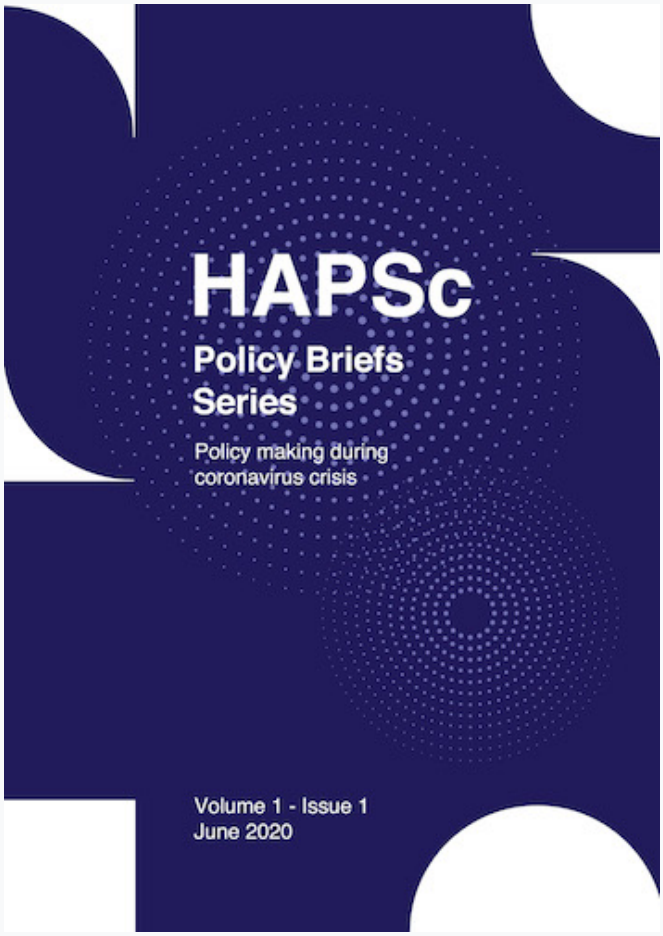
HAPSc Policy Briefs Series

Vol 1, No 1 (2020)

HAPSc Policy Briefs Series



The BRICS response to COVID-19

Pedro Fonseca, Samuel Spellmann, Lucas Gualberto do Nascimento, Elena Bastrykina, Arindam Das

doi: 10.12681/hapscpbs.24966

To cite this article:

Fonseca, P., Spellmann, S., do Nascimento, L. G., Bastrykina, E., & Das, A. (2020). The BRICS response to COVID-19. *HAPSc Policy Briefs Series*, *1*(1), 190–200. https://doi.org/10.12681/hapscpbs.24966

The BRICS response to COVID-19[1]

Pedro Fonseca[2], Samuel Spellmann[3], Lucas Gualberto do Nascimento[4], Elena Bastrykina[5] & Arindam Das[6]

Abstract

Since late 2019, SARS-CoV2 pandemic has spread worldwide. After several generations without a severe pandemic, the mixture of health and economic crisis has hit populations in all continents. The high degree of connectivity that States share, enabled by the current transportation and communication technologies, caused different regions of the world to be affected by coronavirus disease at almost the same time. Yet States responses to the SARS-CoV2 pandemic were not the same. This brief focuses on the BRICS countries individual, bilateral and collective responses to the international health crisis caused by coronavirus disease, from the early detection of COVID-19 cases in China in late December 2019 to the current surge of cases in Brazil.

Introduction

Severe acute respiratory syndrome coronavirus-2 (SARS-CoV2) was first detected in Wuhan, Hubei province, China, on 8 December 2019. SARS-CoV-2 infection can cause coronavirus disease (COVID-19), which can provoke a particular acute respiratory syndrome, leading to hospitalization and possibly death.

On May 27, 2020, the Organizing Committee for Russia's Presidency of the Shanghai Cooperation Organization (SCO) in 2019-2020 and the Russian BRICS Chairmanship in 2020 announced that it would postpone the BRICS Summit scheduled for July 21st to 23rd of 2020 due to the COVID-19 pandemic. According to the communiqué released, a new date for the meeting depends "on the development of the epidemiological situation in the states of the group and worldwide" (BRICS, 2020). Russia, the host country of the 2020 Summit, is the third nation with the highest number of cases with reported (370 thousand), behind only from the United States (1.7 million) and from another BRICS country, Brazil (411 thousand).

