

From Athenian Plague to COVID-19: Historical Epidemiology, Socio-Economic and Political Impacts of Pandemics

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ABSTRACT: Pandemics have shaped our lives for centuries. However, people began recording their epidemiology and impacts only in the ancient era. Since then, pandemics have killed millions around the world, deeply affecting society, economies, and politics. In just the 21st century, five major pandemics, including COVID-19, caused huge numbers of deaths and serious consequences. This article looks at the history of pandemics and their effects on society, economics, and politics. We analyzed research articles from major databases. Our review found that the Black Death caused the highest death toll, killing 200 million people. Cholera was the longest-lasting pandemic. *Yersinia pestis* caused five pandemics, while influenza A caused four, and coronaviruses caused three, throughout history. From the Athenian plague to COVID-19, pandemics have disrupted agriculture, trade, and business. They worsened gaps between rich and poor, led to the fall of some empires, and made hybrid working more common today. We conclude that pandemics are important in shaping human history. Studying them helps us understand their effects and avoid future problems. It also supports better management of pandemics and improves our response to infectious diseases.

KEYWORDS: Pandemics, Socio-economic, Political, Impacts, Athenian plague, COVID-19

INTRODUCTION

Pandemics and epidemics have shaped the trajectory of human existence since antiquity. They have defined the course of kingdoms and the socio-cultural fabrics. They have defined the local and global medical advancement regarding the management of infectious diseases. The two main terms have been deployed interchangeably since the 17th and 18th century to define rapidly spreading infectious diseases (Morens et al., 2009). However, there are subtle differences regarding their geographical contexts. A pandemic refers to a disease of higher frequency that spreads over a large geographical area or affects more than one continent. In a similar vein, an epidemic refers to a disease that surpasses its frequency (Grennan, 2019). In this regard, a non-mitigated epidemic could progress into a pandemic. It could afflict large populations across different cultures and territories, triggering devastating impacts as witnessed during the past COVID-19 pandemic.

However, pandemics have impacted mankind since antiquity, and the last major pandemic remains a threat in the contemporary era. Globally, as of 29 June 2025, COVID-19 has killed over 7 million people out of over 778 million cases since its emergence in Wuhan, China, in December 2019 (WHO COVID-19 Data, 2025). More notably, as of 29 June 2025, COVID-19 has exterminated over 1000 lives from over 300,000 cases over the past 28 days worldwide (WHO COVID-19 Data, 2025). From a socio-political perspective, the world has been plagued by frequent political conflicts and tensions since antiquity. Historically, many pathogens have been overtly or covertly deployed in warfare since the ancient era (Barras & Greub, 2014). In this regard, in recent times, lethal pathogens such as variola virus, *Yersinia pestis* and *Bacillus anthracis* could be genetically reengineered to more virulent strains, and deployed as potent bioweapons (Oliviera et al. 2020; Narayanan et al., 2018). These could trigger epidemics and pandemics in areas of deployment, with a monumental threat to humanity. Thus, all hands be on deck to prevent such occurrences, and appropriate measures must be put in place to mitigate such biological disasters. Hence, a study on pandemics and their impacts would always be relevant in the 21st century.

From the onset of agrarian societies around 12,000 BCE, mankind has started witnessing outbreaks and transmission of infectious pathogens in aggregated and congregated families and communities (Dobson and Carper, 1996). The heightened development of railways, ships, and the air transport system, which triggered fluid global trade and transportation leading to incessant pandemics from the early modern era (Lindahl & Grace, 2015). Therefore, the increasing trends of epidemics and pandemics are attributable to the dynamics of globalization. Consequently, our world has evolved to a global village of humans and microorganisms. When

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we move around easily, the pathogens also travel with us effortlessly. Thus, increasing the risk of transmission to individuals without prior immunity, which could effortlessly trigger deadly outbreaks (Crosby, 1976).

