

The Black Death and COVID-19: The Value of Studying Pandemics in Historical Perspective

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Abstract

This article reflects on the dramatic effects the rapid spread of the Black Death plague pandemic had on Eurasia in the 1300s and the strong parallels this historical case study has with today's global spread of the COVID-19 pandemic. Both pandemics had their origins in 'the East', devastating communities across Asia and Europe, forcing people into lockdowns and quarantines. It also severely affected the economies of Asia and Europe. But there were differences too. COVID-19 is occurring in an age of digital technologies, which has encouraged a wider awareness of the disease and its impact than only via word of mouth. These similarities and differences also allude to how societies reacted and responded to pandemics in diverse geopolitical settings, in different times and space. In addition, a comparative study of COVID-19 and the Black Death through a historical lens considers the value of studying past pandemics for understanding present-day disease challenges. Furthermore, it highlights how past reflections can help to shine a light on contemporary socio-economic problems such as racism and xenophobia.

Keywords: Black Death, COVID-19, pandemic, plague, history, epidemic disease

Introduction

We are writing this article at a time when the world is living through one of the biggest public health crises of our lifetimes – the COVID-19 pandemic¹. Globally, people are being infected by this infectious respiratory coronavirus at an alarming rate, while hundreds of thousands have already succumbed to this disease. Since there is no cure yet, many governments around the world have implemented periods of strict lockdown, including orders to stay at home, and social distancing measures to try to stop its spread. This disease and the accompanying lockdown measures have affected our economies and societies enormously, including our education systems.

Since the outbreak of this pandemic, considerable literature has been published by the medical fraternity on this severe acute respiratory syndrome coronavirus (SARS-CoV-2). Certainly, this scholarship reflects a natural outgrowth from the urgent and determined efforts of infectious diseases experts and science scholars to better understand, for example, the origins and aetiology of this zoonotic disease (Mackenzie & Smith 2020); the workings of this novel virus once it enters the human body (Richardson *et al.* 2020; Wang *et al.* 2020); its spread and effects (Rothan & Byrareddy 2020; Schiffrin *et al.* 2020); testing for possible treatments (Zhou *et al.* 2020; Cao *et al.* 2020); and the huge efforts by scientists around the world to develop vaccines to protect people against this virus (Cohen 2020; Lurie *et al.* 2020). While much has been written on COVID-19 from the perspective of the medical sciences, much less has been published on this disease from a historical perspective (Walsh 2020; Africa Centre for Strategic Studies 2020).

Writing this article has, therefore allowed us to contribute to the literature by reflecting critically on the issue from a historical perspective. As historians, our task is to reflect critically on past events; how varied factors shaped and defined societies. However, it feels strange and a bit disconcerting to reflect on a situation that is happening as we speak, that we are indeed caught up in ourselves, and which in future years will be a subject that will occupy the minds of countless historians. To ground this paper, we have opted to extract a theme, the Black Death, from one of our undergraduate modules, namely ‘The Making of the Modern World’. This is one of our foundational History

¹ This chapter was completed in July 2020 in the midst of the first wave of the COVID-19 pandemic in South Africa.

courses at the University of KwaZulu-Natal (hereafter UKZN). This course examines a subject matter that directly speaks to issues we are all currently living through – globalisation – and the impact that certain infectious diseases, amongst other factors, have had on world history. Drawing on material we teach in our course, as well as other secondary and media sources published in recent months online, firstly, we consider some comparisons between COVID-19 and a past devastating pandemic, the fourteenth century's Black Death. Secondly, we examine what value analysing pandemics with a historical lens can bring to understanding present-day disease challenges.

The Black Death and COVID-19: Comparisons

Origins and Spread

The Black Death was amongst the most catastrophic pandemics in world history. It was caused by an infectious bacterium that produced large, painful buboes (lymph node swellings), as well as blackened skin patches, high fever and sometimes coughing up blood (Bray 1996: 48-54). Many scholars believe that this bubonic plague was likely spread across Eurasia by fleas living amongst infected wild rodent communities somewhere in Central Asia, which were disturbed by the Mongol Empire's expansion in the thirteenth and fourteenth centuries. These marauders then spread these infected fleas to different communities, who infected their hosts when they bit them (McNeill 1976: 140-143). Many scientists believe that this bacterium spread so rapidly to different communities during the fourteenth century as it morphed in some areas into pneumonic strains, which infected people's respiratory systems (Hays 2003: 37-40)². This enabled the disease to spread more quickly amongst people through cough and sneeze droplets, making it more contagious and deadly.

The Black Death spread at a time of growing societal interconnections, including long-distance trade, ironically, facilitated by the Mongols, whose empire extended over 6,000 miles across the Eurasian landmass by the early 1300s (Tignor 2008: 462; Abu-Lughod 1989: Chapter 5). Also, people did not have immunity to this disease. The last outbreak of the plague had occurred

² Other than bubonic and pneumonic forms, the plague bacillus could also cause blood poisoning or septicaemia.

some 700 years earlier, so for the fourteenth-century Eurasian population, this was a new disease (Bray 1996: 19-47). The earliest recorded outbreak of this disease occurred in Hubei province in Mongol-ruled China, sometime in the early 1330s, before spreading to the rest of China (McNeill 1976: 499). From there, it travelled in a westerly direction, traversing the major overland and sea trade routes, affecting societies in Central Asia, the 'Middle East', and eventually reaching the Mediterranean region by 1347/1348. Once reaching the Mediterranean region, it then travelled by ship to major port cities, such as Cairo, Alexandria, Marseilles, and the Italian city-states, including Venice and Genoa (Watts 1997: 25). From these bustling port cities, the disease then 'proceeded to penetrate almost all of Europe, [North Africa] and the Near East along routes radiating inland from the seaports' (McNeill 1976: 145).

The outbreak of COVID-19 in December 2019 can be compared to the Black Death in several respects. Although caused by a virus, not a bacterium, COVID-19 is a novel virus for our generation, as the Black Death was for the fourteenth century. Therefore, we have no immunity to this virus (*The Guardian* 2020). In terms of symptoms, although there remain key differences, interestingly, there are comparisons too. Although COVID-19 presents more like the flu than bubonic plague did, with fever, body aches, a dry cough and nasal congestion amongst other symptoms, the worst cases of COVID-19 have died after experiencing a continuous cough, high fever and difficulty breathing, similar to the pneumonic versions of the plague (Hays 2003: 39; WHO 2020d). Also, similar to pneumonic plague, COVID-19 is transmitted from infected people to others in close proximity, primarily through a cough or sneeze, or by touching contaminated surfaces, where the virus is then absorbed by an uninfected person when they touch their eyes, nose or mouth (Hays 2003: 39; HO 2020f).

At the time of writing this article, it is also believed that COVID-19 had its first outbreak in Hubei province, China, where the Black Death began. The first known cluster of cases was traced to an area in the city of Wuhan, with early theories linking it to a 'wet market' in this city that sold fresh (including live) species of animals, including exotic species, for consumption and use in traditional medicine preparations (*National Geographic* 2020; *The Guardian* 2020). Similar to the Black Death, many believe COVID-19 to be caused by a zoonotic disease spread from infected animals to humans, which has explained the origins of other disease outbreaks in recent years (Mackenzie

& Smith 2020; WHO 2020h)³. Presently, the working theory postulates that COVID-19 likely spread from bats and/or pangolins to humans, though this theory has not yet been proven (Duke University Medical Centre 29 May 2020).