[1] To cite this paper in APA style: Fonseca, P., Spellmann, S., Nascimento, do L. G., Bastrykina, E. & Das, A. (2020). The BRICS response to COVID-19. *HAPSc Policy Briefs Series*, 1(1): 190 – 200. DOI: 10.12681/hapscpbs.24966
[2] Pedro Fonseca is Master's Degree Candidate in Political Science at the Federal University of Pernambuco (UFPE) and at the National Council for Scientific and Technological Development (CNPq) scholarship. (correspondent author)
[3] Samuel Spellmann is PhD Candidate in International Relations at the Pontifical Catholic University of Minas Gerais (PUC-Minas) and Minas Gerais Research Funding Foundation (FAPEMIG) scholarship.
[4] Lucas Gualberto do Nascimento is Master's Degree Candidate in Social Sciences - International Relations and Development at the State University of São Paulo (Unesp).
[5] Elena Bastrykina is Bachelor's Degree Candidate in International Relations at Far Eastern Federal University (FEFU).
[6] Arindam Das is PhD Candidate in Economics at the Birla Institute of Technology and Science Pilani, Hyderabad Campus (BITS) and Member of the International Initiative for Promoting Political Economy (IIPPE).

Yet, the centrality of BRICS countries in the pandemic is not only due to infection numbers. First, China, despite a series of questions about reaction time, has become an example of combating COVID-19 alongside other East Asian countries, such as South Korea, Singapore and Vietnam. Finally, according to the WHO specialist Dr. Mike Ryan, by mid-May has become the new epicenter of the COVID-19 pandemic, with Brazil being the most affected country in the continent.

Thus, this paper seeks to elucidate the possible impacts of the COVID-19 pandemic on BRICS countries and the BRICS institutions multilateral engagement structure. To do so, this paper first presents the socio-political context of the main policies of each BRICS country in the fight against COVID-19. In addition, this briefing shows how the group has been articulating, presenting the main policies taken since the start of the COVID-19 pandemic. Finally, this briefing concludes by reflecting on the possible impacts of the pandemic on the BRICS institutions multilateral engagement structure and its members.

BRICS nations individually

Before analyzing the policies of each BRICS country in the fight against COVID-19 and the socio-political context in which these nations are enshrined, a brief overview of the current stage of the nationwide infection in each nation should be highlighted. By early June 2020, there was a strong concentration of the number of infected people in both Brazil and Russia. Simultaneously, India occupied the 9th position in the worldwide number of infections, with 180,621 COVID-19 cases, followed by China 16th with 84,126 and South Africa 30th with 29,240 cases each. Analyzing the number of deaths, the first member of the BRICS to appear is Brazil, which is in 5th place with a total number of 27,878 deaths. India ranks 13th with 5,144 deaths, followed by China (14th) and Russia (15th) with 4,638 and 4,555 respectively. South Africa is in 35th place with 611 deaths.

From what has been analyzed, we can consider that Brazil will be the regional epicenter of Latin America. Within the BRICS, the Latin American country is responsible for 40.2% of those infected and 65% of deaths. For comparison, Russia and India, countries with the highest number of infected and dead, respectively, represent 34.3% and 12%.