In the 21st century, there has been heightened frequency of pandemics as we have witnessed five pandemics including MERS, SARS, Swine flu, Ebola and COVID-19 since the turn of the century. The reasons are not far-fetched. The increasing wave of globalization and urbanization, deforestation, and our encroachment into the sanctuaries of vectors have increased the frequency of pandemics (Kilpatrick & Randolph, 2012; Lindahl & Grace, 2015). The present El-Nino phenomenon, causing increasing temperature, the consequences of dramatic climatic changes, which provoke heightened vector proliferation and interaction with humans in many parts of the world, are potent factors triggering more epidemics and pandemics in the contemporary era (Caminade et al., 2019, WHO Facts Sheet, 2023; El-Sayed & Camel, 2020). These factors facilitated the emergence and dispersal of potent, lethal organisms, leading to widespread fatalities with catastrophic impacts on the political, socio-economic, and cultural landscape of humans in recent eras. Nevertheless, the advent of pandemics enabled groundbreaking inventions such as the discovery of vaccination by Edward Jenner in 1798 and the Germ theory by Pasteur in the mid-19th century, which replaced the hitherto miasmatic theory (Forrester, 2016; Sampath et al., 2021). They formed the fulcrum of the present biomedicine and the contemporary public health.

Nevertheless, the untoward effects of pandemics have often been overwhelming due to the evident disruption of our livelihoods. From the Athenian plague and Justinian plague, which altered the course and destinies of kingdoms, to the Bubonic plague that wiped out one-third of European populations, to the socio-economic disruptions and internet-work culture induced by COVID-19, humans have often suffered monumental shifts after pandemics (Sampath et al., 2021; Huremović, 2019). Therefore, a study highlighting the impacts of pandemics along economic, social, and political perspectives throughout history is imperative for vital reasons. It would illuminate our insights regarding how pandemics impact the socio-economic and cultural formations of local populations. This could enhance our disease preparedness and health promotional activities geared toward mitigating the impacts of pandemics. Moreover, it could enhance our understanding of how pandemics have influenced medical advancement and the course of biomedicine over the years. In this light, this review article intends to highlight the political, cultural, socio-economic and medical impacts of major pandemics throughout history.

LITERATURE REVIEW

There is no dearth of research on the socio-economic and political impacts of COVID-19. Many researchers have studied the socio-economic effects of COVID-19 campaigns from national and global perspectives (Lebni et al. 2021; Nicola et al. 2020; Tunali, 2020; Mahagamage, 2023, McLean & Malcolm, 2023, Cross et al. 2022). They highlighted job losses, unemployment, and loss of businesses resulting from quarantines, lockdowns, and widespread restrictions on movement. This led to stunted economic growth in most countries especially in lower middle-income countries (LMICs) with overwhelming impoverished populations. In this light, the impacts of the contagion are disproportionate on the existing poor people. According to Cross et al. (2022), these dynamics further widened the socio-economic inequalities of many poor people in many climes. The implications for the social services were huge and varied. The shutdowns of educational institutions, sporting centers, social and other recreational centers triggered boredom, social fatigue, and emotional disturbances. Nevertheless, many families and individuals who were hitherto not accustomed to staying together for long bonded socially. However, according to Lebni et al. (2021), this forceful self-quarantine and imposed home isolation subsequently initiated social differences manifesting as physical and verbal abuses. The prolonged COVID-19 imposed home isolation provoked a social change that have been in the offing before 2019. The rise of artificial intelligence and machine learning from the turn of the 21st century means it is a matter of time before hybrid working permeates our social landscape. However, the COVID-19 dynamics accelerated and necessitated the work- at- home culture to mitigate the pervasive economic turmoil occasioned by the pandemic (Runciman, 2024).

In a different vein, some focus on the political sequelae of SARS-COV-2 on various economies. The dynamics of COVID-19 enhanced significant social changes, exacerbated institutional inequalities and reconstructed social paradigms. For example, Redbird et al. (2022) and Runciman (2024) underscore the institutional and governmental inequalities by shedding light on the variations in governmental response and policies that shaped the pandemic. Many governments provided subsidies, relief packages, and monies to businesses and households; some provide subsidies to those in employment. The consequent inflation left a huge dent on the pandemic response in the developed and developing nations. Moreover, the distribution of pandemic stimulus and aid was enmeshed in unbridled corruption, especially in developing countries. These events left a legacy of public outcry and dissatisfaction with politicians. In most instances, the untoward pandemic response often led to political discontent and mistrust. Regarding the global consequences of COVID-19 on political systems, Elgohary (2023) asserts that the pandemic response severely impairs nationalism and globalization, which has deteriorated neoliberalism as a universal political and economic orientation. Several countries adopted the somewhat authoritarian lockdowns, social distancing, and quarantines whose enforcement remains antithetical to liberalism and globalization. Conversely, he concluded that in Europe, the pandemic contributed to the renaissance of nationalism due to the revival of the state that assumed leading roles in political arena. Bol et al. (2021) aligns with this perspective when he concluded that

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pandemic responses have increased trust in democratic governments in Western Europe, and the governments' handling of COVID-19 has no impact on the traditional left-right ideologies.