Analogous to the Black Death, COVID-19 circulated within China before spreading elsewhere. During the first few weeks of January 2020, it spread rapidly to neighbouring countries, such as South Korea, Thailand, Japan and Taiwan, and then further afield to the United States. By the end of January, the World Health Organisation (WHO) had declared a global public health emergency, with new cases in Europe, the United Kingdom, Russia, Sweden, and the United Arab Emirates (Taylor 2020). A couple of weeks later, it had reached Egypt and Algeria by 14 and 17 February, respectively (*Aljazeera* 2020; WHO 2020a); Brazil by 26 February (Schwartz 2020) and South Africa by 5 March (National Institute for Communicable Diseases 5 March 2020) as a result of infected travellers returning from ‘hotspot’ areas in Asia, Europe and the United States. Unlike the Black Death, which reached most of Afro-Eurasia via overland and oceanic routes, COVID-19 travelled much more rapidly across the world due to international air travel. On 11 March 2020, the WHO declared COVID-19 a global pandemic.

Explanations, Remedies and Preventive Approaches

Another set of parallels emerges in terms of explanations for these two diseases. During the fourteenth century, terrified healers, political authorities, religious leaders, and ordinary people confronted with the Black Death's horrors came up with a wide variety of explanations for its cause. This included ‘miasmas’ or ‘bad air’ (i.e. environmental pollutants), the misalignment of celestial bodies (i.e. astrological forces), imbalances in the body’s humours (i.e. fluids), demonic spirits, or divine punishment from God for people’s sins (Bray 1996: 48; Watts 1997: 12-13; Hays 2003: 42-43, 51). Some European communities also scapegoated specific groups of socially marginalised people, such as Jews, lepers and the poor, but also those regarded as morally deviant at the time, such as sex workers; others blamed cats and dogs whom they

³ SARS (Severe Acute Respiratory Syndrome) is another good example of a zoonotic disease, which originated in bats before spreading to humans. It originated in China in 2002 and spread to at least 26 countries.

viewed as disease carriers (Cohen Jr. 2007: 3-36; Hays 2003: 44, 60). These beliefs led to the persecution (sometimes killing), imprisonment or banishment of such people, and even the mass slaughter of domestic pets.

Although doctors and scientists, at the time of writing, explain COVID-19 as being caused by a virus or microorganism ('germ') that infects the body – a different explanation to those offered in the medieval period – the fact that there remain many unknowns about COVID-19 means that scientists have not been the only ones who have tried to explain it (Watts 1997: 4-5)⁴. Undeniably similar to the plague era, many explanations have been promoted due to panic, fear and ignorance and, unfortunately, some with malicious intent. For example, some have attributed COVID-19 to a deliberate or accidental leak from a Chinese virology lab, others to the development of China's 5G mobile phone network, still others have linked it to billionaire philanthropist Bill Gates, whom they believe had it bio-engineered as a population control measure (Essop 2020; *News24* 2020). Even some political leaders, such as US President Donald Trump, have fuelled conspiracy theories by deliberately labelling COVID-19 as a 'Chinese virus' which has encouraged stigma and xenophobic attacks against Chinese people and led to the destabilisation of US-China relations (*The Conversation* 2020). COVID-19 has also led to anti-migrant sentiment in Europe and assaults on LGBTQ+ communities, whom their ultra-religious accusers view as sinners (*The Week* 2020). Uncannily close to one of the medieval reactions, in recent months, some people have also resorted to getting rid of their pets because of unfounded fears that they might be COVID-19 vectors! (WHO 2020e).

Moreover, in both eras, people tried a variety of remedies. While some people were passive, leaving their fates to their gods, such as many Muslims who viewed the plague as the will of Allah, others took a more active approach (McNeill 1976: 166-167; Watts 1997: 31-32). During the fourteenth century, many people prayed to their gods, participated in religious processions, and went on pilgrimages, hoping for miracles or divine protection (Watts 1997: 10-12; Bray 1996: 48-49). Some fanatical groups in Europe, such as Germany's flagellant groups, even whipped themselves until they bled in public to try to atone for people's sins (Hays 2003: 44, 50; McNeill 1976: 161; Bray 1996:

⁴ Germ theory was first proven in the late 1800s. This is also the period when the bubonic plague bacterium, *Yersinia pestis* was identified, as well as its vector, infected fleas.

78). In recent months, devout religious communities all over the world have continued to worship and attend services, some in defiance of COVID-19 lockdown orders, and others through virtual means, such as Skype or Zoom, in the hopes that their prayers might protect them (Diseko 2020).

Others have sought assistance from physicians. During the plague era, university-trained doctors focused on changing people's diets, encouraging people to avoid polluting 'miasmas' and bloodletting (Bray 1996: 48-49; *Medical News Today* 2018). Other empirics offered people herbal concoctions, burnt brimstone or frankincense to try to purify the air, recited incantations and gave people charms (Watts 1997: 12-13; Defoe 1722: 30, 32-33). None were effective. Ironically, although modern medicine has made enormous therapeutic strides in the last century, scientists at the time of writing have yet to find a cure for COVID-19 (Radcliffe 2020). Thus far, healthcare workers have provided mainly supportive care for the sick, treating their symptoms and providing oxygen, if necessary, until their patients' immune systems either failed them or helped them overcome the virus. Therefore, similar to the fourteenth-century era, many people today, feeling desperate, have sought aid from various people peddling all kinds of false remedies (WHO 2020b)⁵. So-called 'miracle cures' have varied from taking certain dietary supplements to drinking traditional herbal tonics, to wearing 'virus shut out protection pendants' to ward off the virus (Burdon-Manley 2020; Vitelli 2020; Cook 2020). Some suggested treatments, such as the injection of disinfectants or consumption of methanol or hydroxychloroquine (an anti-malarial drug) touted by US President Donald Trump and Brazil's President Jair Bolsonaro as a 'wonder drug', have also proved harmful to people's health, even causing death in some cases (*The Conversation* 2020; Phillips 2020).

Interestingly, when comparing the past to today, although understanding the workings of contagious diseases was much less developed during the medieval period than today, people in both eras also turned to preventive measures to try to stop the spread of disease. Individual actions included evidence of people fleeing congested cities, barricading themselves in their homes, and doctors wearing beak-shaped face marks, as well as long leather coats and gloves, to protect themselves from 'miasmas' (Watts 1997: 9,

⁵ Preventive advice, such as gargling with salt water, drinking hot liquids, eating lots of garlic, and using the sun's UV rays or the heat from hair dryers to kill the virus on surfaces are some examples.

21; Bray 1996: 49; Blakemore 2020). In some areas, governments implemented control measures too. For example, in several Italian port cities, the authorities imposed quarantine measures, which prevented merchant ships from docking at their ports until they had undergone a period of isolation (McNeill 1976: 150-151)⁶.

Other authorities sought to protect the public's health by creating 'health committees' or health boards. These committees were tasked with inspecting and protecting food and water sources, regulating refuse and sewage removal, and overseeing the digging of mass graves, when necessary, to ensure prompt burials (Hays 2003: 53-54; Bray 1996: 75; Watts 1997: 8-9, 16). They also isolated and confined the sick to their homes or in 'pest houses'; seized, disinfected and/or destroyed the possessions of the sick; and could put areas into full or partial lockdowns (Hays 2003: 54-56; Watts 1997: 16, 20-21). Lockdowns included restricting people's movements within or between areas; and limiting or prohibiting various economic and social activities, such as markets, eating houses, drinking taverns, festivals and religious gatherings, including funerals (Hays 2003: 44; Watts 1997: 15-22; Defoe 1722: 45-46). Some of these preventive measures had little effect. They were usually carried out haphazardly or too late, while confinement of suspected cases to filthy, crowded pest houses actually helped spread the Black Death (McNeill 1976: 151; Bray 1996: 56).

Today, because people have a clearer understanding of infectious agents' behaviour and have learned valuable lessons from past pandemic experiences, they too have turned to preventive measures to try to limit the spread of COVID-19. While some individuals, such as during the plague era, have chosen to isolate alone or with their families, many governments have taken a much more active role than was the case in the past, by promoting social distancing to save lives and to prevent the disease from overwhelming their healthcare services. Depending on the country, measures have ranged from implementing full to partial lockdowns, enforced by the police or army, which restricted people's movements and activities, and have lasted from several weeks to months (Kaplan 2020). During lockdowns, people have been

⁶ These ships were required to anchor in a secluded place, and were not allowed contact with the land until this period had passed. Initially lasting from three to four weeks, this quarantine period was later extended to 40 days to ensure that no-one was infected when they disembarked.

required, under threat of fines or arrest to stay at home (unless deemed ‘essential workers’) and avoid contact with others. This has meant the closure of schools, universities, places of worship, shops and other businesses (except food stores and pharmacies), restaurants, entertainment and sporting venues (*UN News* 2020; Sulcas 2020; Meredith & Choudhury 2020).