China

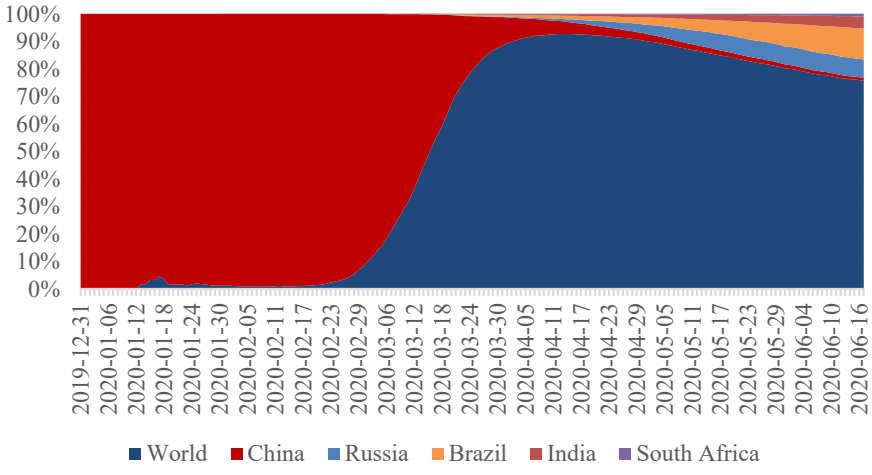
The pandemic outbreak made China the leader in number of cases for the first months; however, after six months of outbreak, the country is currently the 19th in number of Covid-19 cases, registering 83,221 reports, with 78,377 recoveries – a 94% recovery accuracy (WORLDOMETER, 2020). On June 7, the Chinese government released the document entitled "Fighting COVID-19: China in

Action" which details China's prevention, control and treatment efforts to combat COVID-19, in addition to cooperation with the international community (CGTN, 2020). Divided into four chapters, the document divides the fight against COVID-19 into 5 stages.

The first phase took place between December 27, 2019 and January 9, 2020, and it corresponds to the period when the Covid-19 pandemic surged after unknown pneumonia cases started being detected in the city of Wuhan, Hubei Province, Mainland China, in December 2019. These cases were traced to the Huanan Seafood Market; on 8 January 2020, the cause of pneumonia cases was identified as a new kind of coronavirus (KHAN, 2020). By the end of January 2020, all Chinese provinces already had Covid-19 cases confirmed (CHAPPELL, 2020), and the World Health Organization (WHO) had declared a global health emergency, due to the rising number of cases and an international outbreak (BBC, 2020).

The second stage occurred between January 20 and February 20 and was characterized by an attempt to count the progress of the disease. For this, the control of entry and exit of Wuhan and the sending of medical teams to Hubei and Wuhan were established. At the end of this phase, for the first time in Wuhan, the newly cured and discarded cases outperformed the newly confirmed cases (SCIO, 2020).

Figure 1: Total COVID-19 Reported Cases per Country as a Share of Total Cases Worldwide (Dec 31, 2019 to Jun 17, 2020)



Source: Our World in Data (2020)

In the third combat stage, between February 21 and March 17, the number of cases was controlled in the epicenter (Wuhan) and the cases stabilized in the rest of the country. After strict lockdown measures being taken in order to avoid further propagation of the virus, daily new cases in China fell from thousands to hundreds in March; imported cases – that is, transmissions coming from abroad –

surpassed locally transmitted ones for the first time on 13 March (REUTERS, 2020), which highlights the pandemic control after the first spread in Mainland China.

In the fourth stage, from March 18 to April 28, progress was made in Wuhan, in addition to the continued decline in the number of domestic cases. This decline in the number of domestic cases allowed much of the restrictions and controls in Hubei to be removed, with the exception of wuhan (SCIO, 2020). In parallel to that, during the period, the biggest concern was the cases of COVID-19 coming from outside China, which on March 25 were already confirmed in 23 Chinese provinces.

The last stage, which started on April 29, has been characterized by continuous prevention and control. At this stage, the Chinese government tested almost 10 million citizens of Wuhan (WONK, 2020). Moreover, in order to finally surpass the pandemic, the state developer China National Biotech Group (CNBG), a subsidiary of China National Pharmaceutical Group (Sinopharm), is developing an inactivated Covid-19 vaccine, currently under a phase-2 clinical trial. Its safety and efficacy has been proved testing more than 2,000 people, and production units are being constructed to supply 200 million doses a year (XINHUA, 2020).

These measures, in terms of international cooperation, may be a promising result, due to the Chinese approach emphasizing the importance of the WHO – China pledged US$2 billion to the organization for the next two years – and the view on self-developed vaccines as a global public good instead of a profiting patent (WANG, 2020), which has been the approach of private USA companies. Therefore, BRICS cooperation may profit on simultaneous vaccine productions being conducted among its countries, with shared knowledge and technology transfers to definitely tackle the pandemic.

