

RESPONSES TO COVID-19 AND THE STRENGTHENING OF AUTHORITARIAN GOVERNANCE IN CENTRAL ASIA

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August 3, 2020

In March, activist Alnur Ilyashev took to Facebook to [criticize](#) the government of Kazakhstan for its response to Covid-19 and accusing officials of embezzling funds earmarked for those affected by the pandemic. Three weeks later he was arrested for “dissemination of knowingly false information that threatens public order during the state of emergency.” Later a court [sentenced](#) to three years “restricted freedom” and banned him from activism for five years.



**CENTRAL ASIA
PROGRAM**

Covid-19 has caused significant economic shocks in Central Asia, laying bare the vulnerabilities of economies dependent on energy and migration and exposing the weaknesses of the health sector in each country. As of July 15, there were almost 100,000 officially registered cases of Covid-19 in Central Asia, although this is likely an underestimate due to the lack of widespread testing. Facing such a multifaceted crisis, it has been necessary for the state to step in to enforce certain restrictions on citizens. For democratic states, the disruptions to freedom of movement imposed as a result of the pandemic have been temporary and governments have emphasized that it is imperative to return to normal life. But for authoritarian and hybrid regimes, like those in Central Asia, the virus offers an opportunity to suppress dissent, test strategies of public control and strengthen authoritarian norms. While the Central Asian states, with the exception of Turkmenistan, have recognized the spread of the virus in order to receive international humanitarian assistance, they have to varying degrees hidden the true number of infections, and forbidden doctors from talking publicly about the dangerous working conditions in hospitals, and imprisoned citizens for spreading false information. Representatives from the so-called “power ministries,” police, security services and the military, with limited experience with public health, have been the bodies responsible for crisis management, leading to a securitized approach which prioritizes order and stability over public health.

Responses to Covid-19 have differed across the region. Kazakhstan, the first country to confirm a case on March 13, quickly declared a state of emergency, enforcing a strict quarantine in the largest cities. Having lifted the restrictions in May, the country went into another lockdown in July after the arrival of “second wave” of cases. Similarly, Uzbekistan and Kyrgyzstan, where the first cases were also registered in mid-March, are also facing a spike in cases and Uzbekistan has enforced lockdown measures once more. The two other Central Asian republics have not introduced widespread lockdowns. Tajikistan closed its borders at the end of March, but continued business as usual, with the mass events organized for the Navruz holidays. After it registered its first case on April 30 on the eve of a visit from a World Health Organization (WHO) delegation, cases immediately spiked, although there has been no lockdown in the country and officially deaths have slowed. Meanwhile Turkmenistan remains the second most populous country with no official cases after North Korea with life remaining largely unchanged. A WHO delegation, which visited the country in July, recommended the government activate “measures as if COVID-19 were circulating,” but failed to confirm there were active cases in the country despite many independent media [reports](#) to the contrary.

In this article, focus on three areas. First, we explore how Central Asian governments have attempted to restrict the dissemination of information about the virus, blocking websites, threatening doctors and only permitting state media to break curfew to cover the crisis. Second, we examine how medical students have been forced to work in hospitals in the region. Lastly, we explore how Covid-19 allows governments to promote themselves as effective leaders both at home and abroad.

From Lockdowns to Denial: Central Asian Governments Respond to Covid-19

Crises present challenges to both democratic and authoritarian governments as the state is often expected to take a central role in responding quickly and effectively to resolve the situation (Chan 2014). Given that the state in authoritarian countries often plays a greater role in regulating

citizens' daily lives and restricting their rights, they may be expected to be better placed to respond to a crisis like Covid-19 which requires the state to enforce restrictions on the population. In an article comparing China and Taiwan's response to the 2003 SARS pandemic, Jonathan Schwartz argues that China's response was more effective than Taiwan's because it was able to centralize decision making, rapidly enforce restrictions without debate and shape a unified public message (Schwartz 2012). The five Central Asian states have adopted differing approaches to Covid-19 from aggressive lockdowns to outright denial. But each country has taken a top-down approach that emphasizes the leadership of governments in the crisis. Indeed, there has been a degree of convergence in policy responses to the crisis, referred to in the literature as diffusion, or "any process where prior adoption of a trait or practice in a population alters the probability of adoption for remaining non-adopters," although the precise mechanisms through which this has unfolded remain unclear (Strang 1991: 325).