Recently, the socio-economic consequences of the 1918-19 flu have been receiving scholarly attention because its studies have previously been subsumed by the undercurrents of the First World War. Some medical historians have researched on the aftereffects of Spanish flu regarding its fatalities and colonial handling especially in erstwhile colonies. For instance, Ojo et al. (2025) discovered the diminution of export crops and shortage of essential food in Lagos resulted from overwhelming influenza deaths and its control measures. Similarly in colonial Punjab, Ojo (2020) concluded that the scarcity of common items and the appreciation of their prices were direct effects of the Spanish flu. Relatedly, Sharma et al. (2021) discovered similarities in the socio-economic consequences of COVID-19 and 1918-19 flu pandemic in India. Apart from these two notable pandemics separated by a century, other pandemics have not garnered in-depth attention concerning how they affected the social, economic and political formations of the afflicted populations. Since the advent of COVID-19, pandemics have received renewed interest from epidemiologists and historians alike. Many have focused on the relationship between the historical epidemiology of COVID-19 and other past pandemics. Some like Stange (2020) emphasized the impacts of pandemics in the ancient world while Le Pan (2020) highlighted a pictorial epidemiological view of pandemics throughout history. However, these studies did not holistically examine the social, economic and political effects of notable pandemics from antiquity. Moreover, Sampath et al., 2021 and Huremović, 2019 focused on the historical epidemiology of pandemics without detailing their comprehensive socio-economic and political impacts. Hence, this review article intends to fill this gap by highlighting the socio-economic and political impacts of notable pandemics throughout history through a historical and microbiological lens.

METHODOLOGY

This is a historical review article deploying relevant secondary sources from databases such as PubMed, Web of Science, and Google Scholar. Our search included 'pandemics, Athenian plague, Justinian plague, Black plague, Spanish flu, Cholera pandemics, HIV pandemics, Coronavirus, Ebola pandemic, COVID-19, and other pandemics throughout history. We also deployed socio-economic and political impacts of each pandemic as keywords to broaden our search. To refine our search, we deploy the research question for each pandemic, for instance, 'what are the socio-economic and political impacts of the COVID-19 pandemic? We compile relevant articles regarding pandemics from the ancient era to 2025, including themes on the broad epidemiology of causation pathogens. We exclude non-peer review articles and studies focusing on the microbiological characteristics, clinical manifestations, and management of pathogens that occasion pandemics. We curate suitable data before using a narrative review to highlight the impacts of notable pandemics from the ancient to the post-modern era. For clarity, we analyze the socio-economic and political impacts of each pandemic separately in a tabular form, starting from the first recorded pandemic, the plague of Athens, to the SARS-COV-2 pandemic in the 21st century.

Historical Epidemiology of Pandemics

Before delving into the analysis of the impacts of pandemics, we intend to illustrate the mortality figures of the main pandemics from Athenian plague to COVID-19 pandemic.

Table 1 Historical Epidemiology of Pandemics

Pandemics	Duration	Origin	Causative Pathogen	Vector	Estimated Deaths	Sources
Athenian Plague	430-426BCE	Ethiopia	Unknown	Unknown	75,000-100,000	Littman (2009); Domingo et al. (2025)
Antonine Plague	165-180BCE	Iraq	Variola major	Human	5-10 million	Sampath et al. 2021; Piret & Boivin (2021); Tang (2024)
Justinian Plague	541-543	Egypt	Yersinia Pestis	Rodents' associated fleas	100million	Frith (2021)
Black Death	1347-1351	Central Asia	Yersinia Pestis	Rodents' associated fleas	200million	Piret & Boivin (2021); Huremović, 2019
New World Smallpox	1520-onward	West Africa	Variola major	Human	56million	Le Pan (2020)
Italian Plague	1629-1631	Italy	Yersinia Pestis	Rats associated fleas	1million	Le Pan (2020)

