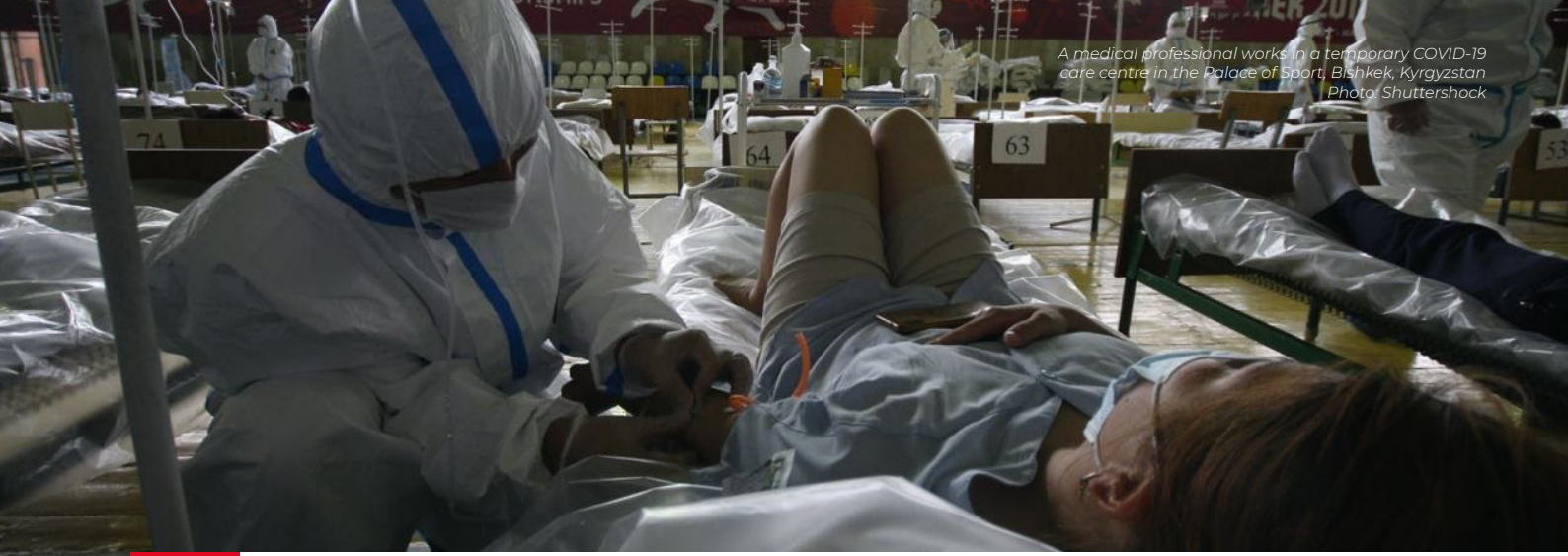

A medical professional works in a temporary COVID-19 care centre in the Palace of Sport, Bishkek, Kyrgyzstan
Photo: Shuttershock

Kyrgyzstan

COVID-19 RESPONSE AND IMPACT ON HIV AND TB SERVICES

(Reviewed by: Andrei Mosneaga, Stop TB Partnership)

Executive Summary

Population[1]	6,524,000
COVID-19 deaths per 100,000 population[2] (at 1 March 2021)	22.4
COVID-19 lockdown(s) initiated	Yes - 24 March 2020
Disruption to harm reduction services	Yes
Reduced TB and HIV detection	Yes
Integrated TB, HIV and COVID-19 testing	No
Reduced access to clinicians	Yes
Reduced access to peer support and/or psychosocial support	Yes
Stockouts of HIV or TB medications	No

[1] National Statistical Committee of the Kyrgyz Republic, 'Total Population by Nationality (Assessment at the Beginning of the Year, People)' (2020) http://www.stat.kg/en/opendata/category/312/ accessed 1 March 2021

[2] Calculated based on reported deaths on Worldometer. Actual deaths may be higher. https://www.worldometers.info/coronavirus/country/kyrgyzstan/ accessed 1 March 2021

Kyrgyzstan is a lower middle-income country of approximately 6.5 million people bordering Kazakhstan, Uzbekistan, Tajikistan, and China. A number of reforms have taken place over the years of post-Soviet independence» towards universal health coverage. Out-of-pocket health expenditure is high, and few are sufficiently covered by health insurance despite a mandatory health insurance system being introduced in 1994[3]. A 2021 study indicates that catastrophic health expenditure in Kyrgyzstan 'continues to rise unabated' and that 'households are increasingly incurring economic hardship from seeking healthcare'.[4]

In addition to this, there are many gaps reported in terms of quality and capacity of rural healthcare – with one MSF report describing that even without the threat of COVID-19, access to healthcare in Kadamjay, in southwestern Kyrgyzstan, is challenging due to long distances to reach health centres[5]. And while rural healthcare has improved since 1997 through the introduc-tion of family medicine and the retraining of rural doctors and nurses, there has been a loss of health manpower through emigration and attrition[6]. In addition, visits carried out by scientists in 2019 to thirty rural family medicine residents showed deficiencies in basic medical equipment, with none of these thirty residents having their own otoscope (medical device to look into ears).[7]

The country receives substantial overseas development assistance for health, including via the World Bank (to improve primary healthcare quality, including healthcare for pregnant women and diabetics)[8] and the Global Fund for AIDS, Tuberculosis, and Malaria (for overall HIV and TB case, reduction of stigma, empowerment of communities of most-at-risk populations, etcetera)[9]. Kyrgyzstan is also in a list of top 30 countries with the highest absolute numbers of MDRTB cases[10], and receives funding and support from USAID and KNCV to reduce the length of MDRTB treatment regimens, among other key interventions[11]. Infrastructure, coordination, and staffing issues have been cited as key factors in rising cases and deaths post-lockdown in Kyrgyzstan[12]. The lockdown, imposed in an officially-announced state of emergency lasting

[3] Médecins Sans Frontières, 'In Remote Kyrgyzstan, COVID-19 Puts a Strain on the Health System' MSF (22 July 2020) https://www.msf.org/kyrgyzstan-covid-19-strains-health-system accessed 3 February 2021

[4] Mariia Iamshchikova, Roman Mogilevskii, and Michael Nnachebe Onah, 'Trends in out of pocket payments and catastrophic health expenditure in the Kyrgyz Republic post «Manas Taalimi» and «Den Sooluk» health reforms, 2012-2018' (2021) 20(1) Int J Equity Health 30. doi: 10.1186/s12939-020-01358-2.

[5] Médecins Sans Frontières, 'In Remote Kyrgyzstan, COVID-19 Puts a Strain on the Health System' MSF (22 July 2020) https://www.msf.org/kyrgyzstan-covid-19-strains-health-system accessed 3 February 2021

[6] Paul Fonken, Inna Bolotskikh, and others, 'Keys to Expanding the Rural Healthcare Workforce in Kyrgyzstan' (2020) 8(447) Frontieres in Public Health doi: 10.3389/fpubh.2020.00447

[7] Paul Fonken, Inna Bolotskikh, and others, 'Keys to Expanding the Rural Healthcare Workforce in Kyrgyzstan' (2020) 8(447) Frontieres in Public Health doi: 10.3389/fpubh.2020.00447

[8] The World Bank, 'Implementation Status & Results Report: Primary Health Care Quality Improvement Program (P167598)' (2020) http://documents1.worldbank.org/curated/en/441371612270960961/pdf/Disclosable-Version-of-the-ISR-Primary-Health-Care-Quality-Improvement-Program-P167598-Sequence-No-04.pdf accessed 3 February 2021

[9] The Global Fund, 'Baseline Assessment – Kyrgyzstan: Scaling Up Programs to Reduce Human Rights-Related Barriers to HIV and TB Services' (October 2018) https://www.theglobalfund.org/media/8145/crg_humanrightsbaselineassessmentkyrgyzstan_report_en.pdf accessed 3 February 2021

