

# Introduction



# 1. HIV and Hepatitis C in Central Asia and China: Understanding the Role of Social Work and NGOs in the Response to Infectious Diseases

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In 2015, the United Nations Member States adopted the Sustainable Development Goals (SDGs) for 2030. The SDGs are a global development framework consisting of seventeen interrelated goals, designed to serve as a 'shared blueprint for peace and prosperity for people and the planet, now and into the future' (United Nations n.d.). Good health and well-being are essential to sustainable development and are described in SDG 3. Within the framework of the SDGs, infectious diseases, including HIV/AIDS and hepatitis C, are an important target. SDG 3 specifies the target of 'ending the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combating hepatitis, waterborne and other communicable diseases' (United Nations n.d.).

In this book, we take a closer look at the development of the response to two major infectious diseases – HIV/AIDS and Hepatitis C – in Central Asia and China. In this introduction, we first provide an overview of the epidemiological trends and the responses in the countries of the region with a focus on China, Kazakhstan, Kyrgyzstan, and Uzbekistan. The country overview includes an analysis of the vulnerabilities that are associated with these diseases, especially among key populations. Secondly, we take a look at the development of HIV/AIDS and Hepatitis C prevention approaches among key populations, a field in which non-governmental organisations (NGOs) play a vital role. We analyse how social work services have developed, especially with regards to vulnerable populations, and to what extent social work actors and NGOs have been contributing to the response. Thirdly, we identify arenas for future action to improve services for key populations. The introduction concludes with a detailed overview of the chapters of this publication.

## *HIV/AIDS in Central Asia and China*

**Central Asia** has long been a hotspot for high prevalence rates of HIV/AIDS, often associated with injecting drug use and incarceration (Bobrova et al. 2007; Thorne et al. 2010; LaMonaca et al. 2019; Deryabina et al. 2019; Golichenko 2020). In recent years, as a result of various factors, the HIV/AIDS epidemic in the countries of Central Asia has undergone significant changes, in particular with regards to HIV transmission and new infections in groups of different ages, genders, and social identities. The epidemiological situation in each Central Asian country remains complex and has its own specific characteristics.

A wide range of factors contribute to the region's HIV/AIDS epidemic, including poverty, unemployment, injecting drug use, sex work, labour migration, and a lack of public awareness about HIV transmission and prevention. The latest statistics show a decrease in injecting drug use and opioid use in all Central Asian countries. Recent developments suggest that unlike in the Russian Federation and Ukraine where 70% of HIV-registered infections are due to injecting drug use, in Central Asia, sexual transmission is now the leading cause of new infections (Zabransky et al. 2014; The Joint United Nations Programme on HIV/AIDS [UNAIDS] 2018; LaMonaca et al. 2019, InBeAIDS 2020). The SOLID project has developed a substantial body of research on HIV/AIDS and HCV in Central Asia and China. In the following section, we present the main epidemiological trends and responses in the individual countries.

**Kazakhstan** was the first country in Central Asia to record HIV infections. At the end of 1990, the Republican AIDS Center was established, followed by networks of regional centres across Kazakhstan (see Chapter 3, 'HIV/Aids and HCV in Kazakhstan' by Dinara Yessimova, Mariya Prilutskaya, Dalida Mukasheva, and Medet Kudabekov in this book). In 2017, it was estimated that 75% of people living with HIV in Kazakhstan were aware of their HIV status, of which only 59% were receiving antiretroviral treatment (ART). Over the past two decades, Kazakhstan has developed a concentrated HIV epidemic with a prevalence of 0.3% in the general population. In 2022, the absolute number of people living with HIV (PLWH) was between 35,000 and 38,000. HIV prevalence among key populations was significantly higher than in the general population: 7.6% among people who inject drugs (PWID), 1.3% among sex workers, 6.9% among men having sex with men (MSM), and 4.1% among people living in prisons. This represents a decrease in prevalence in all groups since 2019/2020. In

2019, HIV testing was conducted by 23 stationary laboratories distributed across all regions. There were no mobile laboratories in the Republic of Kazakhstan, but 23 mobile trust points that travel to the points with the highest concentration of key group representatives and conduct rapid testing.

In 2017, the Republican AIDS Center estimated that 11,207 PWID were living with HIV in Kazakhstan. Among them, 9,072 individuals (80.9%) were aware of their HIV-positive status. Nevertheless, only less than half of these individuals, namely 4,340 (38.7%) of them, were receiving ART. The estimated number of PWID is currently decreasing due to changing patterns of drug use in the country. Since the beginning of the epidemic, NGOs have been playing a key role in providing HIV/AIDS prevention and support to PLWH in Kazakhstan, which has been acknowledged by the international community. Kazakhstan's NGOs often collaborate with the Global Fund to access funding, technical expertise, and best practices. They actively engage with the Joint United Nations Programme on HIV/AIDS (UNAIDS) and other UN agencies to align their strategies with international standards and access data, research, and policy guidance.

In **Kyrgyzstan**, the character of the HIV/AIDS epidemic has changed as well (Pape 2019). For example, the numbers of sexual transmissions of HIV increased over the past decade from 787 cases in 2011 to 3,156 cases in 2018. New infections also occurred among women whose partners are injecting drug users (Deryabina et al. 2019) and women who engage in injecting drug use and sex work (Vélez-Grau et al. 2022). Similar statistics from Kazakhstan and Tajikistan show a steady decrease in the percentage of HIV transmissions that result from injecting drug use. The reasons for this stabilisation are not fully understood. It is unclear whether the decline in new HIV cases and the increase in heterosexual transmission rates are due to an underreporting of transmissions among PLWH and their partners (Deryabina et al. 2019).

The epidemiological situation in Kyrgyzstan regarding HIV and HCV infections presents a complex problem (see Chapter 4, 'HIV/Aids and HCV in Kyrgyzstan' by Jarkyn Shadymanova and Nurgul Musaeva in this book). Over the past decade, there has been an intensification of HIV and hepatitis C transmission not only among vulnerable groups with risky behaviours but also among the general population, leading to an increase in the number of people living with these infections. In Kyrgyzstan, the first case of HIV infection was recorded in 1987. In the following years, there was a continuous increase in the registration of new cases. According to WHO/

UNAIDS estimates, 12,231 people were living with HIV in Kyrgyzstan by the end of 2022. The number of women with HIV increased by 2.8% compared to the end of 2021. The percentage of people who inject drugs and live with HIV remained roughly the same, at 14.6% (compared to 14.3% in 2009). It is worth noting that the prevalence of viral hepatitis C was high among PLWH (50.4%).