Similar to the Black Death era, though on a much larger scale, many governments have made it mandatory too for their citizens to wear face masks when out in public and required healthcare providers to wear personal protective equipment (PPE) (European Centre for Disease Prevention and Control 2020; *BusinessTech* 2020). Unlike the past, many governments today have promoted good hygiene practices, including regular handwashing with soap and water, use of alcohol-based hand sanitisers, and disinfection of surfaces (National Institute for Communicable Diseases 23 March 2020; Centres for Disease Control and Prevention, 2020). Many authorities today also have more advanced testing capabilities than the past, which has led to contact tracing in a bid to find and isolate those infected, as well as their contacts (Lacina 2020).

Unfortunately, while these preventive measures have helped to slow down the spread of COVID-19 in certain areas, like the plague era, they have not stopped its spread. Indeed, many factors have encouraged its continued spread, such as overcrowded living environments; underdeveloped or overwhelmed healthcare systems, inadequate access to PPEs, situations of poverty that have forced people to break lockdown measures to feed themselves and their families; and problematic individual behaviours, including poor hygiene and preventive practices such as handwashing and mask-wearing. In addition, ineffective political leadership has not helped matters. The USA and Brazil cases, whose presidents have denied or downplayed the seriousness of COVID-19 for many months, and whose governments were slow to roll out preventive measures, are a good example of this. Indeed, at the time of writing this article, their infection and death rates stood at the highest and second-highest, respectively, in the world (*Global Times* 2020).

Effects

With no cure and the limits of preventive measures, the Black Death spread rapidly in the past, as has COVID-19 in the last few months, which meant that

both diseases negatively affected their populations. For the medieval generation, the Black Death was a demographic catastrophe. Death usually resulted within three to seven days after infection, with a 60 to 80 per cent mortality rate amongst those infected with bubonic plague, and an almost 100 per cent fatality for those who acquired the more virulent pneumonic strain (Hays 2003: 39). Between the 1340s and 1350s, it is estimated that tens of millions of people died across northern Africa and Eurasia; on average, between 25 and 50 per cent of populations infected, though sometimes as high as two-thirds where populations were densely populated (Tignor 2008: 473-475)⁷.

Although COVID-19 has, at the time of writing, not been as devastating in terms of population numbers as the Black Death, it has still had huge demographic consequences. To date, this coronavirus has infected over 17 million people across the world (*Worldometer* 2020). Healthcare systems, including some in developed countries, have been overwhelmed by many people seeking medical care (Marquez & Moghe 2020; Beall 2020). Lack of staff, hospital beds and ventilators have led to many deaths (WHO 2020g)⁸. Although COVID-19 has resulted in a lower overall fatality rate, approximately 680 000 people (as of 30 July 2020) compared to the tens of millions who died during the Black Death era, today's larger world population. The continued lack of a cure or vaccine will undoubtedly result in more

⁷ Between 1347 and the early 1350s, Watts (1997: 25-26) has argued that the Islamic Mumlaq Empire, with its capital in Cairo, experienced 'catastrophic loss of human life'. Bray (1996: 57) and Hays (2003: 37, 46) put estimates at 30-40 percent for Europe, with some 25,000,000 dead between 1347 and 1350. By the early 1350s China had lost up to two-thirds of its population and the Chinese population dropped from around 120 million to around 80 million over the course of a century after plague's first outbreak (Tignor 2008: 475).

⁸ Although most people (80%) develop mild symptoms or are asymptomatic, 15% suffer severe symptoms requiring hospitalisation (including oxygen), and 5% suffer critical infections requiring ventilation. The people most negatively affected to date have been the elderly (particularly those over the age of 65 years); those with underlying medical conditions, such as hypertension, heart disease, diabetes, lung or respiratory problems; and those who are immunosuppressed, such as cancer, TB and HIV patients (Centres for Disease Control and Prevention 2020).

infections and fatalities as time goes on, as the repeated new ‘waves’ or outbreaks in different parts of the world demonstrate (Morris, Birnbaum & Weber-Steinhaus 2020; *The Economist* 2020). Doctors are also finding, as the months go on, more evidence of serious long-term consequences, such as protracted symptoms of some COVID-19 patients, as well as lung, heart and neurological health problems, which they fear might linger throughout their lives (Christenson 2020; Citroner 2020; Cormier 2020).

In addition, the Black Death had serious psychological effects on its populations. Living through the Black Death, fear of death, apprehension, and despair were constant companions. Indeed, in some of the worst-affected areas, funeral traditions were disrupted or abandoned because of the sheer volume of the dead as ‘corpses lay in piles on the roads’ or were hastily buried in mass graves (Bray 1996: 49-50, 69). As mentioned earlier, this abnormal situation sometimes resulted in hysterical, violent and panicked scapegoating behaviours. Others sought relief by taking a hedonistic approach, which meant over-indulging in alcohol and sex, seeking pleasure in life while they still could (Hays 2003: 51). Even artists captured the deep sense of gloom in the ‘Dance of Death’ artworks, which commonly highlighted death scenes or dying from the plague in their paintings and murals (McNeill 1976: 162; Bray 1996: 76). During the late 1340s, an Italian poet called Petrarch captured this era’s sombre mood by the writing of ‘the empty houses, abandoned towns ... fields covered with the dead, [and] a vast and dreadful silence over the whole world’ (Cartwright & Biddiss 2000: 40).

Similar to the Black Death, when we looked out of our windows during South Africa’s strictest level 5 lockdown period, we too experienced empty streets and silence in our world⁹. For some, lockdown brought an opportunity to slow down, spend time with family they were confined with, and reflect on life goals; for others, it brought psychological distress (Springer 2020). For many, it brought a deep sense of grief for the loss of life from COVID-19 or depression because of forced separation from loved ones or loss of jobs. Moreover, with no cure available, COVID-19 has caused pessimism, fear and uncertainty. For example, it has brought tensions, and even domestic violence amongst those confined together for long periods, enhanced loneliness

⁹ South Africans experienced level 5 lockdown restrictions, the highest lockdown level for this country, for 5 weeks between 27 March and 30 April 2020.

amongst those living alone, exacerbated mental illness, and anxiety for those unable to care for sick loved ones separated from them in isolation facilities (Springer 2020; Onyango 10 May 2020; Orkin *et al.* 13 May 2020). Disruptions to longstanding customary practices, such as funerals, which have been reduced in size, postponed or prevented, and religious traditions, such as attending mosques and breaking fasts with families during Ramadan, have also been deeply unsettling (Larnaud 2020; *South African Government News Agency* 2020; Yuan 2020; Chulov 2020).

Although situations have varied from place to place, both the Black Death and COVID-19 have also had severe political effects on societies. As a fourteenth-century Italian writer Boccaccio captured it: ‘the authority of human and divine laws almost disappeared for, like other men, the ministers and executors of law were all dead or sick or shut up with their families, so that no duties were carried out’ (Bray 1996: 49, 77). In some places, rulers were so weakened by the plague, such as those who ruled the Mongol Empire, that the Chinese, who the Mongols had conquered in the late 1270s, were able to stage a series of successful armed rebellions against their overlords, which led to the Mongols’ defeat and the re-establishment of a Chinese-ruled dynasty in 1368 (Abu-Lughod 1989: 183, 342). In other places, the effects were less extreme, and authorities resumed their political functions after a few months of interruptions (Hays 2003: 44-45). Today, while governments around the world have certainly been affected by COVID-19, particularly by the temporary lockdown protocols they implemented and the infection of political leaders, unlike the plague era, few political leaders have succumbed to the virus. Thus far, no governments have been toppled due to its outbreak (*BBC News* 2020). Of course, it is early days still. With the US 2020 presidential election looming and a sitting president stirring the flames of controversy by promoting unproven treatments, and questionable handling of the crisis, COVID-19 might produce a future political upset in the November 2020 elections (Philippe 2020).