The first case of Covid-19 was registered in the region's largest country Kazakhstan. Two days after the first official case was registered, on March 15 Kassym-Zhomart Tokayev, the President of Kazakhstan, introduced a state of emergency in the country. The government created a "State Commission on Ensuring the State of Emergency under the President of the Republic of Kazakhstan," which was endowed with unlimited powers during the state of emergency. The Commission quickly closed the country's borders and prohibited mass gatherings. The president's [decree](#) gave law enforcement strict instructions to strengthen control over persons who "evade medical examination and treatment, do not comply with the quarantine regime, hid data that are important for determining the epidemiological situation." On March 26, quarantine was introduced in Nur-Sultan, Almaty and Shymkent. By April 3, 2020, similar restrictions were introduced in all regions of Kazakhstan and large cities were quarantined. The state of emergency in Kazakhstan ended on May 11 and with restrictions gradually being lifted before being re-introduced on July 5 following a spike in cases.

Two days after Kazakhstan's first case, on March 15 Uzbekistan announced its first case, a citizen who had recently returned from France. Uzbekistan had already [established](#) a Special Republican Commission on Covid-19 on January 29. However, the authorities of Uzbekistan did not introduce a state of emergency, as in Kazakhstan. Instead, on March 23 the Cabinet of Ministers [introduced](#) an enhanced quarantine regime against the spread of coronavirus. Measures were introduced step-by-step, with closure of borders (March 23) the introduction of penalties for not wearing masks (March 25) and then enforcement of a strict lockdown (March 27). In order to preserve the effectiveness of the measures, the Special Republican Commission decided to extend the restrictive measures to counteract the spread of coronavirus infection until June 30. As the number of cases declined, the government introduced a "traffic light" system, with a range of restrictions based on the number of cases in specific areas. As cases rose, a fresh nationwide lockdown was introduced on July 10.

Like the other two countries, the government of Kyrgyzstan created a body to manage the response to the crisis. Kyrgyz authorities under the Ministry of Health created an operational headquarters to monitor the situation with coronavirus in China on January 24. On March 18, the Ministry of Health officially [announced](#) the first cases of coronavirus, three citizens who arrived in the country on March 12 after performing the minor Hajj in Saudi Arabia. Four days later a state of emergency was [introduced](#) for one month in Bishkek, Osh, Jalal-Abad, Suzak, Nookat and Kara-Suu. This was lifted on May 11, although some restrictions still apply.

Tajikistan's government was long in denial about Covid-19. From February onwards, the government actively [hid evidence](#) that the virus had arrived in the country with "pneumonia" cases spiking in January. Arguably the government did not want to sow panic and wanted the March 1 parliamentary elections to run smoothly. Even after the election, the government refused to introduce any measures to curtail the spread of the virus. Despite reports of cases, the government continued as though everything was normal; the football season began and Navruz, the Persian new year, was celebrated by tens of thousands in the northern city of Khujand. The Tajik authorities only confirmed the first case of Covid-19 on April 30, on the eve of the visit of a delegation from the World Health Organization. Despite the official recognition of cases, the government did not order a mass lockdown. Instead, president Rahmon dismissed Minister of Health Nasim Olimzoda on May 5 for mishandling the situation and appointed Jamoliddin Abdullozoda, head of one of the largest medical institutions in Dushanbe and a native of the same district as the president, as the new minister. As of July 15, there were 56 official deaths, although an [investigation](#) by Radio Free Europe put the death toll at a minimum of 152.

Turkmenistan is the second most populous country with no official Covid-19 cases after North Korea. The closed authoritarian state has continued to hold mass gatherings and enforced no stringent measures until May. On May 15, President Gurbanguly Berdimuhamedow [approved](#) the government's plan on "Turkmenistan's preparedness to stand against the pandemic and ways to rapidly react to it," including restrictions on mass gatherings, border restrictions and an awareness campaign around personal hygiene. Yet, by late July there were still no official cases in the country. Numerous reports have indicated that cases exist in the country. On June 15, staff at the Ashgabat Infection Hospital had been [locked](#) in and their phones confiscated. An employee at the Center for the Prevention and Treatment of Infectious Diseases [told](#) Radio Azatyk that the outbreak was "serious, [with] some patients in extremely serious condition," and with fatalities.