[10] World Health Organization, 'Global Tuberculosis Report 2020' WHO (2020) https://apps.who.int/iris/bitstream/handle/10665/336069/9789240013131-eng.pdf accessed 3 February 2021, 205

[11] Shruti Ravindran, 'USAID's TB strategy as seen from Kyrgyzstan' Devex (25 April 2019) https://www.devex.com/news/usaid-s-tb-strategy-as-seen-from-kyrgyzstan-94724 accessed 3 February 2021

[12] Aruuke Uran Kyzy, 'COVID-19 in Kyrgyzstan: National Unity and Frustration' The Diplomat (21 July 2020) https://thediplomat.com/2020/07/covid-19-in-kyrgyzstan-national-unity-and-frustration accessed 3 February 2021

from 24 March through to 10 May 2020, enabled the government to keep deaths down. However, as lockdown measures eased, cases began to rise evolving in to the first wave of the disease in July 2020 and leading to an overwhelmed healthcare service. During the second wave in autumn 2020, however, the health service was better prepared. Mobile teams for HIV and TB care were deployed across the country to ensure delivery of antiretrovirals and TB medications to patients, and to provide onsite counselling and testing. Health care facilities became better organised and more accessible despite remaining epidemiological security measures. Due to substantial emergency support by the Global Fund, World Bank, and UN agencies, and with increased mobile health interventions, the country was able to meet its needs in rapid tests on COVID-19 and to strengthen community systems on providing prevention, care and support services for key population.

National health authorities admit that the COVID-19 pandemic produced significant effects on access to HIV and TB services in the country due to major distress of the health system and significant decrease in accessibility to and availability of essential services in lockdown conditions[13]. AIDS Centres and TB treatment facilities were focused at addressing emergency cases and care to current patients, while access for new patients was extremely limited. Repurposing of all medical institutions to COVID-19 patients was among the key factors as well. For example, key national HIV and TB institutions, namely the Republican Clinical Infectious Diseases Hospital and National Centre for Phthisiology[14], were partially reprofiled for the admissions of COVID-19 patients for 100 and 38 beds respectively[15]. The number of bacterial diagnostics studies by summer 2020 dropped down for 3 times as compared to the same period of 2019[16]. The study did not reveal interruptions in antiretrovirals and TB medications supply among current patients, as well as practices of changing their treatment regiments over the pandemic period. At the same time serious concerns were raised around drop-down of diagnostics coverage and use of TB medications to treat COVID-19 over the first months of the pandemic as the factors of late TB detection and potential growth of MDR TB forms in the nearest future[17].

In this report, we reviewed country legislation acts and strategic plans, reports of international donor and development agencies, local press articles, and interviewed key stakeholders in the COVID-19, TB, and HIV responses, including Dr. Atyrkul Toktogonova (a TB clinician), Anna (person living with HIV), Evgeny (person living with HIV and TB community representative), and Ravshan Mazhitov (an NGO leader from the city of Osh). We also interviewed an infectious diseases clinician and former member of the central COVID-19 response body, the Republican Headquarters on COVID, who requested anonymity.

[13] HIV and TB Committee under the Coordinating Council on Public Health of the Government of Kyrgyz Republic, Ministry of Health of Kyrgyz Republic, Republican AIDS Centre, National Centre for Phthisiology, 'Plan for adaptation of HIV/TB programmes to COVID-19 conditions', Bishkek 2020, 5, http://hivtbcc.kg/proekti/plan-adaptacii-uslug-v-svjazi-s-vich-i-tb-v-period-epidemii-covid-19, accessed 1 February 2021.

[14] Phthisiology is a field pertaining to the care, treatment, and study of tuberculosis of the lung.

[15] Reliefweb, 'Disaster Response Coordination Unit. Kyrgyzstan: COVID-19 response. Bi-monthly situation update. Date: 23 October 2020, https://reliefweb.int/sites/reliefweb.int/files/resources/Bi-monthly%20situation%20update%2023%20October%202020.pdf accessed 1 February 2021.

[16] HIV and TB Committee under the Coordinating Council on Public Health of the Government of Kyrgyz Republic, Ministry of Health of Kyrgyz Republic, Republican AIDS Centre, National Centre for Phthisiology, 'Plan for adaptation of HIV/TB programmes to COVID-19 conditions', Bishkek 2020, 5, http://hivtbcc.kg/proekti/plan-adaptacii-uslug-v-svjazi-s-vich-i-tb-v-period-epidemii-covid-19, accessed 5 February 2021.

[17] Interview with A.Toktogonova, health specialist, (Zoom, 29 December 2020).

The COVID-19 Response

18 March 2020	24 March 2020	April 2020	10 May 2020
First COVID-19 cases confirmed among three individuals returning from a pilgrimage to Saudi Arabia	*State of emergency announced, with stay at home and public transport restrictions*	*Epidemiology Fund established to mobilise commodities and staff for COVID-19*	*State of Emergency period expired with no strict lockdown measures further introduced and enforced*

The COVID-19 response in Kyrgyzstan was punctuated by a strained healthcare system, political unrest, protests, and dissatisfaction with w the government handled pandemic esponse[18], and volunteer groups that helped ferry stricken patients to hospitals when ambulances were unable to, and who made house calls with oxygen supplies when housebound patients had trouble breathing[19]. The response drew attention to an underfunded health system, but also emerging from our research, issues related to COVID-19 surveillance.

An infectious diseases clinician and former member of the Republican Headquarters (HQ) COVID-19 (who requested anonymity) in conversation with us estimated the real disease spread among the population was at least ten times higher than official statistics. According to informal surveys of the Republican HQ on COVID-19, the official government body for COVID-19 response, only 1 out of 10 persons, who had been experiencing typical COVID-19 symptoms applied for medical care and had received testing. In his own words:

[18] Saipira Furstenberg and Gulzat Botoeva, 'Political Unrest in Kyrgyzstan: Between Old and New Hopes' The Foreign Policy Centre (16 October 2020) https://fpc.org.uk/political-unrest-in-kyrgyzstan-between-old-and-new-hopes/#_ftn16 accessed 10 February 2021

[19] Daria Litvinova, 'Volunteers Came to the Rescue as Virus Raged in Kyrgzystan' AP (28 July 2020) https://apnews.com/article/kyrgyzstan-ap-top-news-understanding-the-outbreak-international-news-photography-08aee6d2f32ba0eca8f5b3ae88b49fd5 accessed 10 February 2021

In the first wave of incidence in summer 2020, the country faced extremely limited COVID-19 testing capacity. People were afraid of testing and attending medical facilities. During the second wave in autumn, the country had a lot of rapid tests, and medical facilities were better prepared. Private clinics started COVID testing as well. Despite this, the majority of the COVID-affected population was remaining hidden.

The first 3 cases of COVID-19 were registered in Kyrgyzstan on 18 March, 2020[20]. They occurred among three individuals returning from a pilgrimage to Saudi Arabia. WHO data suggests that the first wave of the disease incidence occurred on 18-26 July 2020 with the maximum value of 11,883 confirmed daily cases, and the second wave occurred between end of September and end of December 2020 with a maximum of 620 confirmed daily cases. Starting from January 2021, the new cases reduced dramatically to an average of 101 cases per day. In total, as of 1 February 2021, 84,588 cases of COVID-19 have been registered, including 4,176 cases among health staff, and 1,412 deaths among general population[21].

Prior to the arrival of the first COVID-19 cases in the country, the Republican HQ on COVID-19 Response under the Prime Minister was established and fully operational. As the main government COVID-19 response organ, it comprised representatives of all ministries and agencies, including the Ministry of Health and its subordinate health services and agencies, Ministries on Emergency Situations, of Internal Affairs, of Foreign Affairs, of Economy, of Finance, State Military Committee State Border Control Service, and others. A COVID-19 Headquarters was also established under the Ministry of Health to address all the range of epidemiological, diagnostics, prevention, treatment and care issues, reporting to the Republican HQ on COVID-19[22].