In a similar manner to the plague era, many governments today have used the outbreak of COVID-19 to impose new policies that have led to firm regulation of societies. Although implemented ostensibly in the public’s best interests, regulatory measures also affected societies in both the fourteenth and twenty-first centuries negatively. To be sure, other than affecting people’s psychological and social well-being, these diseases and the lockdown measures that accompanied them have also had devastating effects on people’s

livelihoods. In addition to undermining the workforce through illness or death, lockdowns in both the past and present have disrupted all kinds of businesses, including food production and industries, the retail, service and transport sectors, and long-distance trade with the closing of international borders (McNeill 1976: 170; Abu-Lughod 1989: 170, 183; Nicola *et al.* 2020: 185-193). With businesses closed (some temporarily, some permanently), this too led, in the past and today, to the destabilisation of many economies through growing indebtedness, food and other shortages, rising prices and unemployment (Bray 1996: 54-55, 68-69; Hays 2003: 44, 48-49, 55, 58; Segal & Gerstel 2020). Unable to support themselves or their families, this has produced much hardship for people, as it forced many into poverty and reliance upon charity, in the form of soup kitchens or food banks (Watts 1997: 20, 25-26; Moulds 2020). Unlike the past, many governments today have accumulated huge debts in the form of loans from international lending institutions, such as the World Bank or International Monetary Fund, to bolster their failing health and social services, but also to provide stimulus packages for struggling businesses and emergency aid pay-outs to the growing number of unemployed (*The Economic Times* 2020). The long-term consequences of having to repay exorbitant debts will weigh down the economies of such governments for years to come, while the pandemic has driven the world economy into a global recession (Chowdhury & Sundaram 2020; The World Bank 2020).

Furthermore, these economic hardships have had knock-on effects on political systems. Similar to people from the past who protested their loss of income, food shortages and the infringement of their rights and social traditions under government-imposed plague restrictions, many people today have also sought to challenge their governments, which have destabilised their countries further (McNeill 1976: 152, 162; Hays 2003: 53-56; Watts 1997: 18-19). For example, people have protested against lockdown measures that have interfered with people's freedoms of movement and civil rights, and with their ability to earn a living and feed their families (Ellyatt 2020; Grootes 2020; Prasad 2020). However, while some countries' leaders, such as Prime Minister Jacinda Ardern of New Zealand seem to have learnt valuable lessons from the past about what not to do to inflame citizens' protests and found a way to provide decisive, transparent and effective handling of the COVID-19 crisis, others have not (Hamilton 2020; Luscombe 2020). Undeniably, the USA today finds itself at the very top of the COVID-19 infections and mortality list because of its ineffective leadership, which includes a 'slow initial response,

mismanagement of testing, poor coordination between the state and federal government’ (Safi 2020; Wolfson 2020). This country has also not provided adequate support for all its hard-hit citizens during this crisis, and implemented heavy-handed approaches to quell protests. Indeed, the ‘Black Lives Matter’ campaign, which has been reignited in the USA in recent weeks, and resulted in widespread violent protests over police brutality, continued racial inequalities and socio-economic hardships suffered by black communities in the USA, is a good example of this (Pearl 2020).

While we have highlighted several uncanny similarities, and a few key differences between the Black Death and COVID-19 eras, one area that marks a major difference between the two has been in advancements made in Information and Communication Technologies (ICT). In today’s world, the existence of computers and the internet, wireless and satellite technologies, and mobile smart devices, such as cellular phones have had an enormous impact on people. They have helped to keep people connected, at least virtually, during the COVID-19 pandemic, when physical contact has been restricted because of social distancing and lockdown protocols (United Nations Department of Economic and Social Affairs 2020). Certainly, these technologies have kept friends, families, work colleagues, and worshippers in touch; have kept people entertained while in lockdown; online platforms have kept the wheels of learning at schools and universities turning and enabled people needing support, such as talk therapy, to obtain such assistance. It has also enabled the development of new businesses and the expansion of already existing e-commerce ones, such as online service delivery services (*Financial Post* 2020). They have, in addition, provided important public health organisations, such as the World Health Organisation, with a global virtual stage to keep people informed about COVID-19, including critical developments taking places, such as research into cures and vaccine trials WHO 2020c). Indeed, without ICTs, thousands of scientists around the world would not have been able to communicate with one another to share knowledge so quickly about the sequencing of the COVID-19 genome, the potential for various medical treatments, concerns about the mutation of this virus, and cutting-edge research results from the hundreds of clinical vaccine trial experiments currently underway.

Of course, we need to remain circumspect in giving out unqualified praise for ICT solutions. Not everyone has access to such technologies in resource-constrained environments. This encourages digital forms of

inequality in online learning; a situation very much in evidence amongst UKZN students and many other learning institutions across South Africa, where lack of access to smart devices and data because of poverty, as well as inadequate Wi-Fi connectivity through inadequate infrastructural development, have affected the learning experiences of many students negatively (Mzileni 2020). In addition, an expanding reliance by governments on ICT for mass surveillance and tracking of their citizens during the COVID-19 pandemic threatens individual rights to privacy, should these technologies remain in place after this pandemic (Kharpal 2020). Furthermore, ICT online platforms provide great opportunities and give a voice to charlatans promoting falsehoods of all kinds, including fake news, the sale of ‘miracle cures’ and advice, which can cause much serious harm (Karagiannopoulos 2020; Petchot 2020).

Conclusion: The Value of Studying a Past Pandemic for Understanding Present Day Disease Challenges

Today we are in the midst of a global pandemic. In the relatively short time that COVID-19 has been with us – approximately seven months at the time of writing this article – it has had an enormous influence on our world. It will undoubtedly be the research subject of many scholars in future years, who will unpack and interrogate all aspects of this pandemic. Yet, as historians, what can we contribute?

We can contribute an important historical perspective to the scholarly discussions. Studying past pandemics, such as the Black Death, is valuable as it helps us to see that while COVID-19 is a global catastrophe unlike any in our lifetimes, it is not the world’s first pandemic or only pandemic and that there are even parallels that can be drawn by analysing them comparatively (Phillips 2012). Although we live in a world that is much more advanced than the Black Death era, in terms of our scientific knowledge, healthcare systems, and technological capabilities, in other ways, fourteenth-century societies were not that different from our own. Indeed, the Black Death and COVID-19 shared similarities in terms of the wide range of people’s reactions, explanations and strategies to tackle these diseases, as well as the underlying social inequalities and tensions they exposed. In addition, both diseases led to a comparable sense of fear, disorder and anxiety due to a large number of deaths, but also the frantic search for remedies and preventive measures. Viewing COVID-19 in historical

perspective also allows us to see that pandemics had a wide range of similarly powerful demographic, social, economic, psychological and political effects on their societies, that people struggled against and recovered from devastating pandemics throughout history, and that many people were able to move on from these pandemics. This comparative knowledge can be comforting, as it gives us hope in uncertain times that we too, will survive our present pandemic (MacMillan 2020).

Moreover, studying diseases in history has shown us the importance of recognising the close relationship between globalisation and diseases; and that strongly developed societal interconnections serve as a key factor in the spread of diseases. Undoubtedly, today, we live in a world that is even more connected through global commerce and international air travel, which enabled COVID-19 to spread so rapidly around the world. While we do not know yet the exact extent of the economic damage that will occur from COVID-19; to be sure, many of its effects on our connected world will only be truly known in the years to come. Historian, Janet Abu-Lughod's point that the Black Death ultimately 'set back the development of the world system for some 150 years', is a sobering reminder of the potential economic fall out for our coming months and years (Abu-Lughod 1989: 170). Furthermore, since infectious diseases are, as former UN Secretary General Kofi Annan argued, 'problems without passports' that do not respect national boundaries, tackling these problems needs collaboration at the global level as cooperation between many countries in the race to develop vaccines demonstrates (Kell 2020).