Russia

On January 29, 2020, Russian Prime Minister Mikhail Mishustin ordered the creation of a unified federal headquarters for the fight against coronavirus. Its responsibilities include: monitoring the current situation of coronavirus in the country and the world, preparing recommendations to state bodies and regions, monitoring and coordinating work to prevent diseases (RUSSIA, 2020).

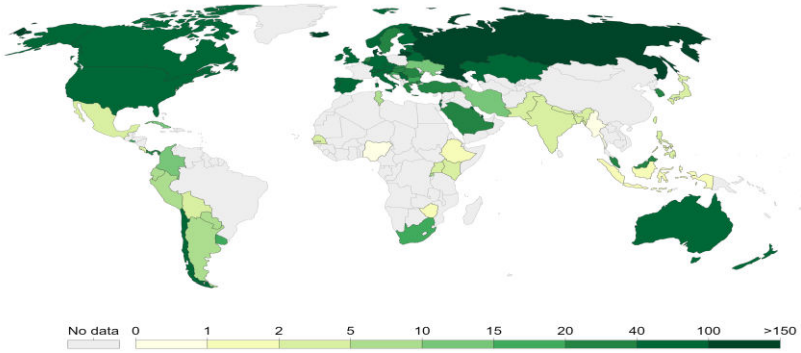
The first two cases of coronavirus infection were confirmed in Russia on January 31 (RIA NOVOSTI, 2020). Since February 20, Russia has temporarily suspended the entry of Chinese citizens, including those who enter the territory of Russia for the purpose of work, study, business, tourism, as well as in private. A week later, Russia also restricts air traffic with Iran due to the risk of spreading the virus (TASS, 2020).

On March 10, Moscow mayor Sergei Sobyanin signed a decree banning mass events with more than 5,000 participants in Moscow. Later, due to the situation with the spread of coronavirus infection, these restrictive measures were expanded. Thus, it is forbidden to hold events with more than 50 participants in Moscow. Moreover, it was announced that secondary and sports schools will be closed from March 21 (CHEVTAEVA, 2020). Since March 18, the government has closed Russia to all foreign citizens and stateless persons without exception (VEDOMOSTI, 2020). On March 19, all 85 regions of Russia were put on high alert. Mass events have been canceled throughout the country, and universities and schools have switched to distance learning (TASS, 2020). On March 27, regular and charter flights to the rest of the world have been discontinued, with the exception of flights for the return of Russian citizens. Since March 30, Russia has restricted traffic through all border checkpoints, including roads and Railways. The total number of cases in Russia, as of June 7, were 467,673, with 5,859 fatalities (WORLDOMETER, 2020).

In June, Russia is going to start providing its Covid patients the first approved drug to tackle the pandemic. The so-called antiviral Avifavir is going to be ministered to patients from June 11, and its production is expected to be able to treat sixty thousand patients per month. Russian Direct Investment Fund (RDIF) has already funded 300 million rubles to ChemRar, a drug manufacturer, in an attempt to turn the Avifavir viable on treating Covid patients (OSBORN, 2020). In addition, Russian scientists announced clinical trials for a Covid vaccine, being conducted in June as well. The Vector Institute, based in Novosibirsk, plans to complete trials in September, as in Russia there are almost fifty Covid vaccine projects being conducted simultaneously (REUTERS, 2020).

The previously mentioned Russian medical achievements on tackling the spread of Covid-19 pandemic may be crucial on BRICS developments in terms of surpassing this global challenge. A scientific-based, systemic, and public approach may bring successful results on sanitary international cooperation, as a public-produced vaccine and antiviral production may raise the possibilities of saving human lives, regardless of national financial conditions and royalty payments based on patents.