On 29 March 2020, an Interagency Contingency Plan of Action on COVID-19 was endorsed by the Prime Minister. This plan was subsequently revised and extended for 12 months[23], and guided coordination, information exchange, and sources of State and non-State support. On 11 May 2020, the Government adopted "Sanitary and epidemiologic requirements for non-admission of spread of coronavirus infection (COVID-19)", which introduced the safety requirements for all institutions and population[24], including regulations on masks, regular disinfections, and health recommendations to employers.

The country introduced a state of emergency for the period of 24 March – 10 May 2020 in consultation with WHO, soon after the latter

[20] WHO, 'WHO Coronavirus Disease (COVID-19) Dashboard. Kyrgyzstan Situation', World Health Organisation (2021), https://covid19.who.int/region/euro/country/kg accessed: 1 February 2021

[21] COVID-19 HQ of Kyrgyz Republic, 'STOP COVID-19. 1 February 2021. Statistics', Telegram channel of the COVID-19 HQ of Kyrgyz Republic (2021), https://t.me/RshKRCOV accessed 1 February 2021

[22] Order of the Ministry of Health of Kyrgyz Republic No.52 of January 31, 2020 'On the implementation of the Government Decree No.30 of January 29 2020, protocol assignment No.1 of 29 January 2020 of the meeting of the Republican Headquarters to prevent the coronavirus delivery and spread at the territory of Kyrgyz Republic', http://med.kg/images/koronavirus/prikaz_52_31012020.pdf accessed 28 February 2021

[23] Decree of the Government of Kyrgyz Republic No.194 of 29 May 2020 on the adoption of the coronavirus infection (COVID-19) contingency plan and early restoration on interactions between the Government of the Kyrgyz Republic and Emergency situations coordination group, http://cbd.minjust.gov.kg/act/view/ky-kg/218195 accessed 02 February 2021

[24] Order of the Government of the Kyrgyz Republic of May 11, 2020, No.244 'On additional measures for decrease in risks of spread of coronavirus infection (COVID-19)', https://cis-legislation.com/document.fwx?rgn=124719, accessed 31 January 2021

declared that COVID-19 was a global pandemic[25]. In the city of Bishkek, and subsequently across the country, all mass events and public places were closed, the public transport system was stopped and restrictions on movements of citizens were introduced. Exceptions were made only for health workers with proof of identification[26]. In April 2020, taxi services were allowed to resume, which allowed limited movements of citizens within their cities of residence. Despite the peak of COVID-19 incidence in summer 2020 and second wave in late autumn, no further lockdown measures were introduced.

Also in April 2020, the Government established an Epidemiology Fund to address critical needs of the of the national COVID-19 response, drawing upon a multitude of different funding sources to fund, inter alia, deployment of temporary beds, observatories and other facilities; mobilization of temporary anti-pandemic teams and services; extra payments to health and other staff working with COVID-19 patients; procurements of medications, health commodities, diagnostics and other equipment with relevant expendables; individual protection commodities for health and other workers; communication and media costs; and other needs[27]. Funding sources included State budget allocations, private donations, and international charities.

Kyrgyzstan also asked international donors - IMF, Asian Development Bank, World Bank and the European Union - for funds up to $627.3m. Out of these funds, 74% are loans, raising questions about avoidance of debt distress, particularly in light of a projected recession, depreciation of the Kyrgyz som, and estimations that as a result of the pandemic, 400,000 individuals (roughly 5.9% of the population), will fall below the poverty line[28]. While the IMF has assessed Kyrgyzstan's level of debt distress as moderate, and that repay ability as adequate,[29] research by the Central Asia Program states that the health crisis 'significantly hampers the country's efforts at debt settlement'.[30] As related to HIV and TB care, the study respondents emphasised flexibility and prompt actions of the World Bank, UNDP (a Principal Recipient of the Programme of the Global Fund to Fight AIDS, tuberculosis and Malaria), the United Nations Office on Drugs and Crime (UNODC) to cover the most pressing needs at the early stages of pandemic[31].

The following paragraphs detail key effects of the COVID-19

[25] Presidential Decree of The Kyrgyz Republic of March 24, 2020, No.55 'On introduction of emergency state in the territory of the city of Bishkek of the Kyrgyz Republic', https://cis-legislation.com/document.fwx?rgn=123125, accessed 1 February 2021

[26] Interview with A.Toktogonova, health specialist, (Zoom, 29 December 2020)

[27] Order of the Government of the Kyrgyz Republic of April 3, 2020, No.194 'On adoption of the Procedures on usage of funds arriving to support the measures to prevent and control the epidemics', Russian read http://med.kg/images/koronavirus/PPKR_03042020_194.pdf accessed 30 January 2021, and Order of the Government of the Kyrgyz Republic of May 11, 2020, No.249 'On amendments to the Order of the Government of the Kyrgyz Republic of April 3, 2020, No.194 'On adoption of the Procedures on usage of funds arriving to support the measures to prevent and control the epidemics", Russian read http://med.kg/images/MyFiles/postanovleniya/PPKR_249_11052020.pdf accessed 30 January 2021.

[28] Julien Bruley and Iliias Mamadiiarov, 'Kyrgyzstan: The Socioeconomic Consequences of the COVID-19 Crisis' Central Asia Program (10 November 2020) https://centralasiaprogram.org/archives/18048 accessed 10 February 2021

[29] IMF, 'Kyrgyz Republic. Request for purchase under the rapid financing instrument and disbursement under the rapid credit facility—press release; staff report; informational annex; and debt sustainability analysis', IMF Country Report No.20/90, International Monetary Fund (March 2020), 7, https://www.imf.org/~/media/Files/Publications/CR/2020/English/1KGZEA2020001.ashx accessed 06 February 2021

[30] Julien Bruley and Iliias Mamadiiarov, 'Kyrgyzstan: The Socioeconomic Consequences of the COVID-19 Crisis' Central Asia Program (10 November 2020) https://centralasiaprogram.org/archives/18048 accessed 10 February 2021

31 Interviews with infectionist (the name is not disclosed by request) (Zoom, 17 January 2021), A.Toktogonova, health specialist (Zoom, 29 December 2020) and R.Mazhitov, NGO Leader (Zoom, 12 January 2021)

Effects on HIV Care

As of 2019, the data on the cascade of HIV services in Kyrgyzstan showed that out of 10,000 people living with HIV, 62% were aware of their status, 40% of them were receiving HIV treatment and 33% of those who are on HIV treatment were virally suppressed[32]. Before the COVID-19 pandemic, the rates of late HIV diagnostics (CD4 cells count of 350/mm3 and less) was 51% among women and 56% among men, while 21% of all people enrolled in HIV treatment had active TB disease[33]. UNAIDS also outlined the national expenditure on HIV/AIDS in 2019 of USD 6,905,323, with USD 1,970,121 (or 28%) coming from the national government[34]. Under the Global Fund Programme "Effectiveness of HIV/AIDS Control in the Republic of Kyrgyzstan", which is among the main international sources of HIV response, the country committed to increase its share of the costs for antiretrovirals procurements for up to 30% by 2021, and it was estimated to be on good track towards this target[35].