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Great Plague of London	1665	Amsterdam/ London	Yersinia Pestis	Rats associated fleas	100,000	Le Pan (2020)
Seven Cholera Pandemics	1817-present	India	Vibrio Choler	Contaminated water	40million	Sampath et al. 2021; Huremović, 2019
Third Plague Pandemic	1855-1959	China	Yersinia Pestis	Rodents 'associated fleas	15million	Frith (2021)
Yellow fever	Late 1800s	USA	Virus	Mosquitoes	100000-150000	Le Pan (2020)
Russian Flu	1889-1890	Russia	Myxovirus Influenza	Avian	1 million	Le Pan (2020)
Spanish Flu	1918-19	USA	Influenza A (H1N1)	Pigs	>50million	Huremović, 2019; Piret, J., & Boivin, G. (2021).
Asian Flu	1957-1958	China	Influenza A (H2N2)		>1million	Huremović, 2019; Piret, J., & Boivin, G. (2021).
Hong Kong Flu	1968	China	Influenza A (H3N2)		1-4million	Huremović, 2019; Piret, J., & Boivin, G. (2021).
HIV/AIDS	1981-Present	Central Africa	HIV	Virus/ Chimpanzee	44.1 million	WHO (2025) HIV Data; Le Pan (2020)
Severe Acute Respiratory Syndrome Coronavirus	2002-2003	China	SARS	Bats	774	Huremović, 2019; Sampath et al. 2021
Swine Flu	2009-2010	Central Mexico	Influenza A (H1 N1)	Pigs	200,000	Le Pan (2020); Mena et al. (2016).
Middle East Respiratory Syndrome	2010 – present	Saudi Arabia	MERS	Bats / Camel	947	WHO (2025) MERS Update
Ebola	2014 – 2016	West Africa	Ebolavirus	Wild Animals	11,300	Ojo (2025); Izudi & Bajurniwe (2024)
COVID-19	2019-2021 (Ongoing)	China	SARS-COV2	Pangolin/ 'Bats	7.8 million	WHO (2025) COVID-19 Data, Le Pan (2020)

Note: Many of the death toll numbers listed above are best estimates based on available research. Some, such as Athenian, Antonine and Justinian Plagues and are subject to debate based on new historical evidence.

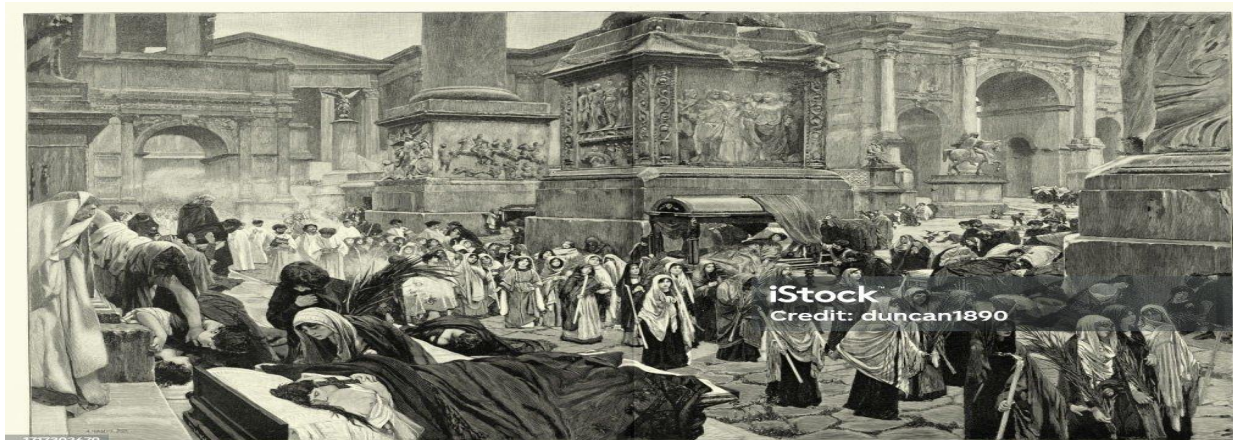
Table (1) displays the key historical epidemiological features of notable pandemics throughout antiquity. It shows that the world has witnessed 20 major epidemics in its recorded history, from 430BC in the ancient era to 2019 in the post-modern era. It spanned roughly 2450 years from the onset of the plague of Athens to the beginning of COVID-19 in Wuhan, China, in late December 2019. Regarding the duration of pandemics, cholera is the longest-lasting pandemic. Since its emergence in India in 1819, the world has witnessed seven pandemics. The latest pandemic commenced in South Asia in 1961 and is ongoing. It continues to ravage the world, particularly those regions plagued by poor health infrastructure and humanitarian crises such as sub-Saharan Africa, the Middle East, and Central America. The second-longest-lasting pandemic is the HIV /AIDS, which commenced in 1981 and still continues to cause major mortalities to the present day. Hong Kong, Swine flu, Asian flu, and the Spanish flu had the shortest duration, lasting not more than 1 year.