In 2022, more than 36,000 representatives of vulnerable groups were provided with HIV testing, harm reduction services, care, and support programmes. HIV rapid testing is actively carried out in Kyrgyzstan among vulnerable groups (see Chapter 10, 'Analysis of Harm Reduction Programmes in HIV/AIDS Prevention in Kyrgyzstan: Experience, Problems, and Prospects' by Tynchtyk Estebeş uulu in this book). These activities are developed with the support of the Global Fund, but also by the government of Kyrgyzstan. NGOs have played a significant role in Kyrgyzstan's response to the HIV epidemic. Often, they were the first to advocate for the need to implement prevention programmes, emphasising the importance of the epidemic at the political level. However, repressive drug control policies as well as careless attitudes and discrimination from medical workers push drug users, sex workers, and MSM away from support programmes. Discrimination particularly affects MSM, as homosexuality carries a particular stigma (Pape 2019). People who use drugs and live with HIV and/or HCV often face a double stigma that hinders them from accessing testing, treatment, and support.

According to the official data of the Ministry of Health, at the onset of 2023, a total of 52,420 people living with HIV were registered in **Uzbekistan**, the most populous country in Central Asia. Similar to other countries in the region, Uzbekistan's HIV epidemic has changed over the past two decades. At present, labour migrants are among the most affected population groups (see Chapter 9, 'Labour Migrants' by Azizbek Boltaev in this book). Since the first detection of HIV infection in Uzbekistan in 1987 until 1<sup>st</sup> January 2022, around 71,000 people living with HIV have been registered, of whom 23,000 have died due to AIDS. An analysis carried out in 2022 of HIV-infected individuals, segregated by gender, revealed that 55% of HIV cases pertain to males, while 45% pertain to females. Sexual transmission accounted for 79% of all registered cases of HIV, followed by parenteral (through injecting drug use) (12.7%) and mother-to-child (0.6%) transmission.

The HIV epidemic in Uzbekistan seems to be stabilising at approximately 3,000 new cases per year, but key populations, including MSM, people

who inject drugs, and sex workers, remain at risk. These populations are at increased risk of HIV infection due to many factors, including stigma, discrimination, and lack of access to prevention and care services. In order to further enhance the role of NGOs as active participants and partners in the prevention of HIV infection (such as by providing syringes and needles to injection drug users), strengthen the protection of the rights and legitimate interests of people living with HIV, Uzbekistan needs to expand the scale of state support to NGOs.

At present, a small number of NGOs have been established in Uzbekistan to offer prevention services and social support for key populations (see Chapter 12, ‘The role of public organizations and non-governmental organizations (NGOs) in addressing and supporting people with HIV’ by Guzalkhon Zakhidova in this book). NGOs also make a significant contribution to the prevention of HIV infection. Communities living with and affected by HIV, including key populations, support programme development and implementation, the expansion of coverage, and improvements to the quality of health services.

Previous studies, such as the CADAP project (Central Asia Drug Action Programme [CADAP] 2020), have shown that the number of new HIV infections is increasing, especially in Kazakhstan, while at the same time the share of transmissions resulting from injecting drug use is decreasing. This trend can also be observed in other Central Asian countries, and it indicates that the epidemic has spread beyond key populations and is now affecting the general population (Pape 2019). Notably, the number of officially registered opioid users in Central Asia has been steadily declining over recent years. In 2013, 35,150 drug users (mostly opioid users) were registered in Kazakhstan, but in 2017 this number decreased to 23,020 (-35%).

In Kyrgyzstan the number of people who use drugs decreased from 9,024 in 2013 to 8,485 in 2017 (-6%), while in Tajikistan, the numbers changed only slightly, from 7,176 in 2013 to 6,947 (-3%) in 2017, nonetheless representing the regional trend (see also Azbel et al. 2017; Michels et al. 2017; Zabransky et al. 2014; Michels/Stöver 2022). Moreover, the number of opioid users treated in narcological clinics has been declining, while the number of patients in opioid substitution treatment (OST) has been slowly increasing, even though this increase is minimal, given the overall number of registered opioid users (Michels et al. 2020). Whether OST affects HIV prevalence rates is difficult to assess, but the overall range and

the retention rates are either too low or too high to produce generalisable epidemiological effects.

A review of the available literature suggests that there is a visible gap in the information about the population living with HIV/AIDS, as well as treatment for this population group and injecting drug users in Central Asia. Still often referred to as transitional states, given the challenges in healthcare reforms that resulted from the collapse of the Soviet Union (Habibov 2016), the countries in Central Asia have developed in different ways, with vulnerable populations remaining the most disadvantaged (Scheil-Adlung/Kuhl 2011). This is especially the case in terms of public health concerns such as the HIV/AIDS epidemic, which remains concentrated in all Central Asian countries. This means that HIV has spread rapidly in one or more subpopulations but is not well established in the general population.

The data from national and international surveys suggest that poverty, unemployment, and an increase in the number of people who inject drugs and people engaged in sex work are the main contributing factors to the HIV/AIDS epidemic in Central Asia. The situation is exacerbated by the lack of public awareness about HIV transmission and prevention methods. The development of the epidemiological monitoring mainly undertaken by international prevention programmes reveals higher rates of HIV in Central Asia.

Data from national AIDS centres show that prevalence is high among so-called key populations, including PWID (29.8% in Kazakhstan and 23% in Kyrgyzstan). The HIV epidemic remains concentrated in all three countries, with HCV being most prevalent in Kyrgyzstan, where the numbers show an increase in 2017 compared to previous years (60.9%), and in Kazakhstan (68.7%). However, a recent increase in the mother-to-child transmission cases shows that the epidemic is spreading beyond the key population groups and into the general population.

In **China**, the HIV/AIDS epidemic has undergone various changes in terms of the routes of transmission over the past 40 years (Xu et al. 2021), even though the overall prevalence remains low. China has made remarkable achievements in HIV prevention and control. UNAIDS estimated that the number of HIV-infected individuals in China could reach 10 million by 2010 (Kaufmann/Jing 2002). However, China has been able to limit the epidemic to a prevalence of <0.1% as of the end of 2017 (NHC 2020; Liu et al. 2021). In 2018, according to the government, there were 1.25 million



PLWH in China, 69% of whom were aware of their HIV status and 83% of whom were accessing ART.

In the 1980s, the first HIV/AIDS outbreak occurred among PWID in the Dehong Prefecture, in the Yunnan Province, which is along the south-west border of the world's largest illicit drug production and distribution centre, the so-called 'Golden Triangle'. The HIV epidemic steadily spread from Yunnan to neighbouring provinces and then to nearly all of China's 31 provinces. In the early 1990s, the second HIV/AIDS outbreak occurred, alongside the emergence of illegal commercial blood collection stations in rural areas of central China. Successful efforts to curb injection drug use and illegal blood collection have led to the emergence of sexual transmission, both heterosexual and homosexual, as the major route for HIV infection in recent years (Xu et al. 2021).

According to official data, there are an estimated 2,561,000 injecting drug users in China, with an estimated HIV prevalence of 11.9% (304,000 people). Of these HIV-positive PWID, 59% had been tested for HIV antibodies in the previous twelve months. Furthermore, there is an HCV antibody prevalence among people who inject drugs of 49% and an HCV ribonucleic acid (RNA) prevalence of 35.8%, but no information regarding how many of the HCV-infected people received treatment (Hajarizadeh et al. 2023).