Studying diseases in a historical perspective also encourages us to recognise the historical and medical facts that COVID-19 will not be our last pandemic. Placing this disease in its broader context of diseases in world history gives us greater awareness and understanding of the threats and impacts posed to humanity by past pandemics and thus, by extension, potential future disease outbreaks. Being forewarned means being forearmed, as it can push people to realise that we cannot be complacent about such threats, as well as spur governments to prepare their societies to face future disease crises (Bower 2020). As medical historian Howard Phillips has argued in a recent interview with Julie Parle (2020: 8), studying past pandemics as a historical subject in our school and university syllabi is a vital step in keeping the threat of pandemics alive in the minds of our youth. We agree with Phillips' argument, and will continue to teach about devastating diseases in our history courses at UKZN. Forearmed with historical knowledge, it is these future leaders and

policymakers who will hopefully act decisively to prepare their societies better for coming pandemics.

However, while studying past pandemics has enabled some societies to learn important lessons, such as the preventive value of physical distancing and swift implementation of lockdown measures to limit the spread of infectious diseases, a strategy successfully implemented, for example, by New Zealand's government, it does not mean that these lessons have been learnt by all. The fact that many governments have been caught short in terms of their readiness, resources, and/or lack of political will to fight COVID-19, or that minorities, such as foreign migrants, Chinese nationals overseas, and members of the LGBTQ+ community continue to be attacked and scapegoated for this disease, highlights that being forewarned by history does not necessarily mean being forearmed. Instead, unfortunately, we see that some behaviours and attitudes have not changed at all, merely repeating themselves in different historical periods. If we are to draw lessons from the past, then we need to understand that constructive changes within societies must not only be implemented but sustained.

References

- Abu-Lughod, J.L. 1989. *The World before European Hegemony: The World System A.D. 1250-1350*. New York and Oxford: Oxford University Press.
- Africa Centre for Strategic Studies 2020. Lessons from the 1918-1919 Spanish Flu Pandemic in Africa. 13 May 2020. Available at: <https://africacenter.org/spotlight/lessons-1918-1919-spanish-flu-africa/> (Accessed on 23 July 2020.)
- Aljazeera 2020. Egypt Confirms Coronavirus Case, the First in Africa. 14 February. Available at: <https://www.aljazeera.com/news/2020/02/egypt-confirms-coronavirus-case-africa-200214190840134.html> (Accessed on 20 April 2020.)
- BBC News 2020. Coronavirus: Boris Johnson Admitted to Hospital over Virus Symptoms. 6 April. Available at: <https://www.bbc.com/news/uk-52177125> (Accessed on 20 April 2020.)
- Beall, A. 2020. The Heart-Wrenching Choice of who Lives and Dies. *BBC*, 29 April 2020. Available at: <https://www.bbc.com/future/article/20200428-coronavirus-how-doctors-choose-who-lives-and-dies> (Accessed on 15 May 2020.)

- Blakemore, E. 2020. Why Plague Doctors Wore those Strange Beaked Masks. *National Geographic*, 12 March 2020. Available at: <https://www.nationalgeographic.com/history/reference/european-history/plague-doctors-beaked-masks-coronavirus/> (Accessed on 30 April 2020.) <https://doi.org/10.1144/geosci-30-3>
- Bower, B. 2020. Past Plagues Offer Lessons for Society after the Coronavirus Pandemic. *Science News*, 18 May 2020. Available at: <https://www.sciencenews.org/article/coronavirus-COVID-19-ancient-plagues-pandemics-lessons-society> (Accessed on 25 May 2020.)
- Bray, R.S. 1996. *Armies of Pestilence: The Effects of Pandemics on History*. Cambridge: Lutterworth Press.
- Burdon-Manley, L. 2020. WHO says Madagascar's Herbal Tonic against COVID-19 not a Cure. *Aljazeera*, 4 May 2020. Available at: <https://www.aljazeera.com/news/2020/05/madagascars-herbal-tonic-COVID-19-cure-200504081212753.html> (Accessed on 8 May 2020.)
- BusinessTech* 2020. New Guidelines for Face Masks in South Africa – What you Need to Know. 29 April. Available at: <https://businesstech.co.za/news/lifestyle/393638/new-guidelines-for-face-masks-in-south-africa-what-you-need-to-know/> (Accessed on 30 May 2020.) <https://doi.org/10.1144/geosci-30-4>
- Cao, Y-c, Q-x & S-x Dia 2020. Remdesivir for Severe Acute Respiratory Syndrome Coronavirus 2 Causing COVID-19: An Evaluation of the Evidence. *Travel Medicine and Infectious Disease* 35. Available at: <https://www.sciencedirect.com/science/article/pii/S1477893920301162> (Accessed on 23 July 2020.) <https://doi.org/10.1016/j.tmaid.2020.101647> PMID:32247927 PMCID:PMC7151266
- Cartwright, F.F. & M. Biddiss 2000. *Disease and History*. Second Edition. London: Sutton Publishing.
- Chowdhury, A. & J.K. Sundaram 2020. COVID-19 Compounds Developing Country Debt Burdens. *Inter Press Service News Agency*, 23 July 2020. Available at: <https://www.ipsnews.net/2020/07/COVID-19-compounds-developing-country-debt-burdens/> (Accessed on 26 July 2020.)
- Christenson, J. 2020. COVID-19 can be a Prolonged Illness, even for Young Adults, CDC Report Says. *CNN*, 25 July 2020. Available at: <https://edition.cnn.com/2020/07/24/health/COVID-19-symptoms-last-long-term-study-wellness/index.html> (Accessed on 26 July 2020.)

- Chulov, M. 2020. COVID-19 Pandemic Casts Long Shadow as Ramadan Starts. *The Guardian*, 24 April 2020. Available at: <https://www.theguardian.com/world/2020/apr/24/COVID-19-pandemic-casts-long-shadow-as-ramadan-starts> (Accessed on 25 April 2020.)
- Citrone, G. 2020. What We Know about the Long-Term Effects of COVID-19. *Healthline*, 21 April 2020. Available at: <https://www.healthline.com/health-news/what-we-know-about-the-long-term-effects-of-COVID-19> (Accessed on 26 July 2020.)
- Cohen, J. 2020. Vaccine Designers take First Shots at COVID-19. *Science* 368: 6486. Available at: <https://science.sciencemag.org/content/368/6486/14.full> (Accessed on 23 July 2020.)
<https://doi.org/10.1126/science.368.6486.14> PMID:32241928
- Cohen, S.K. Jr. 2007. The Black Death and the Burning of Jews. *Past and Present* 196: 3 – 36. Available at: <https://doi.org/10.1093/pastj/gtm005>
- Cook, J. 2020. Warning over Coronavirus Scam ‘Cures’ being Promoted Online. *The Telegraph*, 2 March 2020. Available at: <https://www.telegraph.co.uk/technology/2020/02/27/warning-online-coronavirus-cures-websites-claim-drinks-nasal/> (Accessed on 26 April 2020.)
- Cormier, Z. 2020. How COVID-19 can Damage the Brain. *BBC*, 23 June 2020. Available at: <https://www.bbc.com/future/article/20200622-the-long-term-effects-of-COVID-19-infection> (Accessed on 26 July 2020.)
- Centres for Disease Control and Prevention 2020. Coronavirus Disease 2020 (COVID-19): Groups at Higher Risk for Severe Illness. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html> (Accessed on 30 May 2020.)
- Centres for Disease Control and Prevention 2020. Coronavirus Disease 2020 (COVID-19): How to Protect Yourself & Others. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html> (Accessed on 1 June 2020.)
- Defoe, D. 1722. *A Journal of the Plague Year: Being Observations or Memorials, of the most Remarkable Occurrences, as well as Publick as Private, which Happened in London during the last Great Visitation in 1665*. London: Printed for E. Nutt at the Royal-Exchange.
- Digital Technologies 2020. United Nations Department of Economic and Social Affairs. Critical in Facing COVID-19 Pandemic. 15 April. Available at: <https://www.un.org/development/desa/en/news/policy/>
-

