affected populations at greater risk of HIV. In 2014, large-scale publicity campaigns and education activities focused on migrant workers, teenagers and women.31

For example, the Red Ribbon Health Campaign (“100 Universities Going into 1,000 Enterprises”) utilised the skills of university students, who had attended HIV prevention programmes, to educate other groups about HIV prevention. In 2014, around 1,800 university student volunteers reached more than 120,000 non-local migrant workers with HIV prevention information. In 2013, the campaign targeted workers by arranging for students to go into organisations and businesses, with 300,000 workers reached.3233

Recent national prevention efforts have also focused on serodiscordant couples, providing treatment for the HIV positive spouse, as well as condom promotion and HIV testing. Between 2009 and 2014, the level of transmission between serodiscordant couples dropped by 76%.34

In an effort to combat the rise in new HIV infections among young people, in 2016 China announced that middle and high school students will now be required to attend sex education classes. This is a bold step for the country, which has tended to favour sex education for students of university age or above. The classes will involve information about HIV prevention and HIV testing alongside issues of sexual responsibility.35
Prevention of mother-to-child transmission (PMTCT)

China’s preventing mother to child transmission (PMTCT) programme has substantially developed in recent years, with mother to child transmission (MTCT) a critical concern of the national HIV response. This has resulted in a reduction in HIV-infected newborns from 7.4% in 2001 to 6.1% in 2014.\textsuperscript{36}

Despite this, studies of different Chinese provinces have found that, even where PMTCT programmes exist, services are not always effective due to issues such as a lack of antiretrovirals. For example, a 2013 study in Guangdong found PMTCT programme failed to meet their objectives due to a shortage of antiretrovirals for HIV positive mothers, with 60.2% receiving antiretrovirals and only 48.2% receiving these during pregnancy.\textsuperscript{37}

Other research suggests that, in many cases, pregnant women are unaware of or lack knowledge of HIV antenatal health services.\textsuperscript{38}

However, when PMTCT programmes are fully funded and implemented they have been shown to be effective. For example, Hezhou City, where HIV prevalence is relatively high, began implementing PMTCT programmes in 2003. Hezhou integrated PMTCT interventions into routine maternal and child health care, carried out extensive publicity and social mobilisation campaigns to improve people’s awareness and enhanced the capacity of health staff to implement services effectively. Since 2009, no case of HIV infection among children born to pregnant women with HIV have been reported.\textsuperscript{39}

Prevention of infected blood donation and transfusion

China’s HIV epidemic was profoundly marked by negligent blood donation activities in the early 1990s, which led to a dramatic increase in the spread of HIV across China.\textsuperscript{40} Following a ban on imported blood products in the 1980s, thousands of blood and plasma sites were established across China. Most operated illegally and collected blood from rural, impoverished areas where there would be less interference from authorities. People sold their blood to make money and the collected blood was pooled together and the plasma removed. The remaining blood was then injected back into the donors.\textsuperscript{41}

It was estimated that HIV transmission through blood products accounted for 10% of infections in 2005 due to these practices.\textsuperscript{42} Serious efforts have been made to prevent these incidences from ever happening again. In 2008 almost all the blood stations in China were from voluntary, unpaid donors and in 2010 the government announced that all collected blood products were screened for HIV.\textsuperscript{43} Funding to improve blood donation services has also increased, with the government providing 1 billion Yuan in 2014.\textsuperscript{44}

Although blood donations are now tested for HIV, as of 2015 the tests being used at the majority of blood centres detected HIV antibodies, which only register after 22 days of HIV infection. However, these tests are gradually being replaced by more rapid tests, which show results after only 11 days. It is estimated these tests will cut transmission of HIV through blood transfusion in half.\textsuperscript{45}

Antiretroviral treatment (ART) in China

The number of people living with HIV who have received antiretroviral treatment (ART) in China has significantly increased in the last few years. Around 126,440 people were initiated on ART in 2011, compared to 295,360 in 2015, for the most ever to begin treatment in one year.\textsuperscript{46}