The pandemic, however, created new challenges. Ravshan Mazhitov, the head of an NGO based in Osh, a city in the south of the country, detailed how the pandemic had changed how clients - and particularly clients with multiple comorbidities - received services:

> *The pandemic has affected, literally, everyone. Our way of life has changed. Let me tell you right away about people receiving ART, methadone substitution therapy, DOTs. They needed to move around, but it was difficult. Doctors began to issue certificates that these people need to move. But police and other checks could not be avoided, and we received complaints (about this) from patients.*

A November 2020 article details how the UN Development Program in Kyrgyzstan, in response to the pandemic, had to reopen two shelters to ensure PLHIV and key affected populations were able to access aid, shelter and healthcare

[32] UNAIDS Data 2020 'Kyrgyzstan. Country Data' 361, https://www.unaids.org/sites/default/files/media_asset/2020_aids-data-book_en.pdf accessed 7 February 2021

[33] UNAIDS Country Factsheets 'Kyrgyzstan. 2019', https://www.unaids.org/ru/regionscountries/countries/kyrgyzstan accessed 6 February 2021

[34] UNAIDS Data 2020 'Kyrgyzstan. Country Data' 360, https://www.unaids.org/sites/default/files/media_asset/2020_aids-data-book_en.pdf accessed 7 February 2021

[35] WHO Regional Office for Europe, Towards a healthier Kyrgyz Republic. Health and sustainable development progress report. Copenhagen, WHO Regional Office for Europe (2020), 24 https://www.euro.who.int/__data/assets/pdf_file/0005/459347/healthier-Kyrgyz-Republic-progress-report-2020.pdf accessed 6 February 2021.

during the lockdowns[36]. One PLHIV helped by the UNDP shelters described his experience of contracting COVID-19 and needing to be hospitalised for a month, including the need to receive oxygen[37].

Anna, a PLHIV living in Talas, a remote town in northwestern Kyrgyzstan, told us of her experiences of contracting COVID early in the pandemic:

> *I didn't know that I had COVID. The thing is that I had very strong headaches for 4 days. My head was splitting. But I thought it was from sitting (for a long time) in front of the computer for work. I thought I should just rest. Then I got short of breath after walking fast. Then, in the evenings, chills began, bone aches, signs of fever. And then I thought, something is wrong here and I need to consult with my family doctor. I called the doctor, told about the symptoms, about weakness, drowsiness. The doctor said that I was getting COVID...*

Anna also described how doctors were uncertain in those early days of what treatment regimens would work, and that as a result, she had to self-medicate:

> *I took some other medicines, trying to bring down the temperature, and the temperature was under 40. So, in many ways, I treated myself. (The doctor) immediately said that I was not allowed antibiotics. But doctors themselves often did not know how to treat COVID (in those days). They were given a decree or protocol, they said - treat it like this. It turns out this was wrong. And when the death rate from COVID began, they then realized that this was wrong. And my doctor just told me to take ibuprofen, an anti-clotting drug. And it obviously helped. I have heard a lot about other patients who took certain medications and they got worse.*

As a result of lockdowns and social distancing, self-medication has increased in numerous other contexts from Peru[38] to Togo[39]. While this topic in particular is beyond the remit of this research, it raises particular risks about self-medication among PLHIV and contraindications with antiretroviral medications.

Similarly to other countries examined in this report, medical facilities for HIV were repurposed for the COVID-19 response. An infectious diseases specialist described to us how the establishment of special COVID-19

[36] UN Development Programme, 'COVID-19 Comes as a Double Blow to those Living with HIV' (30 November 2020) https://undp.medium.com/covid-19-comes-as-a-double-blow-to-those-living-with-hiv-aids-b526d7f72935 accessed 10 February 2021

[37] UN Development Programme, 'COVID-19 Comes as a Double Blow to those Living with HIV' (30 November 2020) https://undp.medium.com/covid-19-comes-as-a-double-blow-to-those-living-with-hiv-aids-b526d7f72935 accessed 10 February 2021

[38] Jean Franco Quispe-Cañari, Evelyn Fidel-Rosales, and others, 'Self-medication practices during the COVID-19 pandemic among the adult population in Peru: A cross-sectional survey' (2021) 29(1) Saudi Pharmaceutical Journal 1-11

[39] Arnold J Sadio, Fifonsi A Gbeasor-Komlanvi,and others, 'Assessment of self-medication practices in the context of the COVID-19 outbreak in Togo' (2021) 21 BMC Public Health 58 https://doi.org/10.1186/s12889-020-10145-1

units, or, so called, "red zones", did not result in a corresponding increase of medical staff. The same medical teams were divided to work in COVID-19 and non-COVID-19 units, which entailed major workload increases as the number of COVID patients grew significantly. Less one-on-one time between HIV clinicians and patients, as well as the need to ensure physical distancing, necessitated the establishment of online consultations by some quarters, including the UNDP and Global Fund[40]. Anna, a PLHIV living in Talas, a remote area in northwestern Kyrgyzstan, told us of efforts to reduce the service and knowledge deficit during the COVID pandemic, including the establishment of Whatsapp groups with clinicians from the Republican AIDS Centre in Kyrgyzstan, which PLHIV in remote areas would not have normally had access to. In her own words:

We started to create online groups - in WhatsApp. In these groups we can involve not only our own children, but also doctors from the Republican AIDS Centre[41], for example. We (were able to) attract specialists and that's just great. I (signalled to) everyone that everyone can be in this group under a pseudonym and directly ask questions to doctors, professors. We tried to attract doctors from the oncological centre - we have cancer patients too. Therefore, the consultations went online through this group. A psychologist from Bishkek was also involved. He had his own group, then they opened Zoom, conducted trainings. We also held seminars, trainings on Zoom, including on COVID issues. Received information about the disease, personal prevention. While people were in an enclosed space, this was important and useful.

Our data did not indicate significant ARV treatment interruptions or disruptions to supply, although the narrow remit of our study means that there may be a gap in data on this. Similar to other countries in the region, PLHIV were able to take-home a 3 month supply of ARVs versus 1 month pre-pandemic.

In addition, mobile HIV care units became widely operational since June 2020 in many regions of the country. These mobile units were operated by state health institutions and comprised a general physician or nurse, epidemiologist and a driver[42]. Later, in September 2020, similar mobile units were organised by the Republican Infectious Diseases Hospital and AIDS Centres in different regions to provide support to HIV and TB patients[43]. They comprised an infectious diseases clinician or nurse, social worker or peer consultant, and a driver. Mobile units provided ARV supply to PLHIVs, on-site counselling (including peer counselling), and rapid testing. One of our interviewees, a person living with HIV and a peer consultant working with mobile units,

[40] UN Development Programme, 'COVID-19 Comes as a Double Blow to those Living with HIV' (30 November 2020) https://undp.medium.com/covid-19-comes-as-a-double-blow-to-those-living-with-hiv-aids-b526d7f72935 accessed 10 February 2021

41 The Republican AIDS Centre is the principal centre for AIDS treatment located in Bishkek. The respondent, located almost 360kms away from Bishkek, would not normally have access to doctors from the Republican AIDS Centre.

[42] Order of the Ministry of Health of Kyrgyz Republic No.297 of May 8, 2020, 'On the adoption of temporary standard operation procedures for health care organisations of the Republic during the COVID-19 pandemic', http://med.kg/images/koronavirus/dokumenty/prikaz_297_08052020.pdf, Annex 1 'Manual for temporary standard operation procedures for mobile units', http://www.ksmi.kg/resursy/normativno-pravovaya-baza.html, accessed 1 February 2021

[43] UNDP Republic of Kyrgyzstan, 'UNDP Mobile Teams provide medical care for patients at home', UNDP (30 October, 2020), https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2020/10/mobile-brigades-bring-medical-services-to-patients-homes-.html, accessed 02 February 2021

opined that mobile brigades were instrumental for bringing back patients who had dropped out of treatment:

> *Some of our clients play with therapy: 'today I take it, tomorrow I drop, then I take it again in a week or so'. They display lack of responsibility for their health. When our mobile unit started, it helped very much. First, the doctor is able to assess the situation onsite and see the patient's (level of) adherence or non-adherence. And more trust goes to a peer consultant. The doctor can often personally communicate with clients, take testing samples. During this year, we traveled a lot and reached out to a number of the patients who dropped out. We talked to them and managed to raise their adherence so they started their therapy again. During this time, we had no cases of clients dying. The pandemic scared us, but, at the same time, it helped us. As a matter of fact, we see that the client is going to be short of medications in a few days, so we go out to him and provide the necessary supply to avoid interruption.*

The transition to mobile health is evident throughout the region, with similar examples from other countries in this report. While many NGOs observed the lockdown regime and providing individual counselling of patients and clients by phone, in some places special group chats in WhatsApp were created to provide counselling services. In the city of Talas, for example, group chats involved infectious diseases clinicians, psychologists, cardiologists, endocrinologists, also from the Republican health institutions based in Bishkek. Patients were given the option to use pseudonyms if they preferred and had regular access to online counselling from the doctors, who were over 360km from them[44]. In the city of Osh, an online counselling group was opened on the Facebook page of one of the NGOs[45], which was instrumental for awareness raising on available services and other access-related issues[46].