HIV and HCV epidemic patterns in China can be divided into two main categories. Initially, during the HIV epidemic in southern and south-western China, injecting drug use was the primary mode of transmission, accounting for the majority of infections between 1989 and 1995. However, this situation has since changed, with over 70% of newly reported HIV transmissions now resulting from heterosexual contact (see Chapter 2, 'HIV/Aids and HCV in China' by Hang Su, Yifan Xu, Huiting Lei, Shuxin Shao, and Jiang Du in this book).

China's response to HIV/AIDS has undergone significant transformations over the past 35 years. China has implemented a multitude of laws, policies, and guidelines to support the response to HIV/AIDS, demonstrating a strong commitment both politically and economically to dealing with HIV/AIDS. These achievements have led to a remarkable reduction in mortality from HIV/AIDS over the past two decades, and the number of patients on long-term sustained ART in China now exceeds 800,000. Nevertheless, challenges such as late diagnosis and linkage to care continue to be significant barriers, and the emergence of non-AIDS comorbidities represents a new area of concern in HIV care. The most significant chal-

lenge in eliminating HIV in China lies in identifying currently undiagnosed infections and ensuring that infected individuals are rapidly linked to treatment. Approximately 30% of HIV infections in China go undetected.

Since 2003, China has offered free HIV counselling and testing, along with free antiretroviral therapy. Multiple strategies can be employed to enhance HIV detection, such as implementing more intensive testing programmes that target high-risk groups. Consequently, the most plausible scenario is that by 2030, treatment coverage will have significantly increased, HIV transmission rates will have decreased, drug resistance will remain at low levels, and China will be on the verge of realising UNAIDS' second and third treatment targets. However, the foremost challenge will likely revolve around achieving UNAIDS' first treatment target by 2030.

Regarding the prevention and treatment of HIV/AIDS among injecting drug users, the Chinese Ministry of Public Security has cooperated with the Ministry of Health to gradually improve drug rehabilitation regulations over time. The regulations on HIV/AIDS prevention and treatment issued in 2006 and the Anti-Drug Law issued in 2008 allowed healthcare institutions to provide OST – in China, known as methadone maintenance treatment (MMT) – and clean needles to PWID for the purpose of reducing HIV transmission through needle-sharing behaviour. By June 2016, there were 33,486 participants in needle exchange programmes and 161,975 PWID receiving MMT. From 2006 to 2017, HIV incidence among MMT clients decreased from 0.95 per 100 person-years to 0.03 per 100 person-years. Moreover, results from a needle exchange programme showed that the proportion of needles being shared in the intervention group was lower than that in the control group (35.3% versus 62.3%). At the Guangdong site, the HIV incidence of the intervention group was significantly lower than that of their counterparts (12.9% versus 33.3%,  $P < 0.011$ ) (Xu et al. 2021; Su 2022).

At present, the HIV/AIDS epidemic in China is concentrated among key populations, particularly among gay men and other MSM (UNAIDS 2021). Another study estimated that by October 2020, there were 1.045 million people actually reported living with HIV/AIDS across China (National Health Commission of China [NHC] 2020). The political commitment, social engagement, and international support that are jointly responsible for this remarkable achievement have rarely been evaluated or reviewed. UNAIDS provides country progress reports on the achievements of the UNAIDS strategy, more specifically on improvements that relate to achieving the UNAIDS '95-95-95' targets – namely, that 95% of all people living

with HIV know their HIV status; 95% of all people with diagnosed HIV infection receive ART; and 95% of all people receiving ART achieve viral suppression (UNAIDS 2019).

In response to the first epidemic outbreak of HIV among injecting drug users and the second one through illegal commercial blood collection, China issued the Anti-Drug Law and launched the Blood Donation Act which almost ended the blood product-related infection. China has been providing free ART since 2003, which has covered more than 80% of the identified patients and achieved a viral suppression rate of 91% (UNAIDS 2019; Xu et al. 2021). To bend the curve of HIV/AIDS, China should consider constraining HIV spread through sexual transmission, narrowing the gaps in identifying HIV cases, and guaranteeing access to ART for all people in need.

### *Hepatitis C in Central Asia and China*

With approximately 71 million people chronically infected worldwide, viral hepatitis is a global health concern (Botheju et al. 2019). Hepatitis C is a bloodborne virus that is transmitted through sharing needles, syringes, or other drug-injection equipment; from gestational parent to baby during pregnancy or at birth; or rarely through sexual contact (CDC n.d.). PWID are particularly vulnerable to HCV (Botheju et al. 2019). Transmission can occur through sharing needles, syringes, or preparation equipment or through blood contact (Center for Disease Control [CDC] n.d.).

Central Asia is one of the regions most affected by HCV infections, with Uzbekistan enduring one of the highest prevalence levels globally (Botheju et al. 2019). The spread of HCV in Central Asia is driven by injecting drug use and healthcare exposures (Botheju et al. 2019). In China, reported cases of HCV infections have been increasing since the beginning of the 21<sup>st</sup> century (Duan et al. 2014; Liu et al. 2021). Both in Central Asia and China, PWID are particularly affected by HCV. Overall, HCV infections, prevention, and treatment are not a focal point of social policy in Central Asia and China. Historically, viral hepatitis has been a serious public health problem in Central Asian countries, a situation that worsened after the end of the Soviet Union (Akmatov et al. 2023). Despite public health concerns, there is a lack of robust data on the epidemiology of viral hepatitis in both Central Asia and China (Liu et al. 2021; Akmatov et al. 2023).

For Kazakhstan, a recent meta study found that HCV prevalence ranged from 0.7% to 5.1% among the general population, with a median of 0.9%, and from 2.0% to 50.0% among populations at intermediate risk, with a median of 29.0% (Botheju et al. 2019). Among key populations, HCV prevalence is substantially higher: studies found an HCV prevalence of 40.3% in PLWH and 43.3%–90.2% among PWID, with a median of 60.3% (Botheju et al. 2019).

In Kyrgyzstan, the situation is similar to Kazakhstan. Among the general population, HCV prevalence ranged from 0.8% to 5.0%, with a median of 2.0%. Among PWID, HCV prevalence ranged from 17.0% to 60.4%, with a median of 46.4% (Botheju et al. 2019).

In Tajikistan, HCV prevalence ranged from 0.5% to 7.3% among the general population, with a median of 3.9%. Among PWID, HCV prevalence was between 24.9% and 67.1%, with a median of 32.6% (Botheju et al. 2019). Studies on Tajikistan have especially looked into risk factors for HCV transmission among PWID: daily injection, a history of incarceration, and living/working outside of Tajikistan in the past ten years were all associated with a higher risk of HCV infection (Botheju et al. 2019).

For Turkmenistan, no epidemiological studies on HCV are available (Botheju et al. 2019).