Figure 2: Total COVID-19 tests per thousand people (Jun 17, 2020)



Source: Our World in Data (2020)

India

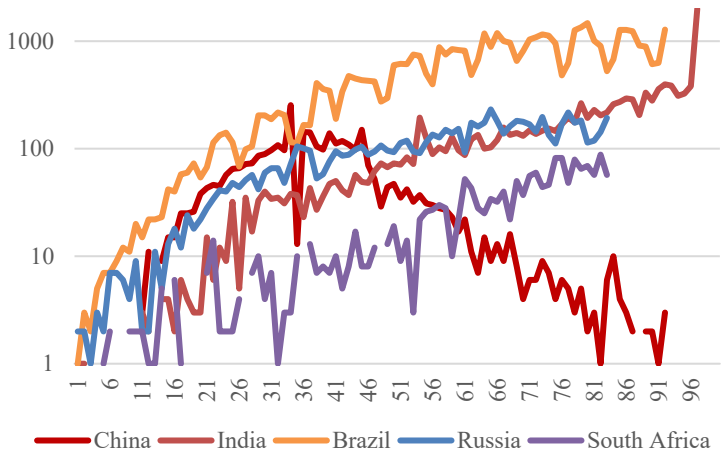
The first Indian case of COVID-19 was identified on January 30, 2020. On March 24, 2020, the Indian Government led by Prime Minister Narendra Modi declared a lockdown across the country. Since then, India has experienced a slow-paced increase of infections, especially in urban areas. As India eased lockdown restrictions to a minimum, the country experienced a significant rise of COVID-19 cases. Thus, the lockdown has had no significant impact on reducing the cases in India (see chart 02).

The federal lockdown has not been equally applied across India. Local level cases have differed since the beginning of the crisis. Data from the State of Kerala, run by the left front, shows a flattened curve in mortality of 0.5 compared to 2.7 percent experienced nationwide (Swaminathan and Johnson, 2020).

Following the lockdown, the economic crisis in India has developed on two fronts. First, the rising of COVID-19 cases affected migrant workers and unorganized laborers sectors in particular. Secondly, the impact on both demand and supply sides of the economy led to severe job losses (Sridhar, 2020).

According to the 2018 Periodical Labor Force Survey (India, 2018), the majority of the population in India depends on the daily wage earnings. During the 2020 pandemic, job losses were concentrated on the agricultural and the construction sectors. The government of India announced multiple economic packages, mainly for the unorganized sector workers, with limited benefits and several conditionalities. Thus, with an abysmal healthcare system which is virtually privatized, the government of India fails to provide basic income support to workers from all sectors.

Figure 3: New Deaths per Day, First One Hundred Days since First Reported Death by COVID-19 by Country (Log10)



Source: Our World in Data (2020)

South Africa

The first case of COVID-19 in South Africa occurred on March 5, according to the National Institute for Communicable Diseases (NIDC, 2020). And on March 15th, with 61 confirmed cases of COVID-19, the President Cyril Ramaphosa declared a national state of disaster and the national command council was created to better combat the crisis. One of the first measures taken was to ban travelers from high-risk countries at the time, such as Italy, Iran, South Korea, Spain, Germany, the United States, the United Kingdom and China as of March 18, 2020 (Ramaphosa, 2020a).

However, the number of cases continued to increase, reaching 927 cases. Thus, despite initial efforts by the South African government, the country declares lockdown[7] between March 27 and April 17. During that first lockdown period, the number of cases jumped from 927 to 2606 (Ourworldindata, 2020), forcing the government to extend the lockdown until the end of April. In addition to awareness policies, increased port and airport entry controls and lockdown, assisted by a committee of scientists[8], the national COVID-19 command council has also put mass testing of the population into practice.

Despite the control actions, the number of COVID-19 cases in South Africa has increased dramatically. In a statement on June 8, President Ramaphosa said that more than half of all cases since the outbreak began were recorded between May 24 and June 7 (Ramaphosa, 2020b). During that period, the number of newly infected was 24,626 compared to 20,124 between March 6 and May 23.

Finally, comparing South Africa with other countries on the African continent, the country is the nation with the most cases. The African continent has 251,866 cases, with South Africa representing 29% (73,600) of the total cases of COVID-19 (AFRICA CDC, 2020). Within South Africa, the Western Cape province accounts for 60% of cases (44,143) and 73.7% of deaths (1156).