To address the reduction in HIV testing, in 2020 the government approved the use of HIV self-testing, the training of outreach workers to support key populations on how to self-test, and revision of HIV testing algorithms in the National Plan of Adaptation of HIV and TB Services to COVID-19 Conditions[47].

[44] Interview with Anna, a person living with HIV and peer consultant at the mobile unit (Zoom, 4 January 2021).

[45] Interview with Ravshan Mazhitov, an NGO leader (Zoom, 12 January 2021)

[46] Interview with Ravshan Mazhitov, an NGO leader (Zoom, 12 January 2021)

[47] HIV and TB Committee under the Coordinating Council on Public Health of the Government of Kyrgyz Republic, Ministry of Health of Kyrgyz Republic, Republican AIDS Centre, National Centre for Phthisiology, 'Plan for adaptation of HIV/TB programmes to COVID-19 conditions', Bishkek 2020, 13-14, http://hivtbcc.kg/proekti/plan-adaptacii-uslug-v-svjazi-s-vich-i-tb-v-period-epidemii-covid-19, accessed 1 February 2021.

Effects on Harm Reduction Services

According to UNAIDS, there are approximately 25,000 PWID in Kyrgyzstan with HIV prevalence of 14.3% among this population[48]. In addition, the country has substantial NSEP coverage, with each person receiving an estimate of 170 units of sterile syringes per year, and with 80.9% of PWID reporting using sterile equipment the last time they injected[49]. This is juxtaposed with the criminalisation of small amounts of drugs for personal use and police enforcement. Country harm reduction, human rights protection and advocacy programmes are funded from the external sources, firstly by the Global Fund[50].

Overall, the COVID-19 response in Kyrgyzstan saw reduced access to drug treatment facilities and to NSEP, and online methods of peer support were increased. In terms of restrictions to drug treatment facilities, entrants including PWUD were required to wear masks per Ministry of Health regulations, and there were other limitations to access, such as number of individuals allowed to enter the facilities at any one time. In addition to this, some in-patient addiction clinics and testing units were repurposed for the care of COVID-19 patients[51].

There were no reported disruptions to methadone stocks. Like in many countries in the region, COVID-19 and restrictions on movement resulted in an increase of days for take-home supply of methadone. In Kyrgyzstan, this meant an increase from 3 to 5 days of take-home supply pursuant to Ministry of Health guidelines[52]. By one estimate, the number of registered OST patients eligible for take home doses increased from 41 percent to 90 percent by April 2020[53]. There were, however, coordination hiccups vis-à-vis the mobile HIV care brigades, resulting in some patients being unable to access OST through these means:

[48] UNAIDS Country Factsheets 'Kyrgyzstan. 2019', https://www.unaids.org/ru/regionscountries/countries/kyrgyzstan accessed 6 February 2021

[49] UNAIDS, 'AIDS Data 2020 'Kyrgyzstan. Country Data' 361 https://www.unaids.org/sites/default/files/media_asset/2020_aids-data-book_en.pdf accessed 7 February 2021

[50] Harm Reduction International, 'Kyrgyzstan Information Note - including harm reduction in Global Fund country proposals' Harm Reduction International (2021), https://www.hri.global/contents/2025 accessed 6 February 2021.

[51] UNODC, 'Brief Overview of COVID-19 Impact on drug use situation as well as on the operations of the drug treatment services and harm reduction programmes in Central Asia', United Nations Office on Drugs and Crime, Regional Office for Central Asia (August 2020), https://www.unodc.org/documents/centralasia/2020/August/3.08/COVID-19_impact_on_drug_use_in_Central_Asia_en.pdf, accessed 29 January 2021

[52] EHRA, 'Harm reduction programmes during the COVID-19 crisis in Central and Eastern Europe and Central Asia', Eurasian Harm Reduction Association (May 2020), https://harmreductioneurasia.org/wp-content/uploads/2020/05/regional-review_-FINAL_ENG.pdf, accessed 29 January 2021

[53] ICAP Global Health, 'ICAP Helps Ensure Methadone Patients in the Kyrgyz Republic Stay on Their Regimens During COVID-19', https://icap.columbia.edu/news-events/icaps-covid-19-guidance-in-the-kyrgyz-republic-increases-access-to-five-day-methadone-prescription-for-patients-on-medication-assisted-therapy/ accessed 30 January 2021

Perhaps, it was the mixture of services (harm reduction and HIV care, causing coordination issues in mobile units). There are OST patients among people living with HIV. We were raising this point and trying to advocate for getting permissions to arrange methadone delivery to the patients by the mobile units. It all remained at the level of talks[54].

In the areas where mobile units of HIV care were operational, there were attempts to get permission for delivery of OST medications to the patients, but such permission was not obtained[55], likely due to the environment of criminalisation and prevailing concerns about diversion of methadone doses away from intended clients. There were additional barriers – take-home supplies of OST were not available for PWID with no permanent place of residence and those living in walking distance from the OST site. Given that PWUD are also TB vulnerable populations, this also raises questions about the need for integration of TB referral services within mobile units. This is examined more closely in the next section.

Intensity of NGO operations during the lockdown regime varied from region to region. For example, in the city of Osh, outreach activities were largely disrupted except for occasional outreach sessions initiated only where urgent circumstances arose. These ad hoc outreach activities operated under the risk of legal consequences. The work of a NGO-run centre running a twelve-step abstinence-based programme for PWID in a remote rural area seemed unaffected by the lockdown, and continued to operate without repercussion[56].

COVID-19 saw the acceleration of online counselling and referrals to health services, mainly via popular messaging apps WhatsApp and Telegram. Interviewees, however, including those from NGOs, said that these online services were not formalised and did not occur systematically as part of any official programme.

Overall, there were a number of barriers to accessing harm reduction services, including legal risks associated with movement under lockdown, increased police presence, and curfew requirements, modified working hours of harm reduction services, and strict criteria for access to take-home OST doses.

[54] Interview with Ravshan Mazhitov, an NGO leader (Zoom, 12 January 2021)

[55] Data from the qualitative interviews with the respondents 1 and 2.

[56] Interview with Ravshan Mazhitov, an NGO leader (Zoom, 12 January 2021).

Impact on TB Testing, Treatment, and Care

Kyrgyzstan is among 18 TB high-priority countries of the WHO European region[57] and among 30 in the WHO list of MDR-TB High Burden Countries[58]. In 2019, MDR/RR-TB cases constituted 29% among new TB cases and 60% among previously treated cases[59]. General TB dynamics in the country displays stable reductions of key parameters in 2019 as compared to 2018, including a 3% decrease in an estimated number of people who developed TB, a 7% reduction in those who developed MDR-TB, a 30% reduction in a number of diagnosed HIV and TB co-infections, and 12% decrease of deaths among people with TB[60]. WHO estimates the overall budget for tuberculosis control being around $16 m in 2019 with 48% of funding coming from national government and 51% from international sources[61].