Throughout the history of pandemics, five pandemics each have originated in China and Africa. Four epidemics had originated in China, particularly in the 20th and 21st centuries, as opposed to two in Africa – the HIV/AIDS pandemic in 1981 and the Ebola pandemic in 2014. Concerning the causative pathogens, Yersinia pestis was responsible for five major pandemics throughout antiquity. Influenza A caused four key pandemics while coronaviruses occasioned three from the ancient to the post-modern era. Particularly, coronaviruses triggered three pandemics – SARS, MERS, and COVID-19 in the 21st century. Concerning mortalities occasioned by pandemics, the Black Death trumped all other pandemics, killing over 200million in the mid-14th century. It is closely followed by the Justinian plague that killed 100 million people, and each of the New World Smallpox and the Spanish flu that

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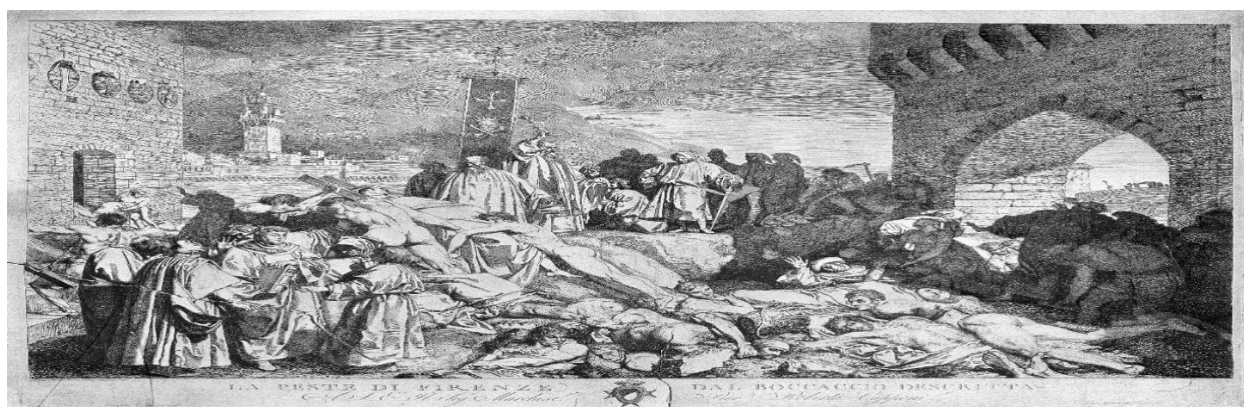
exterminated over 50 million people. SARS and MERS caused the lowest pandemic mortalities in history. SARS was responsible for 774 deaths, and MERS claimed 947 lives.

Images depicting Historical Epidemiology of Pandemics Diagrammatic depiction of Ancient Rome during the Justinian Plague



Images from Adolf-Hirsh Bubonic plague illustrations. Adapted from : <https://www.istockphoto.com/vector/history-ancient-rome-during-the-plague-of-justinian-or-justinianic-plague-a-bubonic-gm1717303679-540414347?searchscope=image%2Cfilm>

A diagrammatical depiction of the Black Death in Florence, 1348



The plague of Florence in 1348, as described in Boccaccio's *Decameron*.