Uzbekistan has a particularly high prevalence of HCV. Among the general population, it was between 6.4% and 13.1%, with a median of 11.9%. Among PWID, HCV prevalence ranged between 20.9% and 63.8%, with a median of 51.7% (Botheju et al. 2019). There are an estimated 2.1 million people with a chronic HCV infection in Uzbekistan. This means that about 80% of people with a chronic HCV infection in Central Asia reside in Uzbekistan (Botheju et al. 2019). The high HCV prevalence in Uzbekistan is associated, among other things, with 'excessive practice of medical and non-medical invasive procedures, such as blood transfusion and bloodletting, in addition to poor infection control, inadequate blood screening, and use of unsafe medical injections' (Botheju et al. 2019).

This comparison of the countries of Central Asia shows a significant variation in HCV prevalence, with Uzbekistan being the most affected country in the region. The comparison of key populations shows that the prevalence of HCV is especially high among PWID, with 51.3% of the cohort being positive (Botheju et al. 2019). PWID are also vulnerable to HIV. From the high level of comorbidities, we can conclude that the two epidemics overlap. To make matters worse, there is hardly any treatment

available for HCV patients, as treatment remains unaffordable (CADAP 2019).

In comparison to Central Asia, China is less affected by HCV. A 2016 study found that HCV prevalence was 1.3% among the general population (Petruzziello et al. 2016). The primary challenge in HCV management in China is a complex issue that involves identifying HCV-infected patients, ensuring their access to treatment options, and making treatment affordable. Furthermore, patient adherence and physician guidance could introduce additional variability in the eventual therapeutic outcomes. The absence of a comprehensive epidemiological monitoring system in China also presents additional hurdles in enhancing HCV management at a national level.

### *HIV and Hepatitis C Prevention and Care among Key Populations*

HIV and HCV are described as dual epidemics that mainly affect key populations. The overlapping nature of the two epidemics stems from underlying behaviours and health disparities among disproportionately affected populations, primarily PWID (Moorman et al. 2023). The particular vulnerability of PWID is particularly evident in Central Asia and China, as tailored prevention programmes are not sufficiently available for PWID. International evidence shows that harm reduction services are key to prevent the transmission of HIV and HCV among PWID. Although the effectiveness of harm reduction has been proven in international research, the availability and coverage of harm reduction services in Central Asia and China is still low.

The reasons for the limited access to and low coverage of harm reduction programmes are of a political nature. There is a strong link between the lack of harm reduction services and conservative legislation that focuses on control and repression rather than on assistance and support for key populations. Key populations, and especially PWID, often face stigmatisation and discrimination in the healthcare system. They are also not seen as a priority by policymakers. Consequently, existing programmes are often limited to small-scale projects that are developed by local community organisations and financed by international donors. As a result, key populations often lack access to medical services, and HIV, tuberculosis (TB), and HCV coinfections are a widespread concern. According to a recent study, up to 50% of individuals, co-infected with HIV and multidrug-resistant TB

(MDR-TB) in Eastern Europe and Central Asia die within two years of treatment initiation (Kraef et al. 2022). Moreover, ART coverage for PLWH in the region is far below the UNAIDS 90% targets (Kraef et al. 2022). The overall policy approach has a negative effect on the situation of PWID and key populations in both Central Asia and China.

To improve the effectiveness of harm reduction efforts in Central Asia and China, the structural conditions must be changed. Local experts argue that there is a lack of prevention programmes for populations in Central Asia and China. For example, there is no outpatient counselling or support services for key populations. There is hardly any outreach work among PWID, except for a few programmes that are conducted by community organisations of former drug users. Secondly, social work is still in its infancy and is not equipped to work with people with drug use disorders. However, over the past decade, the involvement of international donors in the region's overall development has had a positive influence on the development of drug policies, treatment, and prevention of the spread of associated infectious diseases (Michels et al. 2017).

As a result of this international investment, modern and effective harm reduction approaches have been adapted by local NGOs and have generated social and professional initiatives aiming to engage the local governments to strive for more humane drug policies (Michels et al. 2017/2020). In its 'Bishkek Resolution', the CADAP project concluded that the 'consolidated work of non-commercial organizations, community-based organizations, governmental agencies, international organizations and donors' has made a significant impact on the development of social work with people who use drugs (CADAP 2018).

The same holds true for China. Although organised social work in China was established more than 30 years ago, the profession of social work did not play an explicit role in the grand scheme of 'socialist society' until the end of the 20<sup>th</sup> century (Xiong/Wang 2007; Dominelli 2020). This picture has changed significantly since then, as the country has begun to implement professional accreditation of social workers through training, social work degree programmes at universities, and professional assessment standards (Xiong/Wang 2007; Sherraden et al. 2020). With the expansion of social work schools, the China Association for Social Work Education (CASWE) has played a significant role in leading and promoting professional social work training and has had a profound influence both on formalising the curriculum and on improving the quality of social work teaching.

The lack of social support structures for key populations can be explained by the stigmatisation and marginalisation of these groups by both healthcare professionals and the general public. Existing laws, which often-times contradict each other in terms of implementation strategies, have also played a role in excluding key populations from service delivery. Moreover, NGOs are not involved in preparing applications for ART, which is often a strenuous process for patients. There are no job positions for social workers in inpatient facilities such as hospitals or AIDS centres in China. In addition, most NGO workers in the HIV/AIDS institutions have no social work education or training. Furthermore, if employed, social workers are paid low wages, making the profession unattractive for the majority of young graduates. For example, in AIDS centres and hospitals, the role of medical workers is more highly valued than that of social workers; equally, providing basic medical assistance is deemed more important than providing social assistance when it comes to ‘social diseases’ such as HIV/AIDS (see also Sultan/Mažeikienė 2019).

One important issue for improving access to services is dealing with stigma and discrimination. Anderson and Fenton (2022) argue that ‘despite major advances, people with HIV still experience more multimorbidity and poorer health-related quality of life than people without HIV. They frequently face other intersecting forms of stigma, in relation to race, gender, sexual orientation, and migration status.’ According to Anderson and Fenton (2022), service providers such as social workers and healthcare professionals are important for eliminating stigma so that healthcare becomes a safe environment for key populations. In Central Asia and China, several programmes have been initiated that address stigma and discrimination and thereby strive to improve access to services for key populations. In Kyrgyzstan, for example, special training courses have been developed that prepare social workers to provide services to PLWH.

The media plays a powerful role in shaping public perceptions of HIV/AIDS and HCV (see Chapter 11, ‘Media Portrayal and Stigma’ by Uladzimir Pikirenia in this book). However, media representations of HIV/AIDS are often inaccurate and stigmatising. These representations can have a negative impact on the lives of people living with HIV, making it more difficult for them to access the services they need and leading to social isolation and discrimination. Stigma has been driven by societal beliefs about the severity and contagiousness of HIV, perceptions that people who acquire HIV are blameworthy, and associations between HIV and behaviours that violate some individuals’ behaviour variations, such as sex between men, having



multiple partners, drug use, and sex work. These stereotypes can have a devastating impact on the lives of people living with HIV. They can lead to social isolation, discrimination, and even violence.