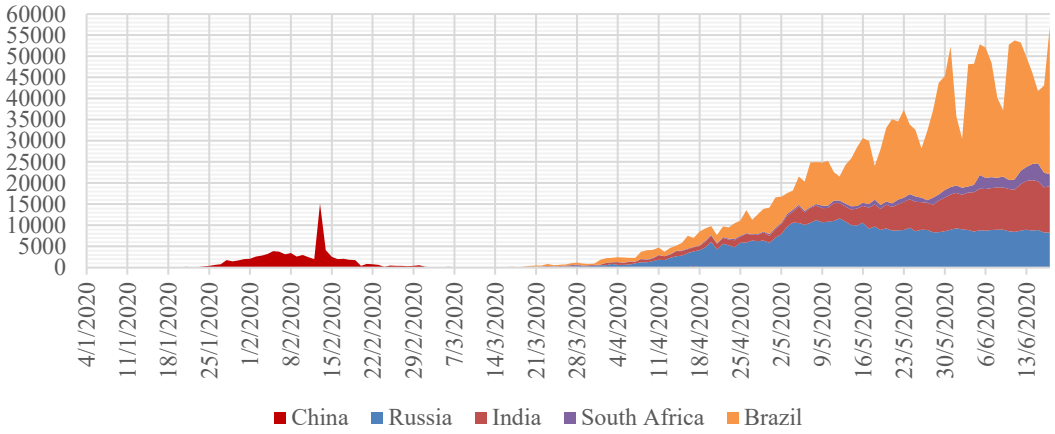
Brazil

The first Brazilian confirmed case was reported on February 26, 2020, in São Paulo. In the first stages of the SARS-CoV-2 epidemic in Brazil, the infection was largely due to imported cases. Self-declared travel history and genetic analysis confirmed that the first detected case in Brazil, was acquired via

[7] During this period the borders were closed, allowing only the transport of food and essential goods, in addition there was a ban on movement between provinces, metropolitan and district areas and agglomerations, except for funerals, but with a maximum limitation of 50 people. See: <https://sacoronavirus.co.za/2020/03/26/national-lockdown-regulations/>.
[8] According to Wiysonge (2020) the committee is composed of 45 scientists with experience in laboratory testing, clinical issues, public health and research and has the role of synthesizing the available scientific evidence to facilitate decision making by the control panel.

international importation from Northern Italy. The overall majority of imported cases came from Italy (54.8%) (Candido et al., 2020). Since then, Brazil has reported 923,189 COVID-19 cases, with 45,241 deaths by June 17, 2020. Having reached the second position in total coronavirus disease cases worldwide by May 23, 2020 and the first position in daily confirmed by May 28 2020, Brazil surpassed the US with over 20,599 new diagnosed infections daily (see chart 01).

Figure 4: Daily Confirmed New COVID-19 Cases



Source: Our World in Data.

It is widely regarded that the current state of the SARS-CoV-2 pandemic in Brazil can be attributed to Federal level governmental failures. With explicit disregard for the spread of coronavirus cases in Brazil during its first stages in February and March 2020, the Federal government led by President Jair Bolsonaro has continued to mismanage the SARS-CoV-2 sanitary crisis in what may be a unique case in the world. Contrary to previous warnings the Brazilian Federal government did not mobilize the Brazilian National Health System to its full potential.

The general attitude of disregard for human life of President Bolsonaro, crystalized in the now famous phrase “So what? What do you want me to do?”, reflects the stance of the entire administration upon the increasing number of COVID-19 cases in Brazil (The Lancet, 2020). On March and again in April 2020, Bolsonaro’s administration has twice changed the Health Minister. Since then, the Brazilian government stopped disclosing comprehensive data on coronavirus cases and deaths (Londoño, 2020). As of 16 June 2020, Brazil continues lacking a Health Minister, with the Federal response to the epidemic being overseen by high ranking military officers politically linked to the president.

Conclusions

The BRICS countries have been searching for international cooperation options to mitigate the effects of the COVID-19 pandemic in their respective territories. This cooperation has been pursued in

bilateral and multilateral stances. In the bilateral area, the cooperation initiative between Brazil and the USA resulted in the donation of 2 million doses of hydroxychloroquine. Chinese authorities has overseen bilateral initiatives between various countries by sending teams and medical supplies has proven successful so far, in what has been called masks diplomacy.