Source: Wellcome Library, London

Adapted From: https://hosted.lib.uiowa.edu/histmed/plague/plague_gallery.html

Influenza victims crowd into an emergency hospital near Fort Riley, Kansas in 1918



Taylor, A. (2018). Photos of the 1918 Flu Pandemic. <https://www.theatlantic.com/photo/2018/04/photos-the-1918-flu-pandemic/557663/>

Social-economic and Political impacts of Pandemics throughout history

Table 2: Socio-economic and Political Impacts of Notable Pandemics

Pandemics	Timeline	Socio-economic Impacts	Political Impacts	Sources
Athenian Plague	430-426BCE	Loss of 25-35% of virile Athenian population occasioned loss of agricultural produce, famine and monumental commercial loss and trade ventures	-Annihilation of 4000 hoplites and 400 calvary men including the influential Greek ruler – Pericles. - Facilitation of political instability and erosion of public confidence in governance. - Contribution to the eventual loss of Athenians to the Spartan in the Peloponnesian Wars.	Littman (2009), Carmicheal (2008)
Antoine Plague	165-180BCE	Significant population loss of about 10 % of Roman population severely impaired trade, commerce and agriculture. Destabilization of pagan beliefs	-Destabilization of Roman military, political architecture. - Contributed to the decline of the Roman Empire and the end of Pax Romana	Tang (2024)
Justinian Plague	541-543	Massive population loss caused tremendous disruptions of agricultural, trade and commercial sectors. It triggered repaganisation of the largely Christianized Eastern Roman Empire and the worship of Saints.	-Weakening of the military might of the Byzantine Empire. -Reduction of tax revenue and economic implosion of the Byzantine Empire. -Contribution to the eventual fall of the Empire and shifting the power dynamics to the Barbarian Kingdoms. -Emperor Justin initiated the imposition of isolation of travelers and foods to Constantinople	Sabbatani et al. (2012); Stange (2020); Tognotti (2013)
Black Death	1347-1351	The annihilation of one-third to one-half of Europe worsened the economies of peasants, leading to stagnating wages, inflation and	-Scapegoating and widespread persecutions of minorities such as Jews and lepers.	Zapotoczny (2006); Jedwab et al. (2022) Tognotti (2013).

		disproportionate increases in living standards between the peasants and the landowners. The sudden scarcity of cheap labor provided an incentive for landlords to compete for peasants with wages and freedoms. Many left their lands to look for exorbitant wages elsewhere. Among others events, these set the pace for capitalism from hitherto pervasive feudalism in Europe. Regarding faith and beliefs, it led to the weakening of the influence of organized religion, Catholic Church in the public arena.	-Triggering of movement of Jews to eastern Europe. - Provocation of growth of Western Europe relative to the World. - Perfection of Justinian 's restriction model to organized lockdowns and quarantines by European governments.	
Seven cholera Epidemics	1817- present	-Worsening socio-economic inequalities among the impoverished, often leading to social tensions and distrust. -Social stigma associated with cholera stifles international trade, commerce and tourism. - Highlighting the significance of adequate WASH and led to improvement in urban sanitation and planning	-Heightening of government responses regarding sanitation and international collaboration against the pandemics. -Potentiation of conferences and stimulated the premier international health organization.	Kennedy (2023); Amisu et al. (2024)
Third Plague Pandemic	1855-1959	-Worsened socio-economic disparities and reinforced social segregation in the colonies including India and South Africa. -Potentiation of great fear, anxiety panic -Potentiated social conflicts and tensions along racial lines	-Colonialists weaponized plague campaigns and hygiene as social and political control on colonized populations.	Frith (2021); Arnold (1993)
Spanish flu	1918-1919	-Stifled agricultural, trade and commercial ventures of many countries especially in the colonies. - Provoked scarcity and escalation in prices of staple foods in local	-Contributed to ending hostilities of World War 1 -Strengthened anti-colonial movements in most erstwhile colonies including	Ojo et al. (2025); Flores (2018)