One of the most important areas in which the services of social workers are in demand is in the provision of psychosocial support for key populations. This entails open conversations, awareness raising, counselling, and facilitating access to social and medical institutions. NGOs can play a central role in the protection of rights and the provision of social support for PLWH. Worldwide, social workers fulfil a key role in providing services to key populations. However, the practice of involving social workers in prevention services for PWID is still new in Central Asia and China. The countries lack experience in developing social work services, despite the available evidence showing that injecting drug use, HIV, and HCV pose public health concerns.

Another indispensable basis for the development of prevention strategies is the availability of high-quality data. For Central Asia and China, however, there is not enough reliable data on the epidemiological development of HIV and HCV in key populations. It is therefore difficult to make a good assessment of vulnerability and to design well-coordinated prevention strategies. For example, a systematic *Lancet* review on the global, regional, and country-level coverage of testing and treatment for HIV and hepatitis C infection among PWID from November 2023 (Hajarizadeh et al. 2023) showed that data from recent HIV antibody testing were available for 67 countries and data on HCV antibody testing were available for 49 countries. Globally, an estimated 48.8% of PWID have been recently tested for HIV antibodies and 47.1% have at some point in time been tested for HCV antibodies. The authors concluded that HIV and HCV testing and treatment uptake among PWID was highly variable and suboptimal in most countries. Strategies to improve access to HIV and HCV testing and treatment for PWID and the availability of public health surveillance are urgently required.

Regarding Central Asia and China, hardly any data were included in this research; all that was available was estimations of the percentage of PWID who have ever been tested for HIV (11.5%) or HCV antibodies (10.7%) and data from only one of the five CA countries, but no data on the percentage of PWID with HIV or/and hepatitis C currently receiving HIV antiretroviral therapy or HCV treatment. Only Tajikistan was included in the study by Hajarizadeh et al. (2023), with an estimated 26,000 injecting drug users (mostly heroin users), of whom 61.3% had been tested for HCV



antibodies and 46% had received treatment. This example shows that there is a need to improve the data situation regarding the overlapping HIV and HCV epidemics in Central Asia and China.

### *The Way Forward: How to Involve NGOs and Improve Services for Key Populations*

The quality of life of people living with HIV or HCV is influenced by a number of factors, including general well-being, family status, emotional support, social contacts, environment, access to education, stigma, and discrimination, as well as the availability, accessibility, and affordability of both medical and social services (Jolley et al. 2012). In light of these factors, PLWH require comprehensive programmes that provide professional support by social workers and other social and medical service professionals. Given the fact that the role of social workers is mainly oriented at changing public opinion, building tolerance towards PLWH in society, and mobilising and activating affected people, outreach work and the use of peer-to-peer approaches have proven especially effective in the countries of Central Asia and China.

At present, social work is mostly carried out by outreach workers in places with key populations, such as prisons, street drug scenes, and other social spaces where marginalised people can be found. Both social work on the streets – with PWID and women involved in sex work – and mobile points (specially equipped vehicles for harm reduction services such as needle exchange programmes) can provide primary medical care, testing, and psychological and other preventive counselling. It is essential to develop partnerships between government agencies and NGOs, to provide financial support to NGO-led projects and to organise the financing of NGO-provided services through state contracts.

One of the aims of this book is to identify key factors emerging from close collaboration between local NGOs and project coordinators in each partnering country. We provide an overview of social work approaches in the region, including harm reduction, and drug treatment services. This includes an analysis of the situation of key populations, including people living in prison, MSM, transgender people, and sex workers. We also discuss medical services for HIV and HCV, HIV and TB comorbidity cases, the treatment and prevention of HIV, collaboration between public health authorities and social partners, implementation strategies of ART therapy,

HIV prevention in the penitentiary system, and finally the benefits of social work for people living with HIV/AIDS.

The findings suggest a need for further exploration of the interrelations between local and international NGOs, international donors, and governments. The provision of state-funded healthcare, harm reduction, and awareness-raising programmes depends on direct communication, the building of trust, and the role of effective and knowledgeable mediators. The following chapters show that the prevalence of HIV, HCV, and other infectious diseases associated with injecting drug use, sex work, and incarceration should be addressed at structural, social, and individual levels. These levels also enable the identification of the strategies necessary for working with key populations, based on indicators such as participation in the labour market, access to social protection, social and economic stratification, and individual biographies (Scheil-Adlung/Kuhl 2011). Our research findings suggest that social work with key populations requires well-organised management, a comprehensive approach to problem-solving strategies, systematic training of local social workers, increased engagement in the social support of vulnerable populations on a state level, and, as a result, the overall strengthening of interaction between all bodies responsible for HIV/AIDS and HCV prevention.

### *Overview of the Book*

This publication presents information on the dual epidemics of HIV and HCV in Central Asia and China. Both epidemics disproportionately affect PWID who are affected by social marginalisation and discrimination. The aim of social work with this key population is to give clients access to medical and social services and to support and stabilise them so that they can make use of services. The development of social work with PWID is a complex process with many obstacles. The present publication shows the efforts that have been made to address the specific needs and vulnerabilities of PWID in Central Asia and China. The book is divided into two parts – country case studies and cross-cutting issues.

The first part of this publication includes five country studies that delve deeper into the development of HIV and HCV in the region of Central Asia and China. Each country case study comprises information about the epidemiological trends and the policy responses in the individual countries.

The first case study is Chapter 2, 'HIV and Hepatitis C in China' by Hang Su, Yifan Xu, and Jiang Du, which analyses the development of the HIV/AIDS and Hepatitis C epidemics and respective policy responses in China. The author argues that the country has made substantial progress in addressing the epidemics management, but there is still a significant journey ahead.

Chapter 3, 'HIV and Hepatitis C in Kazakhstan' by Dinara Yessimova, Mariya Prilutskaya, Dalida Mukasheva, Medet Kudabekov, and Sandugash Ismagulova provides a comprehensive account of the development of HIV/AIDS and HCV in Kazakhstan. The chapter studies the vulnerability in different population groups and gives a detailed account on the government response to the two overlapping epidemics. The argue that Kazakhstan needs multi-disciplinary teams, consisting of medical doctors and social workers, to effectively respond to HIV and HCV. The chapter concludes with an outlook on Kazakhstan's effort to reach the United Nations Sustainable Development Goals.

Chapter 4, 'HIV and Hepatitis C in Kyrgyzstan' by Jarkyn Shadymanova and Nurgul Musaeva shows that stigma and discrimination remains a main barrier in the response to the epidemics. The authors argue that addressing the complexities of HIV and HCV requires a comprehensive strategy encompassing medical, social, legal, and economic dimensions. According to Shadymanova and Musaeva, Kyrgyzstan has demonstrated a firm commitment to safeguarding its citizens' health by integrating HIV/AIDS and HCV initiatives into its long-term national development plan. Most importantly, Kyrgyzstan is committed to reach key populations, educate the public, and uphold partnerships with NGOs to sustain progress against HIV and HCV.