In the multilateral field, in addition to the World Health Organization and other regional bodies (SCO, SAARC, MERCOSUR, African Union), the BRICS initiative emerges as an important tool to combat COVID-19. In a meeting held on April 28, the BRICS members agreed to allocate USD 15 billion to fight the pandemic. On April 30, the New Development Bank (NBD) approved a US$1 billion project for India to combat COVID-19 (NBD, 2020). In the meeting held on May 7, the Health Ministers of the BRICS member countries addressed the pandemic together.

The COVID-19 pandemic has accelerated existing trends, such as the shift of the geopolitical axis to Asia and animosities between China and the USA. Multilateralism has also undergone significant transformations. However, among the few conclusions that the current crisis offers is that problems have become global, thus demanding globally coordinated responses. In this way, the BRICS countries can act as catalysts for global change.

References

AFRICA CDC (2020). Coronavirus Disease 2019 (COVID-19). Available at: <https://africacdc.org/covid-19/>. (Accessed: June 16, 2020).

BBC (2020). Coronavirus declared global health emergency by WHO. London: BBC News. Available at: <https://www.bbc.com/news/world-51318246>. (Accessed: June 16, 2020).

BRICS (2020). BRICS and the SCO summits postponed. Available at: <https://eng.brics-russia2020.ru/news/20200527/395729/BRICS-and-the-SCO-summits-postponed.html>. (Accessed: May 28, 2020).

CGTN (2020). China Global Television Network. Highlights: China issues white paper on COVID-19 fight. Available at: <https://news.cgtn.com/news/2020-06-07/China-issues-white-paper-on-COVID-19-fight-R7Be1Ggswg/index.html>. (Accessed: June 9, 2020).

Chappell, B. (2020). Coronavirus has now spread to all regions of Mainland China. Washington, DC: National Public Radio (NPR). Available at: <https://www.npr.org/sections/goatsandsoda/2020/01/30/801142924/coronavirus-has-now-spread-to-all-regions-of-mainland-china>. (Accessed: June 16, 2020).

Chevtaeva, I. (2020). Sobyanin banned mass events in Moscow [Собянин запретил массовые мероприятия в Москве]. Moscow: Vedomosti. Available at: <https://www.vedomosti.ru/society/articles/2020/03/10/824847-sobyanin>. (Accessed: June 12, 2020).

JOHNS HOPKINS (2020). Coronavirus Resource Center. Available at: <https://coronavirus.jhu.edu/map.html>. (Accessed: June 12, 2020).

Khan, N. (2020). New virus discovered by Chinese scientists investigating pneumonia outbreak. Hong Kong: The Wall Street Journal. Available at: <https://www.wsj.com/articles/new-virus-discovered-by-chinese-scientists-investigating-pneumonia-outbreak-11578485668>. (Accessed: June 16, 2020).

NIDC, National Institute for Communicable Diseases (2020). FIRST CASE OF COVID-19 CORONAVIRUS REPORTED IN SA. Available at: <https://www.nicd.ac.za/first-case-of-covid-19-coronavirus-reported-in-sa/#:~:text=This%20morning%2C%20Thursday%20March%205,Africa%20on%20March%201%2C%202020>. (Accessed: May 27, 2020).

Osborn, A. (2020). Russia to roll out its first approved Covid-19 drug next week. Moscow: Reuters. Available at: <https://www.reuters.com/article/us-health-coronavirus-russia-exclusive/exclusive-russia-to-roll-out-its-first-approved-covid-19-drug-next-week-idUSKBN2381FR>. (Accessed: June 3, 2020).

Ramaphosa, C. (2020a). Statement by President Cyril Ramaphosa on measures to combat COVID-19 epidemic. South Africa: sacoronavirus. Available at: <https://sacoronavirus.co.za/2020/03/15/statement-by-president-cyril-ramaphosa-on-measures-to-combat-covid-19-epidemic/>. (Accessed: May 30, 2020).

Ramaphosa, C. (2020b). From the Desk of the President (8th June 2020). South Africa: sacoronavirus. Available at: <https://sacoronavirus.co.za/2020/06/08/from-the-desk-of-the-president-8th-june-2020/>. (Accessed: June 10, 2020).