		populations. It triggered pronounced loss of economic capacities and shrinking international trade volume.	India and most African climes.	
HIV /AIDS	1981- present	Intensification of existing socioeconomic disparities because it affects more impoverished communities. -Increasing mortalities of young adults and middle-aged results in family disruptions and concomitant economic burden on relations and on health systems. Orphans are vulnerable to abuse, poverty and exploitation. - Stigmatization and discrimination of People living with HIV at work, schools and social arena. - Heightening of mental disorders such as mood disorders, anxiety, depression and cognitive dysfunction	-Triggering increase in political will and intervention by governments and international health bodies to tackle infectious diseases. -Fostering international collaboration in tackling infectious diseases -Spurring governments to increase allocations regarding the management and research regarding infectious diseases.	Taraphdar et al. (2011); Staupé-Delgado & Rubin (2022).
Ebola	2014-2016	-Exacerbated socioeconomic disparities in impoverished communities in affected West African Countries	-Exposure of poor health systems and health infrastructure in the affected West African clime. -Amplification of border control problem, poor government health capacities and the intersection of political conflicts and infectious diseases.	Onyekuru et al. (2023)
COVID-19	2019-2021(Still ongoing)	-Facilitation of economic losses through enormous COVID mortalities. Social distancing and lockdowns occasioned job losses, loss of businesses and unemployment. -Facilitation of hybrid working or work from	-Adoption of lockdowns and quarantined favored Communism as against Democratic ideals. -Heightened government intervention through stimulus packages and aids	Redbird (2022); Nicola et al. (2020)

		home culture in diverse working environment.	-Exacerbation of institutional and government inequalities between the Global South and the more developed North.	
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WASH – Water, Sanitation and Hygiene, HIV – Human Immunodeficiency Virus

Table (2) shows the social, economic, and political impacts of major pandemics throughout antiquity. In the ancient era, the Athenian, Antonine and Justinian plagues occasioned landmark socio-economic and political shifts. From the Athenian plague to COVID-19, pandemics have decimated large populations, triggering monumental agricultural, trade and commercial disruptions. More significantly, in the mid-19th century, the dynamics of post-Black Death impacts leading to disproportionate increases in living standards between the peasants and the landowners set the pace for capitalism in Europe. Unsurprisingly, due to the undercurrents of colonialism in the following centuries and other factors, this economic pattern was replicated in other parts of the globe. Thus, from the advent of the Black Death in the mid-14th century to COVID-19, pandemics have worsened and widened the socio-economic disparities among individuals, communities, and nations.

On the social front, particularly in the ancient era, they initiated significant contestation and recalibration of faiths and beliefs of the affected populations. In this era, and up until the initiation of the Germ concept in the late 19th century, the miasmatic theory of illness causation was pervasive. This refers to supernatural beliefs in bad air and energies in the atmosphere that trigger diseases and illnesses. While the preexisting faith, Catholicism alluded to supernatural causation of pandemics, they could not provide the necessary atonement to end the catastrophe. Hence, the contestation of preexisting faith, leading to repaganisation and weakening of the Church during and after the Antonine and the Justinian plague. Moreover, from the Athenian Plague to COVID-19, pandemics have evoked unimaginable fear, panic, and trepidation in local populations, leading to social tensions, conflicts, and the contestations of the integrity and validity of kingdoms, empires, and governments. In recent times, the dynamics of COVID-19 campaigns necessitated social distancing, lockdowns, and stay-at-home policies, which facilitated and institutionalized hybrid working after the pandemic.

On the political front, pandemics decimated military power and triggered political instability that contributed to the fall of notable ancient kingdoms such as the Greek and the Roman Empires. More notably, however, it was not all doom and gloom concerning the political consequences of pandemics. The Justinian Emperor pioneered the deployment of isolation and quarantine in the management of pandemics. With no known solution and explanation to the ravaging plague, the emperor imposed the isolation of foods and people coming to Constantinople from North Africa. In the wake of the human catastrophe wrought by the Black Plague about eight centuries later, the European governments improved the Justinian model by setting up complex and organized lockdowns, quarantines and hygiene, and disinfection infrastructures to contain the scourge. Nevertheless, since the discovery of cholera, which is a disease associated with impoverishment and poor water infrastructures in the Ganges River in India in 1817, hygiene and infectious disease control have become a tool of social control and segregation, especially in colonized societies and in the present Global South. The third plague pandemic and 1918-19 flu (Spanish flu) in the colonies including India and sub-Saharan countries, are vivid examples, where the colonialists deployed pandemic campaigns as a technology of political, social, and economic control on hapless colonies. Along with the political aftereffects of World War 1, these dynamics, fortunately, strengthened anti-colonial movements in most colonized contexts that crystallized into political independence in most colonized countries from the mid-20th century.