Chapter 5, 'HIV and Hepatitis C in Tajikistan' by Safarkhon Sattorov, Alijon Soliev, Umed Talbov, Sona Orbelyan, and Mykyta Trofymenko discusses the development of the two epidemics in Tajikistan. The authors argue that Tajikistan has made significant progress in its response to the HIV epidemic. The number of people covered by prevention, testing, and treatment services increased dramatically, which led to a decrease in the AIDS mortality rate. Tajikistan has also demonstrated its commitment to developing a system for responding to HCV by joining the Coalition for Global Hepatitis Elimination and requesting that the WHO conducts a hepatitis assessment in Tajikistan.

The last country case study is Chapter 6, 'HIV and Hepatitis C in Uzbekistan' by Uladzimir Pikirenia and Azizbek Boltaev, which examines the efforts to control HIV and HCV epidemics. The authors argue that

the country faces significant challenges in the fight against HIV/AIDS and Hepatitis C. Stigma and discrimination continue to hinder access to and uptake of HIV testing and treatment services, particularly among key populations. In addition, the criminalization of behaviors associated with HIV transmission, such as drug use and sex work and MSM, exacerbates this issue, creating barriers to effective prevention and care.

The second part contains additional case studies and cross-cutting issues, such as stigma and discrimination that hamper the response to the HIV/AIDS and Hepatitis C epidemics in Central Asia and China. Other cross-cutting issues concern the role of NGOs in the response to HIV/AIDS and Hepatitis C, media reporting and the development of specific interventions such as harm reduction programmes.

Chapter 7, 'Stigma' by Hang Su, Yifan Xu, and Jiang Du, deals with HIV-related stigma in China. According to the authors, stigma significantly influences people's decisions and behaviours, diminishing their willingness to participate in HIV testing, treatment, and prevention efforts. The authors argue that efforts to reduce the burden of stigma should strategically target key risk factors associated with this issue. Specifically, interventions need to be tailored to populations experiencing heightened stigma, including urban residents and individuals with depression. Consequently, China needs to provide social support and education for the families of patients, thus strengthening connections with potential support networks. Furthermore, future strategies should focus on training health professionals and community leaders in empathy-building, stigma reduction, and discrimination elimination. This will contribute to creating a supportive clinical environment for individuals living with HIV and HCV in China.

Chapter 8, 'Opioid Antagonist Maintenance Treatment in Central Asia' by Uladzimir Pikirenia, Medet Kudabekov, Zhyldyz Bakirova, and Azizbek Boltaev, provides a comparative overview of the development of opioid antagonist maintenance treatment (OAMT) in Central Asia. The authors argue that OAMT is a key strategy in the response to HIV/AIDS and Hepatitis C among people who use drugs. Despite medical evidence, OAMT is not implemented in all countries of Central Asia. Only Kyrgyzstan and Tajikistan currently offer a full programme, whereas Kazakhstan has introduced a pilot programme. In contrast, OAMT is not available in Turkmenistan and Uzbekistan.

Chapter 9, 'Labor Migrants: Exploration of the New Driving Force of the HIV Epidemic in Uzbekistan' by Azizbek Boltaev turns to the vulnerable group of migrant workers in Uzbekistan. Nearly 5 million migrants from

Central Asia were living in the Russia by end of 2020, among which over 630,000 Uzbeks. Labour migrant regularly return to their home country. They are particularly vulnerable to HIV, as Russia has a much higher prevalence rate than the countries of Central Asia. Azizbek Boltaev shows that HIV prevalence among labour migrant is significantly higher than in the general population. It was 1.1% in 2021. There is a particularly high HIV prevalence among labour migrants from the cities Samarkand (4.8%), Nukus (1.7%), and Andijan (1.6%).

Chapter 10, 'Harm Reduction Programmes in HIV/AIDS Prevention in Kyrgyzstan: Experience, Problems, and Prospects' by Tynchtyk Estebeş uulu discusses the development of harm reduction services in Kyrgyzstan. The author argues that harm reduction programmes provide information on safe drug use thereby contribute to reducing the spread of HIV among people who use drugs. By doing this, harm reduction programmes have a positive impact on public health and promote the social integration of people who use drugs. Furthermore, harm reduction helps to reduce stigma and discrimination. The chapter by Tynchtyk Estebeş uulu also emphasizes the importance of a sociological approach in studying and improving the effectiveness of these programmes.

Chapter 11, 'Media Portrayal and Stigma: Analysing HIV/AIDS Coverage in Uzbekistan's Press' by Uladzimir Pikirenia presents another case study from Uzbekistan. The author analyses the way in which the HIV/AIDS epidemic is portrayed in Uzbek media. The chapter presents the findings of a study regarding the presentation of HIV/AIDS in the 14 most popular media outlets in Uzbekistan during November 2022 to October 2023. Many media articles make use of a stigmatizing language, particularly with regard to key population. A particularly troubling aspect of the media coverage is the emphasis on the criminal penalties faced by women under Article 113 of the Criminal Code, which penalises the transmission of HIV/AIDS. The author argues that journalists should be encouraged to follow guidelines for HIV reporting, ensuring that coverage is not only accurate but also respectful and free from stigmatising language.

Chapter 12, 'The Role of public organizations and non-governmental organizations in addressing and supporting people with HIV' by Guzalkhon Zakhidova, deals with the work of community-based organisations in supporting people living with HIV in Uzbekistan. The author paints a picture of the development of the most relevant civil society organisations in Uzbekistan that have developed services for key populations. The author argues that NGOs have become key actors in HIV prevention efforts and

are playing a pivotal role in advocacy, programme development and support services.

Chapter 13, 'Innovative Approaches in Adolescent Sexual Education: Bridging the Gap between Awareness and Action in Uzbekistan' by Tatsiana Pikirenia, discusses the development of HIV prevention programmes among adolescents and schoolchildren. According to the author, it is essential to look at many problems through the eyes of teenagers and assess whether the surrounding infrastructure meets their needs and how programmes can be improved to prevent destructive forms of behaviour among young people. By targeting adolescents and schoolchildren with appropriate interventions, it's possible to significantly reduce their risk of HIV and STI transmission and support their overall health and well-being.

Chapter 14, 'Social and Psychological Assistance to Women Living with HIV in Kyrgyzstan' by Alla Bessonova, Asel Tentigenova, and Nurgul Mu-saeva, discusses the development of psychosocial support programmes for mothers with HIV in Kyrgyzstan who represent a particularly vulnerable group, especially those women who use or had been using drugs. The authors argue that it is necessary to strengthen support services in Kyrgyzstan, as mothers and children with HIV require special attention due to stigma and stereotyping.

Chapter 15, 'The Role of Social Work in the Prevention and Treatment of HIV/AIDS in Germany' by Larissa Steimle, Heino Stöver, Ingo Ilja Michels, and Daniel Deimel analyses the history of social work and HIV/AIDS in Germany. The authors show that social work plays a prominent role in supporting people affected by HIV/AIDS. To properly address the challenges posed by the epidemic social work in Germany are well advised to take an international perspective, by cooperating with and learning from different countries.