Controlling the Narrative

Questions and inconsistencies have emerged from the official narrative about Covid-19 in each country. A cemetery outside of Almaty created solely for Covid-19 victims had more graves than [reported](#) deaths in city. In Tajikistan, despite the fact that there were no official Covid-19 cases, in April bodies were being taken away by men in hazmat suits to be buried. Although, officially at least, the reported cases of coronavirus in Central Asia are not significant when compared to other parts of the world, the pandemic has become a catalyst for governments in the region to strengthen their control over public information. This is in keeping with previous crises of public order such as the Andijon massacre of 2005, the Zhanoezen protests in 2011 and the 2010 conflict in the Rasht Valley Tajikistan, when the governments took measures to monopolize the narrative on the events and suppress any alternatives (Lemon 2014; Megoran 2008; Lewis 2016). Authorities argue that allegedly false information disseminated through the independent media and social networks poses a threat to public health.

Two days after the first case was made public, the Ministry of Information in Kazakhstan made a statement arguing that the country had recently witnessed an increase in the dissemination of false information and [warned](#) citizens they needed to strictly observe the law to maintain the stability of the country. Article 274 of the Criminal Code stipulates that under a state of emergency "disseminating knowingly false information" is [punishable](#) by 3 to 7 years in prison. By April 3, 41 [cases](#) had been opened against those accused of spreading false information.

Uzbekistan has adopted similar measures. In addition, the government made amendments and additions to the Criminal Code and the Code of Administrative Responsibility on March 26, 2020. According to these amendments, violation of the quarantine regime or “spreading untrue information on the spread of the infection” is [punishable](#) by fines or imprisonment up to ten years. The March 23 decree by the Cabinet of Ministers [noted](#) that “mobile phones, audio and video equipment, bank cards and other storage media belonging to persons infected or quarantined on suspicion of being infected with coronavirus will be temporarily confiscated” a way of preventing patients filming in hospitals. When adopting these amendments, senators noted that “laws are being introduced to prevent unjustified panic among the population, ensure public safety and create conditions for the normal functioning of state structures.” New legal amendments [allowed](#) the Ministry of Internal Affairs and the National Guard to detain people violating quarantine for up to 24 hours. The government [argued](#) that these measures were in keeping with the Constitution, in particular Article 24, the right to life. Blogger Usmonjon Qodirov was [jailed](#) for 15 days after criticizing that state requiring citizens to break lockdown to prepare for the president’s visit to Ferghana region.

Kyrgyzstan’s Republican Coronavirus Headquarters emphasized that distribution of false information was also criminalized. Human Rights Watch [reported](#) that the State Committee on National Security (GKNB) distributed information about at least 27 people it accused of “spreading knowingly false information” about the virus. In the meantime, the government only provided information to journalists about the crisis in the form of briefings, refusing to answer questions at other times. Only the state media were given permits to move freely around the cities where lockdown was fully enforced, including the capital city Bishkek. On June 26, parliament [passed](#) a new law on disinformation. The law prohibits the distribution of “false or non-credible information,” without defining these terms, but allowing “authorized state bodies” to do so. It obliges the owners of websites to “immediately restrict or prohibit access” to such information or face being blocked. The parliamentary deputies who proposed the bill claim it is necessary to fight the spread of false information about Covid-19.