Repurposing of the National Centre of Phthisiology and regional TB treatment facilities to COVID-19 patients resulted in significant changes in treatment conditions. Where possible, patients were shifted to outpatient regimes to release beds for COVID-19 patients, while those in critical condition and absolutely required hospitalisation were locked down[62]. Monitoring of treatment effectiveness reduced, as the collection of sputum samples for microscopy and culture for management of chemotherapy were not available for the vast majority of patients with MDR-TB; and similar delays were observed for other safety and monitoring examinations (biochemical tests, ECG etc.) that are regular parts of the TB care package[63]. Ravshan Mazhitov, NGO leader based in Osh, Kyrgyzstan's second largest city, told us:

> *The Tuberculosis Hospital was immediately closed. There were queues for x-rays, PCR analysis. Some X-ray machines are of poor quality. Doctors sent for a CT scan, which costs*

[57] WHO Regional Office for Europe, 'Tuberculosis' https://www.euro.who.int/en/health-topics/communicable-diseases/tuberculosis/tuberculosis-read-more#:~:text=New%20cases%20of%20tuberculosis%20(TB,%2C%20the%20Russian%20Federation%2C%20Tajikistan%2C accessed 7 February 2021.

[58] WHO, 'Global Tuberculosis Report 2020', World Health Organization (2020), 205 https://apps.who.int/iris/bitstream/handle/10665/336069/9789240013131-eng.pdf accessed 7 February 2021

[59] World Health Organization, 'Tuberculosis Profile: Kyrgyzstan' (2020), https://worldhealthorg.shinyapps.io/tb_profiles/?_inputs_&entity_type=%22country%22&lan=%22EN%22&iso2=%22KG%22 accessed 7 February 2021.

[60] STOP TB Partnership, 'Tuberculosis Situation in 2019. Kyrgyzstan', http://stoptb.org/resources/cd/KGZ_Dashboard.html, accessed 7 February 2021.

[61] World Health Organization, 'Tuberculosis Profile: Kyrgyzstan' (2020), https://worldhealthorg.shinyapps.io/tb_profiles/?_inputs_&entity_type=%22country%22&lan=%22EN%22&iso2=%22KG%22 accessed 7 February 2021

[62] Interview with A.Toktogonova, health specialist (Zoom, 29 December 2021).

[63] HIV and TB Committee under the Coordinating Council on Public Health of the Government of Kyrgyz Republic, Ministry of Health of Kyrgyz Republic, Republican AIDS Centre, National Centre for Phthisiology, 'Plan for adaptation of HIV/TB programmes to COVID-19 conditions', Bishkek 2020, 4, http://hivtbcc.kg/proekti/plan-adaptacii-uslug-v-svjazi-s-vich-i-tb-v-period-epidemii-covid-19?fbclid=IwAR1KG59GlrPy9wwnJUSvrSoW0UEXWxcFTaIZB5ZfLJDY6JEVI7wwlmDcfUs, accessed 1 February 2021

about $ 30, and the clients do not have the financial resources for this. Family medicine centres accepted everyone, but after the outbreaks, the offices were closed in the polyclinic. The security guard at the entrance asked the visitors in great detail why they came to the doctor, and it took a lot of time and effort to explain everything to these guards, who, in principle, did not understand the issues and did not care about anything.

There was no evidence from our interviews of medication supply disruptions to TB patients already receiving treatment, whether on an inpatient or outpatient basis, although more in-depth research is required on this specific point. To address the access gap over the lockdown regime in the country, a video-observed TB treatment (VOT) approach was piloted, similar to other countries in this report. Patients were provided with TB medications supply under the condition of video recording the drug taking process and sending those videos to the assigned doctors – per standard VOT protocols. Relevant amendments were introduced to the new versions of treatment protocols. Our interviewees, including those representing health facilities and TB patient community, however, outlined a number of barriers to accessing VOT, which included lack of smartphones with the relevant operational capacity, low skills of patients in video recording, and infrequency of sending VOT data on a regular basis.

As of May 2020, the National Virology Laboratory was the main COVID-19 reference laboratory in country. With the support of the WHO Regional Office for Europe, international reference laboratories in the Netherlands, Germany, the United Kingdom and Russia were assigned to validate national laboratory test results.

The country uses GeneXpert and Xpert-MTB/Rif platforms for HIV and TB diagnostics. As GeneXpert platforms can be used for COVID-19 diagnosis, there were concerns that HIV and TB diagnosis would be deprioritised or displaced due to the need to use these machines for COVID-19. While ultimately these machines weren't used for COVID-19 due to the insufficient supply of Cepheid COVID-19 cartridges, in the spring of 2020, the Kyrgyz Republic applied for emergency support from UNDP to conduct a load assessment of diagnostic platforms[64]. The assessment found that the machines were used below capacity, and there wasn't a need to procure additional machines:

Overall, there are only 24 GeneXpert machines or platforms in all key areas and centres, where many patients can apply for testing. We calculated the workload of these machines, and it turned out that it was only 30% to our surprise!... Our intention was to save money, and not to buy new platforms which were not actually necessary, and such a procurement would have taken much time. We had considered having extra (GeneXpert) modules, so that TB diagnostics would not be affected (by repurposing for COVID-19).[65]

In other words, the country did not find the need to purchase additional platforms. This point was corroborated by another interviewee representing the Republican HQ on COVID-19, who emphasised the state of urgency in the first

[64] As part of the Global Fund-funded project "Effective HIV and TB control in the Kyrgyz Republic" https://www.kg.undp.org/content/kyrgyzstan/en/home/projects/effective-tb-and-hiv-control-project-in-the-kyrgyzstan.html accessed 15 February 2021

[65] Interview with A.Toktogonova, health specialist from Bishkek (Zoom, 29 December 2020)

half of 2020 during the first pandemic outbreak, when the Government was prioritising procurements of expendable materials such as probes, cartridges and reagents rather than long-term acquisition of new testing platforms.

Despite efforts to recover TB diagnostic capacity, TB testing in summer 2020 fell threefold compared to the same period in 2019, while the systems for epidemiological investigations and tracing of contact persons were practically paralysed[66]. Similar trends were observed with HIV testing, when the number of naïve testing clients reduced dramatically as compared to 2019[67].

The study respondents outlined several reasons for the reduction in TB case detection and testing, which generally centred around increased stresses and organisational barriers imposed by the pandemic, including limited mobility during the state of emergency and lockdown measures, fear and stigma associated to being diagnosed with COVID-19 during TB follow up and/or hospitalisation, reduced admission of visitors by medical facilities, lack of integrated COVID-19 and TB diagnostics, lack of medical and laboratory staff due to increased workload and immersion in COVID-19.These outcomes are consistent with contingency measures and plans[68] adopted by the Ministry of Health in 2020 to increase TB detection and HIV testing, which did not foresee procurement of additional diagnostics platforms, but rather prioritised measures such as:

- *Facilitating the expansion of rapid testing in the field;*
- *Establishing index testing teams by Family Medicine Centres and AIDS Centres;*
- *Facilitating the use of Xpert-MTB/Rif and Xpert/Xpress-COVID-19 platforms for simultaneous testing on TB, COVID-19 and HIV;*
- *Adopting algorithms of TB testing among people diagnosed with COVID-19; and other measures.*

By early 2021 (time of publication of this report), these measures on early diagnostics of TB and HIV are in the process of implementation with the main part of them to be accomplished in 2021 under the Global Fund Programme. However, A.Toktogonova, a health specialist from Bishkek, expressed serious concern on the situation as its adverse impacts related to the increased number of late TB detection, including the emerging signs of growth of MDR forms.

The primary thing that worries me and the entire service is the poor detection of patients. I travelled around the country, talked to doctors, and saw many neglected cases, which had not been the case before. Now we have late TB detection. Another thing is the impact of COVID on TB. I have often pointed out

[66] HIV and TB Committee under the Coordinating Council on Public Health of the Government of Kyrgyz Republic, Ministry of Health of Kyrgyz Republic, Republican AIDS Centre, National Centre for Phthisiology, 'Plan for adaptation of HIV/TB programmes to COVID-19 conditions', Bishkek 2020, 4, http://hivtbcc.kg/proekti/plan-adaptacii-uslug-v-svjazi-s-vich-i-tb-v-period-epidemii-covid-19, accessed 1 February 2021.