All in all, this book provides a comprehensive overview of the situation of HIV/AIDS and Hepatitis C in Central Asia and China, focusing on the specific vulnerabilities of people who inject drugs. The contributions show that the two overlapping epidemics present serious challenges for the region. Although important progress has been achieved, a lot of work still needs to be done in order to develop effective responses. The authors of this volume show approaches that can make a difference.

## Bibliography

- Akmatov, Manas K./Beisheeva, Nurgul J./Nurmatov, Asylbek Z./Gulsunai, Sattarova J./Saikal, Kylychbekova N./Derkenbaeva, Aisuluu A. et al. (2023): The Changing Epidemiology of Viral Hepatitis in a Post-Soviet Country – The Case of Kyrgyzstan. In: *Pathogens* 12, No. 8, p. 989.
- Anderson, Jane/Fenton, Kevin (2022): HIV related stigma: a dangerous roadblock. In: *BMJ* 379, No. o2989. DOI: 10.1136/bmj.o2989.
- Azbel, Lyuba/Rozanova, Julia/Michels, Ingo/Altice, Frederick L./Stöver, Heino (2017): A qualitative assessment of an abstinence-oriented therapeutic community for prisoners with substance use disorders in Kyrgyzstan. In: *Harm Reduction Journal* 14, No. 43, pp. 1–9.
- Bobrova, Natalia/Sarang, Anya/Stuikyte, Raminta/Lezhentsev, Konstantin (2007): Obstacles in provision of anti-retroviral treatment to drug users in Central and Eastern Europe and Central Asia: A regional overview. In: *International Journal of Drug Policy* 18, No. 4, pp. 313–318.
- Botheju, Welathanthrige S.P./Zghyer, Fawzi/Mahmud, Sarwat/Terlikbayeva, Assel/El-Bassel, Nabila/Abu-Raddad, Laith J. (2019): The epidemiology of hepatitis C virus in Central Asia: Systematic review, meta-analyses, and meta-regression analyses. In: *Scientific Reports* 9, No. 2090, pp. 1–15.
- Center for Disease Control (CDC) (n.d.): Fact Sheet Hepatitis C and injecting drug use. [www.cdc.gov/hepatitis/hcv/pdfs/factsheet-pwid.pdf](http://www.cdc.gov/hepatitis/hcv/pdfs/factsheet-pwid.pdf), 12.02.2024.
- Central Asia Drug Action Programme (CADAP) (2018): Resolution. International conference ‘The role of community and social work in the sphere of drug use and prevention of infectious diseases’, Bishkek, Kyrgyzstan, 24–25 January 2018.
- Central Asia Drug Action Programme (CADAP) (2019): Regional Report on the Drug Situation in Central Asia. [www.solid-exceed.org/resources/publication/regional-report-drug-situation-central-asia](http://www.solid-exceed.org/resources/publication/regional-report-drug-situation-central-asia), 27.02.2024.
- Central Asia Drug Action Programme (CADAP) (2020): Central Asia Drug Action Programme (CADAP) Phase 6. Final Report. March 2020. [www.researchgate.net/publication/340453078\\_Central\\_Asia\\_Drug\\_Action\\_Programme\\_CADAP\\_Phase\\_6\\_Final\\_Report\\_A\\_European\\_Union\\_Assistance\\_Programme\\_for\\_Central\\_Asia](http://www.researchgate.net/publication/340453078_Central_Asia_Drug_Action_Programme_CADAP_Phase_6_Final_Report_A_European_Union_Assistance_Programme_for_Central_Asia), 27.02.2024.
- Deryabina, Anna P./Patnaik, Padmaja/El-Sadr, Wafaa M. (2019): Underreported injection drug use and its potential contribution to reported increase in sexual transmission of HIV in Kazakhstan and Kyrgyzstan. In: *Harm Reduction Journal* 16, No. 1, pp. 2–7.
- Dominelli, Lena (2020): Personal reflections on 30 years of social work development in China. In: *China Journal of Social Work* 13, No. 1, pp. 102–109.
- Duan, Zhongping/Jia, Ji-Dong/Hou, Jinlin/Lou, Lillian/Tobias, Hillel/Xu, Xiao Yuan et al. (2014): Current Challenges and the Management of Chronic Hepatitis C in Mainland China. In: *Journal of Clinical Gastroenterology* 48, No. 8, pp. 679–686. DOI: 10.1097/MCG.000000000000109.



- Golichenko, Mikhail (2020): Documenting human rights violations is not enough to reform archaic drug policies in Eastern Europe and Central Asia. In: Bewley-Taylor, David R./Tinasti, Khalid (eds.): *Research Handbook on International Drug Policy*. Cheltenham: Edward Elgar Publishing, pp. 113–130.
- Habibov, Nazim (2016): Effect of corruption on healthcare satisfaction in post-soviet nations: A cross-country instrumental variable analysis of twelve countries. In: *Social Science and Medicine* 152, pp. 119–124.
- Hajarizadeh, Behzad/Kairouz, Abe/Ottaviano, Sophie/Ireland, Jeremy/Willing, Alex/Cunningham, Evan/Webb, Paige et al. (2023): Global, regional, and country-level coverage of testing and treatment for HIV and hepatitis C infection among people who inject drugs: a systematic review. In: *The Lancet Global Health* 11, No. 12, pp. e1885–e1898.
- InBeAIDS (2020): Prevention of infectious diseases and treatment of HIV/AIDS and hepatitis among injecting drug users in Central Asia and the contribution of social work to the services for drug using people (InBeAIDS). Frankfurt am Main: Frankfurt University of Applied Sciences. DOI: 10.13140/RG.2.2.24808.62727.
- Jolley, Emma/Rhodes, Tim/Platt, Lucy/Hope, Vivian/Latypov, Alisher/Donoghoe, Martin/Wilson, David (2012): HIV among people who inject drugs in Central and Eastern Europe and Central Asia: A systematic review with implications for policy. In: *BMJ Open* 2, No. 5, p. e001465.
- Kaufman, Joan/Jing, Jun (2002): China and AIDS – the time to act is now. In: *Science* 296, No. 5577, pp. 2339–2340.
- Kraef, Christian/Bentzon, Adrian/Skrahina, Alena/Mocroft, Amanda/Peters, Lars/Lundgren, Jens D./Chkhartishvili, Nikoloz et al. (2022): Improving healthcare for patients with HIV, tuberculosis and hepatitis C in eastern Europe: a review of current challenges and important next steps. In: *HIV Medicine* 23, No. 1, pp. 48–59.
- LaMonaca, Katherine/Dumchev, Kostyantyn/Dvoriak, Sergii/Azbel, Lyuba/Morozova, Olga/Altice, Frederick L. (2019): HIV, Drug Injection, and Harm Reduction Trends in Eastern Europe and Central Asia: Implications for International and Domestic Policy. In: *Current Psychiatry Reports* 21, No. 7, p. 47.
- Liu, Xue-Jiao/McGoogan, Jennifer M./Wu, Zun-You (2021): Human immunodeficiency virus/acquired immunodeficiency syndrome prevalence, incidence, and mortality in China, 1990 to 2017: a secondary analysis of the Global Burden of Disease Study 2017 data. In: *Chinese Medical Journal* 134, No. 10, pp. 1175–1180.
- Michels, Ingo Ilja/Keizer, Bob/Trautmann, Franz/Stöver, Heino/Robelló, Ernest (2017): Improvement of Treatment of Drug use Disorders in Central Asia the contribution of the EU Central Asia Drug Action Programme (CADAP). In: *Journal of Addiction Medicine and Therapy* 5, No. 1, pp. 1–14.
- Michels, Ingo Ilja/Stöver, Heino (2022): *Drug Treatment, Culture and Social Policy in Central Asia and China*. 3<sup>rd</sup> ed., Baden-Baden: Nomos.
- Michels, Ingo Ilja/Stöver, Heino/Aizberg, Oleg/Boltaev, Azizbek (2020): Opioid Agonist Treatment for Opioid Use Disorder patients in Central Asia. In: *Heroin Addiction and Related Clinical Problems* 22, No. 1, pp. 33–46.