Tajikistan was in denial about having any cases of Covid-19 throughout March and April, despite independent media reports to the contrary. In response these contradicting narratives, the government of Tajikistan took steps to curtail the flow of information and punish those reporting about the gravity of the situation. The Prosecutor General [warned](#) the population not to spread “unfounded rumors about the increase in deaths, rising prices, shortages of primary products, closure of roads between the regions of the country,” threatening legal action against those spreading such information. In April, Tajikistan’s government formally [blocked](#) independent media outlet Akhbor, which had posted information contradicting the government’s narrative on Covid-19. A few weeks later it restricted access to [kvtj.info](#), a crowdsourced site reporting many more from suspected Covid-19 infections than the official statistics would suggest. On May 11, two masked men [attacked](#) Asia Plus journalist who had reported on Covid-19 Abdulloh Ghurbati near his house in Dushanbe. Asia Plus was blocked towards the end of April. Protests from civil society and the media did not cause any change in government policy. A [letter](#) from eighteen civil society organizations and independent experts urging the government to be more transparent did not receive a response. Like the other Central Asian governments, Tajikistan has also amended its legislation to curtail the follow of information. On June 10, the government amended the Criminal Code and the Administrative Code. According to amendments, penalties are provided for disseminating inaccurate and inaccurate information through the media about a pandemic of 580 somoni (\$60) for individuals, and up to 11,600 somoni (\$1150) for legal entities.

In Turkmenistan, the government has taken steps to curtail any reports about Covid-19 in the country, discouraging the very use of the word. For example, pro-government *Gundogar News* [published](#) an article on March 28 accused *Radio Free Europe* of publishing “fake news” about cases of COVID-19 infections in Turkmenistan with the aim of “creating panic.” Those speaking about the virus in public or wearing masks have been [punished](#) with up to ten days in jail. Reports indicate that doctors in the country are being [forced](#) to work in infectious disease hospitals for two weeks at a time with no phones. In April, a doctor working in the quarantine zone in Turkmenabat was [detained](#) after being found with a mobile phone.

Co-opting Medical Students

By the third week of March 2020, all educational institutions in Kazakhstan, Kyrgyzstan and Uzbekistan, from kindergartens to universities, had been closed. This affected more than 14 million students. While most students have continued their studies remotely, the governments have co-opted medical students into serving in hospitals with no pay, driven by a shortage of medical personnel especially in the regions. Working with little PPE, healthcare workers have made up considerable proportions of the deaths due to Covid-19 in Central Asia.

Kazakhstan was the first country in the region to resort to the practice of turning to medical students in the fight against Covid-19. According to the Minister of Health of the Republic of Kazakhstan, [Yelzhan Birtanov](#), “professional duty obliges senior medical students and interns to be actively involved in the fight and in the treatment of patients with coronavirus. Since they have taken the appropriate oath as doctors, they are now involved, of course voluntarily.” While the government claimed that the students volunteered, there was a [shortage](#) of 4,000 doctors and 800 epidemiologists throughout Kazakhstan. In Pavlodar region, for example, the authorities were [forced](#) to resort to allowing imprisoned doctors to be released from jail to treat and care for the sick.

Following Kazakhstan, Uzbekistan began to conscript medical students in the fight against Covid-19. The authorities of Uzbekistan [involved](#) students of medical schools at a single hotline of the Agency for Sanitary and Epidemiological Welfare of the Republic of Uzbekistan and sent them to the regions to conduct preventive interviews with the population. The Tajik authorities also actively began to copy the practice of attracting young specialists from medical universities of the country to fight Covid-19. In early May 2020, the leadership of the Tajik State Medical University, compiled a list of fifth-year students who did not pass final exams, about 200 students (60% of the total number of graduates) and threatened all with expulsion if they did not agree to go to work in hospitals in the country. Each individual had to work in the hospital for two weeks and then isolate at home for the next two weeks. At the same time, the situation in the healthcare system of Tajikistan is complicated by the shortage of masks, special protective suits, respirators, disinfectants, anti-viral drugs and many other means of protection against coronavirus. At least this was [stated](#) by one of the forced students of the medical university that “among them there are also many volunteers who want to help the country's doctors in the fight against coronavirus, but when attracting students to work in hospitals they should pay a salary and provide personal protective equipment.” In early July, following the arrival of a second wave of infections, the Kyrgyz authorities [said](#) that students and residents of medical universities will be involved in hospitals to help doctors.

The involvement of senior students of medical universities in the fight against coronavirus has become common practice in post-Soviet countries, as well as around the world. However, where some democratic countries such as the UK have [allowed](#) medical students to graduate early in order to begin working in hospitals, they volunteered and were paid, unlike in the Russia and the countries of Central Asia.