- [digital-technologies-critical-in-facing-COVID-19-pandemic.html](#)
(Accessed on 30 May 2020.) <https://doi.org/10.1144/geosci-30-4>
- Diseko, L. 2020. Is Coronavirus Coming between People and their Faith? *BBC News*, 10 March 2020. Available at: <https://www.bbc.com/news/world-51819117> (Accessed on 20 April 2020.)
- Ellyatt, H. 2020. More Anti-Lockdown Protests seen in Germany as Coronavirus Fatigue Spreads in Europe. *CNBC*, 18 May. Available at: <https://www.cnbcm.com/2020/05/18/anti-lockdown-protests-germany-uk-and-poland.html> (Accessed on 1 June 2020.)
- Essop, F. 2020. Opinion: COVID-19 ‘Infodemic’: Conspiracy Theories Extremely Dangerous. 23 April 2020. *News24*. Available at: <https://www.news24.com/news24/columnists/guestcolumn/opinion-the-COVID-19-infodemic-and-why-conspiracy-theories-are-extremely-dangerous-20200423>
(Accessed on 23 May 2020.)
- Financial Post* 2020. Why Some New Businesses are Springing up during COVID-19. 5 May 2020. Available at: <https://business.financialpost.com/personal-finance/taxes/why-some-new-businesses-are-springing-up-during-COVID-19>
(Accessed on 1 June 2020.)
- Global Times* 2020. US, Brazil most ‘Failed’ COVID-19 States. *Global Times*, 27 June 2020. Available at: <https://www.globaltimes.cn/content/1192770.shtml> (Accessed on 23 July 2020.)
- Grootes, S. 2020. Political Risks of COVID-19 Lockdown, Fuelled by Hunger. *The Daily Maverick*, 10 May 2020. Available at: <https://www.daily-maverick.co.za/article/2020-05-10-political-risks-of-COVID-19-lockdown-fuelled-by-hunger/#gsc.tab=0> (Accessed on 1 June 2020.)
- Hamilton, L. 2020. What Sets Good and Bad Leaders Apart in the Coronavirus Era. *The Conversation*, 7 June 2020. Available at: <https://theconversation.com/what-sets-good-and-bad-leaders-apart-in-the-coronavirus-era-140013> (Accessed on 13 June 2020.)
- Hays, J.N. 2003. *The Burdens of Disease: Epidemics and Human Response in Western History*. New Brunswick, NJ: Rutgers University Press.
- Kaplan, J. 2020. At Least 20% of the Global Population is on Coronavirus Lockdown – Here are their Rules. *Business Insider* 25 March 2020. Available at: <https://www.businessinsider.co.za/countries-on-lockdown-coronavirus-italy-2020-3?r=US&IR=T> (Accessed on 15 April 2020.)
-

- Karagiannopoulos, V. 2020. Fake News Online and the Health Risks during the COVID-19 Pandemic. *PrivSec Report*, 11 May 2020. Available at: <https://gdpr.report/news/2020/05/11/fake-news-online-and-the-health-risks-during-the-COVID-19-pandemic/> (Accessed on 10 June 2020.)
- Kell, G. 2020. Four Lessons we should Learn from the Pandemic. *Forbes*, 11 April 2020. Available at: <https://www.forbes.com/sites/georgkell/2020/04/11/four-lessons-we-should-learn-from-the-pandemic/#21b1f41b6370> (Accessed on 15 May 2020).
- Kharpal, A. 2020. Use of Surveillance to Fight Coronavirus raises Concerns about Government Power after Pandemic Ends. *CNBC*, 26 March 2020. Available at: <https://www.cnbc.com/2020/03/27/coronavirus-surveillance-used-by-governments-to-fight-pandemic-privacy-concerns.html> (Accessed on 10 June 2020.)
- Lacina, L. 2020. WHO Coronavirus Briefing: Isolation, Testing and Tracing Compromise the ‘Backbone’ of Response. World Economic Forum, 18 March 2020. Available at: <https://www.weforum.org/agenda/2020/03/testing-tracing-backbone-who-coronavirus-wednesdays-briefing/> (Accessed on 20 May 2020.)
- Larnaud, N. 2020. ‘No chance to see their loved ones again’: Funerals in Italy have been Banned, and Many are being Buried Alone. *CBS News*. Available at: <https://www.cbsnews.com/news/italy-has-banned-funerals-now-after-coronavirus-patients-die-alone-they-are-buried-alone-too/> (Accessed on 25 March 2020.)
<https://doi.org/10.1044/leader.PPL.25032020.24>
- Lurie, N., M. Saville, R. Hatchett & J. Halton 2020. Developing COVID-19 Vaccines at Pandemic Speed. *New England Journal of Medicine* 382. Available at: <https://www.nejm.org/doi/full/10.1056/NEJMp2005630> (Accessed on 23 July 2020.) <https://doi.org/10.1056/NEJMp2005630> PMID:32227757
- Luscombe, B. 2020. Jacinda Ardern Helped New Zealand Beat Coronavirus. Next Up: Getting Re-Elected. *Time*, 12 June 2020. <https://time.com/5852567/new-zealand-coronavirus-jacinda-ardern-election/> (Accessed on 13 June 2020.)
- Mackenzie, J.S. & D.W. Smith 2020. COVID-19: A Novel Zoonotic Disease Caused by a Coronavirus from China: What we Know and What we Don’t. *Microbiology Australia* 41:1. <https://doi.org/10.1071/MA20013> PMID:32226946 PMCID:PMC7086482
-

<https://www.publish.csiro.au/ma/ma20013>

(Accessed on 23 July 2020.)

MacMillan, M. 2020. From the Black Death to COVID-19: What History can Teach us about Managing Crises and Coming out Stronger. 7 May 2020. Available at: <https://www.prospectmagazine.co.uk/magazine/margaret-macmillan-black-death-COVID-19-lessons-history> (Accessed on 15 May 2020.)

Marquez, M. & S. Moghe 2020. Inside a Brooklyn Hospital that is Overwhelmed with COVID-19 Patients and Deaths. *CNN*, 31 March 2020. Available at: <https://edition.cnn.com/2020/03/30/us/brooklyn-hospital-corona-virus-zpatients-deaths/index.html>

(Accessed on 15 May 2020.)

McNeill, W.H. 1976. *Plagues and People*. New York: Anchor Books.

Medical News Today 2018. What was Medieval and Renaissance Medicine? 2 November 2020. Available at:

<https://www.medicalnewstoday.com/articles/323533#renaissance>

(Accessed on 20 April 2020.)

Meredith, S. & S.R. Choudhury 2020. Coronavirus: China's Hubei, Where Virus First Emerged, to Relax Lockdown Measures. *CNBC*, 1 May 2020. Available at: <https://www.cnbc.com/2020/05/01/coronavirus-latest-updates-asia-europe.html> (Accessed on 10 May 2020.)

Morris, L., M. Birnbaum & F. Weber-Steinhaus 2020. Europe Scrambles to Avoid a Second Coronavirus Wave, as Infections Rise. *The Washington Post*, 28 July 2020. Available at: https://www.washingtonpost.com/world/europe/europe-coronavirus-second-wave/2020/07/28/8dd12632-d0d1-11ea-826b-cc394d824e35_story.html

(Accessed on 30 July 2020.)