China has implemented 2013 World Health Organization (WHO) guidelines for HIV treatment,
which recommends providing HIV treatment for people living with HIV who have a CD4 count of 500 or less.47 This has increased the pressure on treatment centres and antiretroviral drug supplies but has also had a tremendous effect in reducing AIDS-related mortality.48

Due to the implementation of these guidelines, 80% of people eligible for ART are now receiving it. This equates to 59% of all adults and children living with HIV in China, compared to 52% in 2013.49 Furthermore, more than 90% of those on ART are virally suppressed. This is when the level of HIV in someone’s body is very low, which greatly reduces the likelihood of transmission.50

PMTCT treatment is still insufficient, with treatment coverage for pregnant mothers equating to just over 60% in 2013.51

**Barriers to HIV prevention in China**

**Human rights**

HIV and AIDS activism in China has not been as widely celebrated as it has been in other countries. Significant progress has been made in tackling the HIV and AIDS epidemic, yet many voices in the epidemic are still being suppressed, including HIV and AIDS activists, non governmental organisations (NGOs) and projects.52 This has had significant repercussions for people living with HIV.

The government has remained cautious in its dealings with the majority of human rights groups and NGOs working in China, which limits their capacity profoundly. Harassment, detention and censorship are just some of the challenges HIV and AIDS activist groups have faced in the past.53

That said, some provincial HIV regulations include provisions to uphold the rights of people living with HIV. For example, regulations in Yunnan Province prohibit refusal of medical care for people living with HIV and prohibit employment units from discriminating against people living with HIV and their family members. However, this province has also introduced regulations that restrict rights, such as requirements for mandatory HIV testing before marriage in high HIV prevalence regions and HIV testing every six months for entertainment venue workers.54 Furthermore, policies that protect the rights of people living with HIV are all too frequently undermined by state authorities such as the police.55 This also leads to increased stigma and discrimination across Chinese society.

The 2009 China Stigma Index study, the most recent available, found HIV-related discrimination in employment, education and health care to be widespread. Of the 2,000 people living with HIV surveyed, 42% reported having faced some type of HIV-related discrimination and 12% had been refused medical care. Around 15% said they had been refused employment or a work opportunity and 7% had been forced to move or refused accommodation due to their HIV status. Of the female respondents, around 12% had been pressured into terminating a pregnancy by medical staff or a family planning department due to their positive status.56

**Legal and punitive barriers**

HIV programmes are severely limited by the criminalisation of many key affected populations. It is illegal in China to engage in sex work, with sex workers facing compulsory detention for reasons of ‘re-education’ and punishment. Sex workers are one of China’s key affected populations, with HIV prevalence at around 0.22% in 2014.57 But HIV programmes to increase awareness and provide support are severely limited by the punitive laws surrounding their work.58

However, China has made progress in some areas.59 For example, laws limiting movement within
and entering the country for people living with HIV were lifted in 2010. The Chinese government has been greatly commended following these actions, taking a positive step in reducing HIV stigma and discrimination.60

The future of HIV and AIDS in China

It is clear that China’s epidemic significantly affects key populations around the country, namely men who have sex with men, people who inject drugs and young people. Greater effort will be required for providing more targeted interventions that adequately and effectively support these groups. Greater coordination between community level HIV organisations and national level services will also be crucial for curbing the HIV epidemic in China in the future.61

The Chinese government has made a serious commitment to the HIV epidemic across the country by funding 99% of its response from domestic sources.62 However, increased financing will be needed as HIV testing and treatment continues to be scaled-up. Without this, drug and resource shortages may occur, preventing those most in need of treatment to access it.

China’s multisectoral approach to HIV, which engages the government, civil society and the private sector and draws on comprehensive national data, can provide important lessons for many countries in Asia and the Pacific and beyond.63

However, a 2016 study of Shandong Province suggests the country has a long way to go before it achieves UNAIDS’ 90-90-90 targets. Research conducted for the study found only 60% of people with HIV were diagnosed, 42% of whom were on ART. Of these, 60% were virally suppression. It found failings in a number of key stages in the HIV care journey (sometimes known as the ‘care continuum’); namely diagnosis, linkages to care, retention in care, initiation of ART, and viral suppression.64 Each will need to be addressed in turn if China is to end AIDS by 2030 as it has pledged to do.65

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