Covid-19, Soft Power and State Legitimacy

Each government has claimed to have been effective in addressing the public health crisis, attempting to amass symbolic capital for their response to the pandemic. This is particularly important for the region's "performance-based" authoritarian regimes Kazakhstan and Uzbekistan, where governments' legitimacy rests on increasing living standards and addressing social issues from the top-down (Lemon 2019; Schatz 2009; Foa 2018). Governments have mobilized pro-government youth organizations and their ruling party youth wings to fight the spread of coronavirus infection by informing people about hygiene and holding events to show the people how the government is effectively fighting the virus. At the same time, clearly hiding their obvious oversights in the health care system in the provision and provision of high-quality medical care to the population, as well as in countering the spread of coronavirus in their countries. In Tajikistan, Avangard, a Ministry of Internal Affairs sponsored youth group with 5,000 members, [handed](#) out leaflets about cleanliness around the country. The youth wing of the ruling People's Democratic Party, Sozondagoni Vatan, also [handed](#) out informational leaflets and distributed aid among the population. In Kazakhstan, Zhas Otan, 5,000 [volunteers](#) from the youth wing of the ruling Nur Otan party, were involved in delivering aid.

The Covid-19 crisis has offered him the region's two largest states Kazakhstan and Uzbekistan an opportunity to continue engage in "virus diplomacy." Since coming to power in 2016, Mirziyoyev has actively pursued a diplomatic strategy to place Uzbekistan at the center of the region. Mirziyoyev has made 14 calls to other Central Asian presidents since March, outshining Tokayev's nine phone calls. Uzbekistan has also [outmatched](#) Kazakhstan in terms of humanitarian aid to the region's poorest states, Tajikistan and Kyrgyzstan (see Table 1). The government of Uzbekistan has [sent](#) medical aid in April and a team of [eight](#) doctors in May to Tajikistan, making Uzbekistan Tajikistan's [largest](#) donor of humanitarian aid. It also [donated](#) food and medical supplies to Kyrgyzstan. Kazakhstan made its own donations shortly afterwards, [donating](#) 5,000 tons of flour to Tajikistan and Kyrgyzstan. In the midst of its own second wave in July, Kazakhstan [sent](#) Tajikistan a further 100 ventilators, a move that drew criticism from those who argued they were sorely needed at home.

Table 1: Intra-Central Asian Humanitarian Assistance

Donor	Recipient	Description
Uzbekistan	Tajikistan	10 ambulances, 24-ton cargo consists of medicines, mainly antibiotics, 18 railway cars with medicines and foodstuffs to Tajikistan, 10 tons of medical equipment, as well as 144 medical containers, 8 virologists

Uzbekistan	Kyrgyzstan	440 Medical beds, 1000 electronic pyrometers, 2,500 protective overalls, 150,000 medical gloves, 150,000 medical masks, 50 oxygen concentrators and 100 ventilators
Kazakhstan	Tajikistan	5,000 tons (\$1.5 million), 100 ventilators
Kazakhstan	Kyrgyzstan	5,000 tons, \$1.5 million

Despite the fact that the government budgets just \$30 per person for healthcare, the lowest in the former Soviet Union, the government of Tajikistan has claimed to have been effective in fighting Covid-19. In a meeting with healthcare professionals on May 20, president Rahmon [claimed](#) the government had taken “timely measures” to address the crisis. “The Tajik people have gone through situations that were many times more difficult than this disease. I can confidently say that they are going through this with their heads held high,” he concluded. State media has continuously [praised](#) the selfless work of doctors. Tajikistan has boasted enviable recovery rates. In two days in May, a reported 1,000 patients with Covid-19 were [reported](#) to have recovered. Officially, new cases have decreased from a daily high of 407 to an average of 40-70 per day since June 1. Once the region’s deadliest outbreak, deaths have plateaued, with 44 of the 57 official deaths coming during the first three weeks of April.