[67] UNDP Kyrgyz Republic, "'It's as if people had forgotten about HIV'" (published September 16, 2020), https://www.kg.undp.org/content/kyrgyzstan/en/home/presscenter/articles/2020/09/as-if-people-had-forgotten-about-hiv.html accessed 31 January 2021

[68] HIV and TB Committee under the Coordinating Council on Public Health of the Government of Kyrgyz Republic, Ministry of Health of Kyrgyz Republic, Republican AIDS Centre, National Centre for Phthisiology, 'Plan for adaptation of HIV/TB programmes to COVID-19 conditions', Bishkek 2020, 13-14, http://hivtbcc.kg/proekti/plan-adaptacii-uslug-v-svjazi-s-vich-i-tb-v-period-epidemii-covid-19, accessed 1 February 2021

the problem of usage of anti-TB drugs to treat COVID patients. This apparently leads to the rise in drug-resistant forms. These forms are different - MDR, XDR... Fluoroquinolones were often prescribed to save people. Levofloxacin was cheap and readily available. Many people were saved, but this is an alarming factor. WHO has already announced that we may return to those conditions, to those figures that were in place 5 years ago. We had so far had good achievements in terms of morbidity and mortality decrease, but now we may backtrack on the indicators which were put in place 5 years ago.

This testimony raises important flags about the potential rise of antimicrobial resistance and MDRTB in Kyrgyzstan.

Impact on Human Rights and Social Care

As other countries in the EECA region, Kyrgyzstan introduced strict and large-scale measures to prepare the country for the COVID-19 impacts, including military-supplemented lockdowns. Testimony from a former official from the Republican COVID-19 HQ, however, indicated an imbalance between internal lockdown restriction measures and necessary measures to enhance the capacity of health system.

In my opinion, there was our mistake in placing too much emphasis on the prevention of the virus entrance in the country while neglecting the need for strengthening of capacity of health care system. By summer, we were spending much effort on sanitary and epidemiological control, opening of sanitary block-posts everywhere etc., but when the virus entered the country, all that efforts appeared useless. Health system by its bed capacity and other parameters were not ready to handle the rapid virus spread.

Capacity issues as described in the executive summary became evident during the summer peak, with one commentator stating that the country was not prepared for a rise in infection numbers, and that 'there are not enough beds in hospitals, there's a clear lack of doctors and nurses, ambulances cannot cope with the colossal number of callouts, and there's a backlog of people to be buried in cemeteries.'[69]

A.Toktogonova, a health specialist from Bishkek corroborated this, stating:

> *The situation was disastrous in the summer. Not only with a large number of cases, but also with the unavailability of the medical service, and the whole country. This includes a psychological aspect. Not only ordinary people were afraid, but we, doctors, were also afraid. At some point I even said to myself, this is probably a war! When we entered the red zone, we did not sleep for 3 days. Work was in full swing and we were unable to sleep. Our entire team was 10 people and everyone was busy with something. There was a lot of work. The sick were dying, we did not even understand what was happening - the person was dying quickly. You come in the morning, while you watch others, a person dies. Patients were constantly admitted, at night too. It was still hot at 40 degrees, and in suits it was extremely difficult - they were losing water, etc.*

Healthcare professionals spoke of increased stresses and workload affecting interactions with patients. Interviews in Kyrgyzstan, however, did not indicate similar findings in personal attitudes of health professionals to patient community and representatives of key populations during their access to counselling and other health services, although in-person contact was much reduced. In fact, one of the PLHIV interviewees commended the efforts of health practitioners at the AIDS Centre to approach patients by phone to check their health status and to provide counselling:

> *An infectious disease specialist from the AIDS centre constantly called me, worried about me. We discussed various options with him, and he advised a lot. I don't know about other places, but in Talas, the attitude towards HIV patients was very caring. They were worried not only for me. They were also very much worried about the guy who died; they constantly called relatives. They managed to get a breathing apparatus somewhere and brought home. There were no such devices anywhere, and they found somewhere, made an agreement and brought home. An infectious disease specialist, an epidemiologist, a family doctor called. They were coming to see us at home in special suits and monitored the condition.*

While repressive police actions to enforce the lockdown regime and their impacts at HIV/TB patients and other key populations were not evident, the threat of repressive action and bureaucratic requirements of needing to have additional documents from health facilities and/or other organisations confirming the purpose of movement around the city seemed to be a deterrent to access to healthcare. No cases of detentions, fines or other forms of rights violations were described by our interviewees. More research needs to be done

[69] Kamila Eshaliyeva, 'Is Kyrgyzstan Losing the Fight Against Coronavirus?' OpenDemocracy (13 July 2020) https://www.opendemocracy.net/en/odr/kyrgyzstan-losing-fight-against-coronavirus accessed 4 February 2021

among key populations to determine whether these occurred in particular regions or contexts that we have missed.

In addition to human rights and social care effects on marginalised communities, there were corresponding human rights issues and pressures affecting healthcare staff, with doctors and nurses working in so-called 'red zones' (COVID units) being given additional payments from the national Epidemiological Fund, while those who were formally engaged in non-COVID-19 zones, despite shouldering similar risks, were not eligible to receive any monetary incentives[70].

Numerous gender-related and legal barriers have been observed as regards people living with TB in Kyrgyzstan. In a 2016 Legal Review on Tuberculosis in Kyrgyzstan, it was found that contacts of patients were often informed about patients' TB statuses often without prior consultation with the patient, and some patients were not informed of the importance of contact tracing[71]. The report further found that patients did not know that under the law, they should be entitled to social support. Civil society respondents to the Legal Review said that while social support was guaranteed under the law, it was not implemented in practice[72]. Patients further stated that they were required to purchase vitamins and anti-allergy medications at considerable cost[73], and in addition to this, diagnosis of complications such as kidney or liver problems from TB drugs, is not provided for free, so these complications are often left untreated[74]. Exacerbating these costs and the lack of social support is a government decree precluding TB patients from certain types of work[75].

A gender assessment on TB in Kyrgyzstan, also conducted in 2016, found further barriers for women with TB. Notably, women in Kyrgyzstan are more economically marginalised than men[76]. In addition, the assessment found that a majority of women living with TB in the focus groups had been left by their husbands and/or thrown out of the household by their in-laws due to the stigma of being diagnosed with TB, with one woman repeating her husbands' words: "Who needs a sick wife?"[77] COVID-19 has seen a cooccurring syndemic on domestic violence

[70] Interview with infectious diseases specialists (anonymised per request) (Zoom, 29 December 2020)

[71] Nonna Turusbekova, 'Legal Review: Tuberculosis in Kyrgyzstan' Stop TB Partnership (June 2016) http://www.stoptb.org/assets/documents/communities/CRG/TB%20Legal%20Environment%20Assessment%20Kyrgyzstan%20_%20ENG.pdf accessed 1 March 2021, 9

[72] Nonna Turusbekova, 'Legal Review: Tuberculosis in Kyrgyzstan' Stop TB Partnership (June 2016) http://www.stoptb.org/assets/documents/communities/CRG/TB%20Legal%20Environment%20Assessment%20Kyrgyzstan%20_%20ENG.pdf accessed 1 March 2021, 11

[73] Nonna Turusbekova, 'Legal Review: Tuberculosis in Kyrgyzstan' Stop TB Partnership (June 2016) http://www.stoptb.org/assets/documents/communities/CRG/TB%20Legal%20Environment%20Assessment%20Kyrgyzstan%20_%20ENG.pdf accessed 1 March 2021, 14

[74] Samanta Sokolowski, 'Gender Assessment in Kyrgyzstan' Stop TB Partnership (2016) http://www.stoptb.org/assets/documents/communities/CRG/TB%20Gender%20Assessment%20Kyrgyzstan%20%20_%20ENG.pdf accessed 1 March 2021