Moulds, J. 2020. How the Threat of COVID-19 is Affecting People across Africa. World Economic Forum, 6 May 2020. Available at: <https://www.weforum.org/agenda/2020/05/africa-COVID-19-coronavirus-pandemic-food-water-perc/>

(Accessed on 15 May 2020.)

Mzileni, P. 2020. How COVID-19 will Affect Students. *The Mail and Guardian*, 23 April 2020. Available at: <https://mg.co.za/education/2020-04-23-how-COVID-19-will-affect-students/> (Accessed on 15 May 2020.)

National Institute for Communicable Diseases 2020. First Case of COVID-19 Coronavirus Reported in SA. 5 March 2020. Available at:

- <https://www.nicd.ac.za/first-case-of-COVID-19-coronavirus-reported-in-sa/> (Accessed on 15 May 2020.)
- National Institute for Communicable Diseases 2020. Coronavirus (COVID-19) Home Hygiene Tips. 23 March 2020. Available at: <https://www.nicd.ac.za/coronavirus-COVID-19-home-hygiene-tips/> (Accessed on 1 June 2020.)
- National Geographic 2020. Wet Markets likely Launched the Coronavirus. Here's What you Need to Know. 15 April 2020. Available at: <https://www.nationalgeographic.com/animals/2020/04/coronavirus-linked-to-chinese-wet-markets/> (Accessed on 5 May 2020.)
- News24 2020. Global COVID-19 News: Bill Gates Conspiracy Theories may 'Hamper Virus Efforts'. 18 May 2020. Available at: <https://www.news24.com/World/News/global-COVID-19-news-bill-gates-conspiracy-theories-may-hamper-virus-efforts-swedens-deadliest-month-in-30-years-20200518> (Accessed on 25 May 2020.)
- Nicola, M., Z. Alsafi, C. Sohrabi, A. Kerwan, A. Al-Jabir, C. Josofodis, M. Agha & R. Agha 2020. The Socio-Economic Implications of the Coronavirus Pandemic (COVID-19): A Review. *International Journal of Surgery* 78: 185–193. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7162753/>; <https://doi.org/10.1016/j.ijsu.2020.04.018> PMID:32305533 PMCID:PMC7162753
- Onyango, M.A. 2020. Sexual and Gender-based Violence during COVID-19: Lessons from Ebola. *The Conversation*, 10 May 2020. Available at: <https://theconversation.com/sexual-and-gender-based-violence-during-COVID-19-lessons-from-ebola-137541> (Accessed on 20 May 2020.)
- Orkin, M., B. Roberts, N. Bohler-Muller & K. Alexander 2020. The Hidden Struggle: The Mental Health Effects of the COVID-19 Lockdown in South Africa. *The Daily Maverick*, 13 May 2020. Available at: <https://www.dailymaverick.co.za/article/2020-05-13-the-hidden-struggle-the-mental-health-effects-of-the-COVID-19-lockdown-in-south-africa/#gsc.tab=0> (Accessed on 20 May 2020.)
- Parle, J. (ed.). 2020. COVID-19: (Un)precedented Times? Interview with Professor Emeritus Howard Phillips. *Historia Newsletter*, May 2020. Available at: <https://hgsa.co.za/wp-content/uploads/2020/05/Historia-Newsletter-15-May-2020.pdf> (Accessed on 23 July 2020.)
-

- Pearl, R. 2020. Coronavirus Deaths Show How Little Black Lives Matter in American Healthcare. *Forbes*, 15 June 2020. Available at: <https://www.forbes.com/sites/robertpearl/2020/06/15/coronavirus-black-lives-matter-healthcare/#67f50fdf6257> (Accessed on 15 June 2020.)
- Petchot, K. 2020. 'Fake News' in the Time of COVID-19. *UNESCO Bangkok Asia and Pacific Regional Bureau for Education*, 1 June 2020. Available at: <https://bangkok.unesco.org/content/press-provides-antidote-fake-news-time-COVID-19> (Accessed on 10 June 2020.)
- Philippe, D-P. 2020. The Political Implications of COVID-19. Standard Chartered Bank, 20 April. Available at: <https://www.sc.com/en/feature/the-political-implications-of-COVID-19/> (Accessed on 25 April 2020.)
- Phillips, H. 2012. *Plague, Pox and Pandemics*. Auckland Park, RSA: Jacana.
- Phillips, T. 2020. Brazil Condemned to Historic Tragedy by Bolsonaro's Virus Response. *The Guardian*, 5 June 2020. Available at: <https://www.theguardian.com/world/2020/jun/05/brazil-coronavirus-COVID-19-virus-doctor> (Accessed on 7 June 2020)
- Prasad, R. 2020. Coronavirus: Why is there a US Backlash to Masks? *BBC News*, 5 May 2020. Available at: <https://www.bbc.com/news/world-us-canada-52540015> (Accessed on 1 June 2020.)
- Radcliffe, S. 2020. Here's Exactly Where We are with Vaccines and Treatments for COVID-19. *Healthline*, 8 June 2020. Available at: <https://www.healthline.com/health-news/heres-exactly-where-were-at-with-vaccines-and-treatments-for-COVID-19> (Accessed on 10 June 2020.)
- Richardson, S., J.S. Hirsch, M. Narasimhan, J.M. Crawford, T. McGinn, K.W. Davidson & The Northwell COVID-19 Research Consortium 2020. Presenting Characteristics, Comorbidities and Outcomes among 5 700 Patients Hospitalised with COVID-19 in the New York City Area. *Journal of the American Medical Association* 323: 20. Available at: <https://jamanetwork.com/journals/jama/article-abstract/2765184> (Accessed on 23 July 2020.) <https://doi.org/10.1001/jama.2020.6775> PMID:32320003 PMCID:PMC7177629
- Rothan, H.A. & S.N. Byrareddy 2020. The Epidemiology and Pathogenesis of Coronavirus Disease (COVID-19) Outbreak. *Journal of Autoimmunity* 109. Available at: <https://www.sciencedirect.com/science/article/pii/S0896841120300469> (Accessed on 23 July 2020.) <https://doi.org/10.1016/j.jaut.2020.102433> PMID:32113704 PMCID:PMC7127067
-

- Safi, M. 2020. 10 Key Lessons for the Future to be Learned from Fighting COVID-19. *The Guardian*, 1 May 2020. Available at: <https://www.theguardian.com/world/2020/may/01/10-key-lessons-for-future-learned-fighting-COVID-19-coronavirus-society> (Accessed on 2 May 2020.)
- Schiffirin, E.L., J.M. Flack, S. Ito, P. Muntner & R.C. Webb 2020. Hypertension and COVID-19. *American Journal of Hypertension* 33: 5. Available at: <https://academic.oup.com/ajh/article/33/5/373/5816609> (Accessed on 23 July 2020.) <https://doi.org/10.1093/ajh/hpaa057> PMID:32251498 PMCID:PMC7184512
- Schwartz, L. 2020. Brazil Confirms First Case of COVID-19 in Latin America. *Medscape*, 26 February. Available at: <https://www.medscape.com/viewarticle/925806> (Accessed on 25 April 2020.)
- Segal, S. & G. Gerstel 2020. The Global Economic Impacts of COVID-19. Centre for Strategic and International Studies, 10 March 2020. Available at: <https://www.csis.org/analysis/global-economic-impacts-COVID-19> (Accessed on 20 April 2020.)
- Science Daily* 2020. Duke University Medical Centre, Evolution of Pandemic Coronavirus Outlines Path from Animals to Humans. 29 May. Available at: <https://www.sciencedaily.com/releases/2020/05/200529161221.htm> (Accessed on 2 June 2020.)
- South African Government News Agency* 2020 New COVID-19 Regulations for Funerals. 2 April 2020. Available at: <https://www.sanews.gov.za/south-africa/new-COVID-19-regulations-funerals> (Accessed on 20 April 2020.)
- Springer, S.H. 2020. The Psychological Impact of COVID-19. *Psychology Today*, 24 March 2020. Available at: <https://www.psychologytoday.com/za/blog/free-range-psychology/202003/the-psychological-impact-COVID-19> (Accessed on 20 May 2020.)
- Sulcas, A. 2020. Fighting COVID-19: Will SA's Lockdown Work (and What does that Mean?)? *The Daily Maverick*, 31 March 2020. Available at: <https://www.dailymaverick.co.za/article/2020-03-31-fighting-COVID-19-will-sas-lockdown-work-and-what-does-that-mean/#gsc.tab=0> (Accessed on 10 May 2020.)
- Taylor, D.B. 2020. How the Coronavirus Pandemic Unfolded: A Timeline. *The New York Times*, <https://www.nytimes.com/article/coronavirus-timeline.html> (Accessed on 27 May 2020.)
-