While the governments of the region have received hundreds of millions of dollars of foreign assistance to help them deal with the negative effects of the pandemic, they have also shifted the burden to civil society and patriotic citizens. In Tajikistan, after the president pledged a month’s salary to assist those in need, the state media [reported](#) a wave of similar promises from officials and entrepreneurs “following the initiative of the leader of the nation” (*pairavi az tashbbusi peshvoi millat*) who donated to a fund established by the Ministry of Finance, with some state employees having their pay diverted without their consent. In Uzbekistan, the government has placed the burden on the emerging entrepreneurial class. The government requested donations be [channeled](#) to GONGOs O'zbekiston mehr-shafqat va salomatlik (Uzbekistan - Mercy and Health) and Saxovat va ko'mak umumxalq harakati ('Generosity and Assistance'). Like in Tajikistan, some employees of the state or large companies have [complained](#) that their salaries were diverted to the fund without their permission. In March, the first President of the Republic of Kazakhstan, Nursultan Nazarbayev, created a fund for Covid-19, Biz Birgemiz (We are Together). Quickly, the ruling Nur Otan had [allocated](#) 150 million tenge (\$360,000) to provide assistance to low-income families, elderly and disabled people and soon after a range of entrepreneurs and workers also contributed. Dispersal of aid was often accompanied by a list of officials and citizens with the amount of money they had pledged. In all countries, there was a lack of accountability and transparency on how the funds would be dispersed. For example, a deputy mayor in Akkurgan district was accused of misappropriation.

Conclusion

While the Central Asian governments have taken different approaches and had different levels of success in addressing the pandemic, it has presented each government an opportunity to test their capacity to control the population. To varying degrees, each government has cracked down upon those spreading “disinformation” about the situation or challenging the official narrative. Each country, apart from Turkmenistan, has amended its legislation to introduce penalties for violating quarantine and other measures to respond to Covid-19. It does appear that a degree of diffusion

has taken place in their responses to the pandemic. While such measures are framed as being in the public interest, and they have been somewhat effective in curbing the spread of the virus, next time they may not be used for such purposes. There does not seem to be a [correlation](#) between regime type and the effectiveness of responses to Covid-19. While some authoritarian states, such as Singapore, have effectively managed the crisis, others like Iran have failed. Instead, previous experience with managing pandemics, such as the 2002-2003 SARS pandemic, effective state capacity and high public trust in the government are more important in shaping the efficacy of crisis management. To varying degrees, the Central Asian governments do not meet these conditions. Although the pandemic has presented opportunities to Central Asian governments to extend their control over their populations, they also face a serious challenge to their economies and potentially to the stability of their political systems. Ultimately, it remains to be seen whether Covid-19 will lead to a strengthening of authoritarian governance in different Central Asian states or whether it will lead to an erosion of public trust in the state and provoke increased resistance.

Bibliography

Chan, H. (2013). Crisis Politics in Authoritarian Regimes: How Crises Catalyse Changes under the State–Society Interactive Framework. *Journal of Contingencies and Crisis Management*, 21(4), pp.200-210.

Foa, R. (2018). Authoritarianism and Modernization. *Journal of Democracy*, 29(3), pp.129-140.

Lemon, E. (2014). Mediating the Conflict in the Rasht Valley, Tajikistan. *Central Asian Affairs*, 1(2), pp.247-272.

Lemon, E. Mirziyoyev's Uzbekistan: Democratization or Authoritarian Upgrading? *Foreign Policy Research Institute*, June 2019.

Lewis, D. (2016). Blogging Zhanaozen: Hegemonic Discourse and Authoritarian Resilience in Kazakhstan. *Central Asian Survey*, 35(3), pp.421-438.

Megoran, N. (2008). Framing Andijon, Narrating the Nation: Islam Karimov's Account of the Events of 13 May 2005. *Central Asian Survey*, 27(1), pp.15-31.

Schatz, E. (2009). The Soft Authoritarian Tool Kit: Agenda-Setting Power in Kazakhstan and Kyrgyzstan, *Comparative Politics*, 41(2), pp. 203-222.

Schwartz, J. (2012). Compensating for the 'Authoritarian Advantage' in Crisis Response: A Comparative Case Study of SARS Pandemic Responses in China and Taiwan. *Journal of Chinese Political Science*, 17(3), pp.313–331.

Strang, David. "Adding Social Structure to Diffusion Models: An Event History Framework." *Sociological Methods Research* 19, (1991): 324–353.