[75] Decree of the Government of the Kyrgyz Republic (31 May 1999) #294, described in Nonna Turusbekova, 'Legal Review: Tuberculosis in Kyrgyzstan' Stop TB Partnership (June 2016) http://www.stoptb.org/assets/documents/communities/CRG/TB%20Legal%20Environment%20Assessment%20Kyrgyzstan%20_%20ENG.pdf accessed 1 March 2021, 16

[76] Samanta Sokolowski, 'Gender Assessment in Kyrgyzstan' Stop TB Partnership (2016) http://www.stoptb.org/assets/documents/communities/CRG/TB%20Gender%20Assessment%20Kyrgyzstan%20%20_%20ENG.pdf accessed 1 March 2021

[77] Samanta Sokolowski, 'Gender Assessment in Kyrgyzstan' Stop TB Partnership (2016) http://www.stoptb.org/assets/documents/communities/CRG/TB%20Gender%20Assessment%20Kyrgyzstan%20%20_%20ENG.pdf accessed 1 March 2021, 11

due to lockdowns forcing women to be indoors 24 hours a day with abusive partners[78]. Given existing gender disparities in TB, COVID-19 raises the question of how women with TB are particularly impacted and imply that there has been an exacerbation of social marginalisation.

Like other countries in the region, there was little support for those who lost their jobs during the lockdown for individuals generally. One article reported a lack of support for individuals who had lost their wages – with charities and private individuals stepping in to deliver food to families as well as delivering PPE to medics and police[79].

People with TB and HIV in particular thus face multilayered obstacles to accessing medical care, compounded by multiple socio-legal barriers. This raises questions about the need for comprehensive HIV/TB/COVID-19 recovery planning that takes into account socio-legal barriers.

[78] UN Women, https://www.unwomen.org/en/news/in-focus/in-focus-gender-equality-in-covid-19-response/violence-against-women-during-covid-19 accessed 1 March 2021

[79] Kamila Eshaliyeva, 'Is Kyrgyzstan Losing the Fight Against Coronavirus?' OpenDemocracy (13 July 2020) https://www.opendemocracy.net/en/odr/kyrgyzstan-losing-fight-against-coronavirus accessed 4 February 2021

Impact on TB Testing, Treatment, and Care

The COVID-19 response in Kyrgyzstan overall is characterised by an early lockdown, overwhelmed medical services due to a rise in cases in the summer of 2020 due to easing of restrictions, and better preparedness during the second wave of infections in autumn. Starting from January 2021, there has been a stable decrease in new cases registered daily and gradual dismissal of lockdown measures, while national vaccination campaigns are at a nascent stage, with a lack of clarity at time of writing on deployment and rollout plans.

Both HIV and TB responses were affected by the pandemic, and underwent innovations and modifications to reach out to patients – including through Whatsapp/Telegram groups with clinicians and mobile brigades. However, hiccups persist, including with a lack of alignment of take-home OST and mobile HIV care brigades. In addition, there has been a clear reduction in TB detection. New international assistance programmes on emergency support to adaptation of HIV and TB services to the COVID-19 pandemic and its consequences are underway. Our main findings are follows:

- *Sufficient stocks of ARV, TB, and OST medications.* Where some countries faced delivery delays of medication supplies, in Kyrgyzstan, the strict lockdown regime in March-May 2020 and the peak in COVID-19 cases in July did not seem to produce substantial impacts on procurement and supply of antiretrovirals and TB drugs. There did not seem to be cases of medication stockouts, and interviewees did not report medication regimen changes, although due to the limits of our study, this must be examined in more depth. In OST, national procurements of methadone ensured enough stocks to overcome any potential delivery delays caused by lockdown. However, other barriers existed for supply of medications to patients (see below).

- *Reduced accessibility of HIV and TB treatment facilities.* Lockdown regimes, health system overload, and repurposing of health facilities to COVID-19 care reduced access of HIV and TB patients to diagnostics, medications supply, in-person counselling and other types of medical care (surgery, cardiology, endocrinology and others). A number of innovations were introduced to attempt a compensation of gaps in services, including mobile HIV counselling units, VOT, and online counselling.

- *Reduced testing in HIV and TB.* Both HIV and TB detection reduced by approximately 30% respectively compared to 2019, while essential MDRTB testing decreased threefold. This raises serious concerns around late TB detection and an increase of MDRTB in the coming year. Given similar symptoms, the country may benefit from integrated COVID and TB testing.

- *Use of anti-TB drugs to treat COVID.* Clinicians interviewed reported that there is concerning use of TB drugs to treat COVID-19, raising concerns of AMR and MDRTB. This must be examined in more depth, and if found to be prevalent, to be tackled via stewardship activities and training of clinicians.

- *Socioeconomic effects and income loss among key populations.* Interviews indicated that key affected populations lost income due to the pandemic. Further studies are needed on the impact of loss of income on access to TB and HIV services. Key affected

populations, many of whom participate in the informal economy, lost income, with little available financial assistance. Programmatic and financial frameworks of community-based programmes for key populations need to ensure necessary flexibility for wider coverage of contingency costs (for example, related to transportation, paying for the urgent and essential health services, COVID-19 and other diagnostics and procurements of additional individual protection commodities).

Recommendations are as follows:

Problem area	Advocacy Target	Recommendation
Reduced HIV and TB screening among general populations and key groups	Ministry of Health	■ Promotion of integrated COVID-19 and TB testing; ■ Increased support to HIV mobile clinics with rapid testing and peer counselling services among other interventions; ■ Facilitation of online platforms and peer counselling on HIV self-testing.
Reduced admission to TB facilities due to COVID-19	Ministry of Health	■ Training of health staff, patients, NGO and peer consultants on the use of VST; ■ Development and wider use of mobile applications on VST; ■ Support to psychological and social care interventions for the patients using VST.
Poor TB infrastructure reported in certain areas	Ministry of Health; International Donors; National TB Programme	■ To survey TB infrastructure and increase coverage of necessary equipment.

Income losses among HIV and TB communities affecting access to health facilities and individual treatment adherence	Government of Kyrgyzstan (including Ministry of Finance and Ministry of Health)	■ The need for comprehensive social support to HIV and TB patients
	Ministry of Health and domestic NGOs	■ Facilitation of peer-led psychological and social support groups
	International donors	■ Inclusion of emergency COVID-19 relief package into community-based projects to support key populations.
Gender barriers to HIV and TB treatment aggravated by COVID-19 impacts	International donors and domestic NGOs	■ Capacity building of community-based service providers on gender-oriented and gender-transformative strategies in HIV and TB response.
Insufficient data on the trends of HIV and TB in the pandemic and post-pandemic conditions, including on gender-related barriers to care, treatment, and support, and on COVID-19 mortality among HIV and TB communities	Academics and researchers	■ Operational and scientific research studies to assess the pandemic and post-pandemic trends on COVID-19 mortality among HIV and TB patients; ■ Documentation of extent of reduction in TB detection; ■ Studies to assess gender-related barriers to HIV and TB care associated to COVID-19 response ■ Investigations on use of anti-TB drugs to treat COVID-19
Use of anti-TB drugs to treat COVID-19	WHO, Ministry of Health	■ Scale-up of antimicrobial resistance stewardship activities

The publication was created by the Matahari Global Solutions and published within the framework of the regional project called “Sustainability of Services for Key Populations in Eastern Europe and Central Asia” which is carried out by the Alliance for Public Health, in a consortium with the 100% Life (All-Ukrainian Network of PLWH), the Central Asian HIV’ Association and the Eurasian Key Populations Health Network with the aid from the Global Fund to Fight AIDS, Tuberculosis, and Malaria.
Viewpoints presented herein are solely those of its authors and may not coincide with the views or opinions of the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

The Global Fund to Fight AIDS, Tuberculosis, and Malaria did not take part in the coordination and approval of both the immediate material and the possible conclusions stemming from it.