- Technical Report: Using Face Masks in the Community – Reducing COVID-19 Transmission from Potentially Asymptomatic or Pre-Symptomatic People through the Use of Face Masks. European Centre for Disease Prevention and Control (An Agency of the European Union), 8 April 2020. Available at: <https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-COVID-19-transmission> (Accessed on 30 May 2020.)
- The Conversation* 2020. Donald Trump’s ‘Chinese Virus’: The Politics of Naming. 21 April 2020. Available at: <https://theconversation.com/donald-trumps-chinese-virus-the-politics-of-naming-136796> (Accessed on 25 May 2020.)
- The Conversation* 2020. Why More Must be done to Fight Bogus COVID-19 Cure Claims. 17 May 2020. Available at: <https://theconversation.com/why-more-must-be-done-to-fight-bogus-COVID-19-cure-claims-138220> (Accessed on 25 May 2020.)
- The Economic Times* 2020. Coronavirus to Leave a Legacy of Unprecedented Global Debt. 15 May 2020. Available at: <https://economictimes.indiatimes.com/news/international/business/coronavirus-to-leave-a-legacy-of-unprecedented-global-debt/articleshow/75752259.cms?from=mdr> (Accessed on 27 May 2020.)
- The Economist* 2020. A Second COVID-19 Wave is Worrying Australia, Japan and Hong Kong. 1 August 2020. Available at: <https://www.economist.com/asia/2020/08/01/a-second-COVID-19-wave-is-worrying-australia-japan-and-hong-kong> (Accessed on 1 August 2020.)
- The Guardian* 2020. What is Coronavirus, What are its Symptoms, and When should I Call a Doctor? Available at: <https://www.theguardian.com/world/2020/apr/17/what-is-coronavirus-what-are-its-symptoms-and-when-should-i-call-a-doctor> (Accessed on 17 May 2020.)
- The Guardian* 2020. How did Coronavirus Start and Where did it Come from? Was it Really Wuhan’s Animal Market? 28 April. Available at: <https://www.theguardian.com/world/2020/apr/28/how-did-the-coronavirus-start-where-did-it-come-from-how-did-it-spread-humans-was-it-really-bats-pangolins-wuhan-animal-market> (Accessed on 5 May 2020.)
-

- The World Bank 2020.COVID-19 to Plunge Global Economy into Worst Recession since World War II. 8 June. <https://www.worldbank.org/en/news/press-release/2020/06/08/COVID-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii> (Accessed on 26 July 2020.)
- Tignor, R. *et al.* 2008. *Worlds Together, Worlds Apart: A History of the World. Volume Two: The Mongol Empire to the Present*. Second Edition. New York and London: W.W. Norton & Company.
- UN News 2020. COVID-19: Lockdown across India, in line with WHO Guidance. 24 March 2020. Available at: <https://news.un.org/en/story/2020/03/1060132> (Accessed on 10 May 2020.)
- Vitelli, R. 2020. The ‘Parallel Pandemic’ of Fake Cures. *Psychology Today*, 22 April 2020. Available at: <https://www.psychologytoday.com/za/blog/media-spotlight/202004/the-parallel-pandemic-fake-cures> (Accessed on 26 April 2020.)
- Walsh, B. 2020. COVID-19: The History of Pandemics. *BBC*, 26 March 2020. Available at: <https://www.bbc.com/future/article/20200325-COVID-19-the-history-of-pandemics> (Accessed on 23 July 2020.)
- Wang, L., Y. Wang, D. Ye & Q. Liu 2020. Review of the 2019 Novel Coronavirus (SARS-CoV-2) Based on Current Evidence. *International Journal of Antimicrobial Agents* 55:6. Available at: <https://www.sciencedirect.com/science/article/pii/S0924857920300984> (Accessed on 23 July 2020.)
<https://doi.org/10.1016/j.ijantimicag.2020.105948> PMID:32201353
PMCID: PMC7156162
- Watts, S. 1997. *Epidemics and History: Disease, Power and Imperialism*. New Haven and London: Yale University Press.
- What was the Black Death and How did it End? 8 April 2020. Available at: <https://www.theweek.co.uk/76088/what-was-black-death-and-how-did-it-end> (Accessed on 3 June 2020.)
- WHO Africa 2020a. A Second COVID-19 Case is Confirmed in Africa. 25 February. Available at: <https://www.afro.who.int/news/second-COVID-19-case-confirmed-africa> (Accessed on 20 April 2020.)
- WHO 2020b. Coronavirus Disease (COVID-19) Advice for the Public: Myth Busters. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/avice-for-public/myth-busters> (Accessed on 26 May 2020.)

- WHO 2020c. Coronavirus Disease (COVID-19) Pandemic. Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019?gclid=EAIaIQobChMIvd24wZr56QIVDevCh3WjgkoEAAAYASAAEgK3b_D_BwE (Accessed on 1 June 2020.)
- WHO 2020d. Coronavirus Symptoms. Available at: https://www.who.int/health-topics/coronavirus#tab=tab_3 (Accessed on 29 May 2020.)
- WHO 2020e. Pets don't Transmit COVID-19. Available at: <https://www.who.int/COVID-19/pets> (Accessed on 1 June 2020.)
- WHO 2020f. Q&A on Coronaviruses (COVID-19): How does COVID-19 Spread? Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-corona-viruses> (Accessed on 25 May 2020.)
- WHO 2020g. Q&A: Influenza and COVID-19 – Similarities and Differences. 17 March 2020. Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-similarities-and-differences-COVID-19-and-influenza?gclid=EAIaIQobChMIjarE7q336QIVTe3tCh0_uw8IEAAYASAAEgJBK_D_BwE (Accessed on 29 May 2020.)
- WHO 2020h. SARS (Severe Acute Respiratory Syndrome). <https://www.who.int/ith/diseases/sars/en/> (Accessed on 28 May 2020.)
- Wolfson, E. 2020. Trump Said He Would Terminate the U.S. Relationship with the WHO: Here's what that Means. *Time*, 4 June 2020. Available at: <https://time.com/5847505/trump-withdrawl-who/> (Accessed on 6 June 2020.)
- Worldometer 2020. COVID-19 Coronavirus Pandemic. Available at: www.worldometers.info/coronavirus/#countries (Accessed on 30 July 2020.) <https://doi.org/10.1144/geosci-30-6>
- Yuan, J. 2020. Mass-Grave Burials on Hart Island in New York Rise Fivefold. *The Washington Post*, 16 April 2020. Available at: <https://www.washingtonpost.com/national/hart-island-mass-graves-coronavirus-new-york/2020/04/16/a0c413ee-7f5f-11ea-a3ee-13e1ae0a3571story.html> (Accessed on 20 April 2020.)

Zhou, D., S-M. Dai & Q. Tong 2020. COVID-19: A Recommendation to Examine the Effect of Hydroxychloroquine in Preventing Infection and Progression. *Journal of Antimicrobial Chemotherapy* 75: 7.
<https://academic.oup.com/jac/article/75/7/1667/5810487>
(Accessed on 23 July 2020.)
<https://doi.org/10.1093/jac/dkaa114>
PMid:32196083 PMCID:PMC7184499

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