- Moorman, Anne C./Bixler, Danae/Teshale, Eyasu H./Hofmeister, Megan/Roberts, Henry/Chapin-Bardales, Johanna/Gupta, Neil (2023): Hepatitis C Virus-HIV Coinfection in the United States Among People Who Inject Drugs: Data Needed for Ending Dual Epidemics. In: Public Health Reports. DOI: 10.1177/00333549231181348.
- National Health Commission of China (NHC) (2020): Home page. [www.nhc.gov.cn/jkj/new\\_index.shtml](http://www.nhc.gov.cn/jkj/new_index.shtml), 01.06.2021.
- Pape, Ulla (2019): HIV/AIDS politics and policy in Eastern Europe and Central Asia. In: Oxford Research Encyclopaedia of Politics. DOI: 10.1093/acrefore/9780190228637.013.1314.
- Petruzziello, Arnolfo/Marigliano, Samatha/Loquercio, Giovanna/Cozzolino, Anna/Cacciapuoti, Carmela (2016): Global epidemiology of hepatitis C virus infection: An up-date of the distribution and circulation of hepatitis C virus genotypes. In: World Journal of Gastroenterology 22, No. 34, pp. 7824–7840. DOI: 10.3748/wjg.v22.i34.7824.
- Scheil-Adlung, Xenia/Kuhl, Catharina (2011): Social Security for All: Addressing inequities in access to health care for vulnerable groups in countries of Europe and Central Asia. Geneva: International Labour Office, Social Security Department.
- Sherraden, Michael/Yuen-Tsang, Angelina W.K./Wang, Sibin/Khinduka, Shanti/Zou, Li/Deng, Suo/Gao, Jianguo et al. (2020): Re-emergence of social work in modern China: A perspective by Chinese and U.S. partners. In: China Journal of Social Work 13, No. 1, pp. 40–54. DOI: 10.1080/17525098.2020.1732534.
- Su, Hang (2022): China: history of development of addiction treatment social work in China. In: Michels, Ingo Ilja/Stöver, Heino (eds.): Drug Treatment, Culture and Social Policy in Central Asia and China. 3<sup>rd</sup> ed., Baden-Baden: Nomos, pp. 53–72.
- Sultan, Aysel/Mažeikienė, Natalija (2021): Living with HIV in post-Soviet states: Rejecting individual stigma through social activism. In: International Social Work 64, No. 3, pp. 386–398. DOI: 10.1177/0020872819858746.
- The Joint United Nations Programme on HIV/AIDS (UNAIDS) (2018): Miles To Go. Closing Gaps Breaking Barriers Righting Injustices. [www.unaids.org/sites/default/files/media\\_asset/miles-to-go\\_en.pdf](http://www.unaids.org/sites/default/files/media_asset/miles-to-go_en.pdf), 12.02.2024.
- The Joint United Nations Programme on HIV/AIDS (UNAIDS) (2019): Country progress report – China. Global AIDS Monitoring 2019. [www.unaids.org/sites/default/files/country/documents/CHN\\_2019\\_countryreport.pdf](http://www.unaids.org/sites/default/files/country/documents/CHN_2019_countryreport.pdf), 26.02.2024.
- The Joint United Nations Programme on HIV/AIDS (UNAIDS) (2021): China. Community-based organizations call for scaled up Internet-based HIV prevention services in China. 14<sup>th</sup> September 2021. [www.unaids.org/en/keywords/china#:~:text=C%20community%20based%20organizations%20call%20for,HIV%20prevention%20services%20in%20China&text=called%20for%20strengthen-,Networks%20of%20key%20populations%20and%20community%20based%20organizations%20in%20China,Internet%20based%20HIV%20prevention%20services](http://www.unaids.org/en/keywords/china#:~:text=C%20community%20based%20organizations%20call%20for,HIV%20prevention%20services%20in%20China&text=called%20for%20strengthen-,Networks%20of%20key%20populations%20and%20community%20based%20organizations%20in%20China,Internet%20based%20HIV%20prevention%20services), 26.02.2024.
- Thorne, Claire/Ferencic, Nina/Malyuta, Ruslan/Mimica, Jadranka/Niemiec, Tomasz (2010): Central Asia: Hotspot in the worldwide HIV epidemic. In: The Lancet. Infectious diseases 10, No. 7, pp. 479–488. DOI: 10.1016/S1473-3099(10)70118-3.
- United Nations (n.d.): The 17 Goals. [www.sdgs.un.org/goals](http://www.sdgs.un.org/goals), 12.02.2024.

- Vélez-Grau, Carolina/El-Bassel, Nabila/McCrimmon, Tara/Terlikbayeva, Assel/Primbetova, Sholpan/Mergenova, Gaukhar/Bussey, Erin et al. (2022): 'I never hoped for anything ... now I have other plans': The role of microfinance in HIV intervention for women who use drugs and engage in sex work in Kazakhstan. In: *International Social Work* 65, No. 4, pp. 663–677.
- Xiong, Yuegen/Wang, Sabin (2007): Development of Social Work Education in China in the Context of New Policy Initiatives: Issues and Challenges. In: *Social Work Education* 26, No. 6, pp. 560–572.
- Xu, Jun-Jie/Han, Meng-Jie/Jiang, Yong-Jun/Ding, Hai-Bo/Li, Xi/Han, Xiao-Xu/Lv, Fan et al. (2021): Prevention and control of HIV/AIDS in China: lessons from the past three decades. In: *Chinese Medical Journal* 134, No. 23, pp. 2799–2809.
- Zabransky, Tomas/Mravicik, Viktor/Talu, Ave/Jasaitis, Ernestas (2014): Post-Soviet Central Asia: A summary of the drug situation. In: *International Journal of Drug Policy* 25, No. 6, pp. 1186–1194.