Reuters (2020a). Mainland China sees imported coronavirus cases exceed new local infections for first time. Beijing: The Straits Times, 2020. Available at: <https://www.straitstimes.com/asia/east-asia/mainland-china-reports-11-new-coronavirus-cases-on-march-13>. (Accessed: June 16, 2020).

Reuters (2020b). Russia plans coronavirus vaccine clinical trials in two weeks. Moscow: Reuters, 2020. Available at: <https://www.reuters.com/article/us-health-coronavirus-russia-cases/russia-plans-coronavirus-vaccine-clinical-trials-in-two-weeks-report-idUSKBN2360BJ>. (Accessed: June 3, 2020).

Reuters (2020c). South America is a new COVID 'epicentre', African deaths still low - WHO. 2020. Available in <https://br.reuters.com/article/healthcareSector/idUSL8N2D44NB>. (Accessed: May 23, 2020).

Ria Novosti (2020). The first two cases of coronavirus infection have been identified in Russia [В России выявили два первых случая заражения коронавирусом]. Moscow: Russia. Available at: <https://ria.ru/20200131/1564113463.html>. (Accessed: June 12, 2020).

Russian Government [Правительство России] (2020). Mikhail Mishustin approved the composition of the operational headquarters to prevent the importation and spread of new coronavirus infection in Russia [Михаил Мишустин утвердил состав оперативного штаба по предупреждению завоза и распространения новой коронавирусной инфекции на территории России]. Moscow: Russia. Available at: <http://government.ru/news/38865/>. (Accessed: June 12, 2020).

TASS (2020a). High alert due to coronavirus introduced throughout Russia [Режим повышенной готовности из-за коронавируса введен на всей территории России]. Moscow: Tass. Available at: <https://tass.ru/obschestvo/8027563>. (Accessed: June 12, 2020).

TASS (2020b). Russia introduces a temporary restriction on the entry of Chinese citizens to Russia [Россия вводит временное ограничение на въезд граждан Китая в Россию]. Moscow: Tass. Available at: <https://tass.ru/obschestvo/7800949>. (Accessed: June 12, 2020).

SCIO (2020). The State Council Information Office. Fighting Covid-19 China in Action. Available at: <http://english.www.gov.cn/news/topnews/202006/07/content_WS5edc559ac6d066592a449030.html>. (Accessed: June 20, 2020).

Vedomosti (2020). Foreigners will be banned from March 18 to enter Russia [Иностранцам запретят с 18 марта въезд в Россию]. Moscow: Vedomosti. Available at: <https://www.vedomosti.ru/politics/news/2020/03/16/825338-inostrantsam>. (Accessed: June 12, 2020).

Wang, X. (2020). Coronavirus: China should rein in 'wolf warrior' diplomats and let its actions do the talking. Hong Kong: South China Morning Post. Available at: <https://www.scmp.com/week-asia/opinion/article/3085709/coronavirus-china-should-rein-wolf-warrior-diplomats-and-let-its>. (Accessed: June 16, 2020).

Wiysonge, S. C. (2020). South Africa's War on COVID-19. Think Global Health. Available at: <https://www.thinkglobalhealth.org/article/south-africas-war-covid-19>. (Accessed: May 1, 2020).

Wonk, C. (2020). Tests on nearly 10 million people in Chinese city of Wuhan turn up only 300 coronavirus cases. South China Morning Post. Available at: <https://www.scmp.com/video/coronavirus/3087342/tests-nearly-10-million-people-chinese-city-wuhan-turn-only-300>. (Accessed: June 5, 2020).

Worldometer (2020a). Total Coronavirus cases in China. Worldometer. Available at: <https://www.worldometers.info/coronavirus/country/china/>. (Accessed: June 16, 2020).

Worldometer (2020b). Total Coronavirus cases in Russia. Worldometer. Available at: <https://www.worldometers.info/coronavirus/country/russia/>. (Accessed: June 12, 2020).

Xinhua (2020). China steps up inactivated Covid-19 vaccine development. Beijing: China Daily, 2020. Available at: <http://covid-19.chinadaily.com.cn/a/202006/01/WS5ed50236a310a8b24115a032.html>. (Accessed: June 16, 2020).