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Pericles delivers a funeral speech during the war; he fell victim to the Athenian plague after the speech



Pericles gives the funeral speech, by painter Philipp von Foltz, 1852 [Public Domain]

Adapted from: <https://greektraveltellers.com/blog/the-plague-of-athens>

COVID-19 institutionalized work-at-home culture



Adapted from Free Getty images : <https://www.gettyimages.com/detail/photo/having-a-video-conference-call-from-home-royalty-free-image/1216403165?phrase=pandemic&adppopup=true>

Since 1981, the advent of HIV/AIDS has enabled formation of international health organizations and bodies to tackle infectious diseases that are capable of triggering pandemics in the 20th century and beyond. In the 21st century, the dynamics of pandemic epidemiology as well as the management of Ebola and COVID-19 highlighted the significance of functional government and robust health systems and infrastructures in curbing the menace of pandemics. The disproportionate distribution of COVID-19 vaccines echoed the colonial nature of contemporary global medicine. It elicits how inequalities in government's economic capacities and intervention could shape outcomes of pandemic campaigns. In the COVID-19 scenario, it exacerbated the socio-economic disparities between the more developed Global North and the developing Global South. However, there are obvious benefits of robust government intervention in the welfare of their populations. For instance, during the pandemic, health financing skyrocketed in most countries, allocations were made for stimulus and relief packages for many households and businesses during lockdowns, thus strengthening their trust in the governments' handling of COVID-19 menace.

CONCLUSION AND RECOMMENDATION

Natural disasters such as earthquakes, famines and diseases have often determined the course of the historical trajectory of humans. Pathogens of high virulence and transmissibility often potentiate pandemics at specific time intervals throughout history. These often cause enormous loss of lives with tumultuous disruptions of the socio-economic and political spaces of man. In the 21st century alone, the world has encountered five main pandemics, including COVID-19, that killed over 7.8 million people with devastating impacts. In this regard, this review article has examined the historical epidemiology of pandemics from Athenian plague to COVID-19 and exposed their concomitant socio-economic and political effects. This review article discovered that five pandemics each originated from China and Africa. The Black Death caused the highest fatalities, exterminating 200 million people. Cholera is the longest-lasting pandemic, *Yersinia pestis* caused five pandemics, while influenza A triggered four, and coronaviruses occasioned three, throughout antiquity. Regarding the impacts of pandemics, we have shown that they have weakened notable antique kingdoms and catalyzed their fall, worsened socio-economic inequalities among individuals and countries, provoked contestations of established faiths and facilitated working at home culture in the 21st century.

To prevent further pandemics and mitigate further deleterious impacts of the existing ones, all hands must be on deck. Individuals, households, communities and governments as well as international health organizations, have a huge role to play. For individuals, they must know their HIV status as well as that of their sex partners while shunning sexual promiscuity and networking to curb the menace of HIV /AIDS. Appropriate use of barrier contraceptives is advised if random flings cannot be prevented. In a similar vein, the role of strict hygiene in the protection against certain diseases, such as cholera, cannot be overstated. The provision of WASH infrastructure in impoverished areas is pivotal to tackling the menace. Government health bodies educate the populations regarding the epidemiology of about common infectious disease that have the propensity to cause outbreaks. There should be heightened community education that could foster collaboration and engagement with different infectious disease campaigns. This would enhance early reportage of epidemics to ensure early detection, disinfection, isolation, and early management of victims to forestall mortalities. As mining activities, deforestation, and tourist sectors continue to flourish in present-day settings, efforts must be geared towards the protection of humans from exposure to vectors that harbor pathogens. They serve as veritable vehicles of transmission to humans. Miners and tourists should wear personal protective equipment (PPE) to ensure protection from coming in contact with vectors such as bats and their droplets that could initiate Ebola pandemics. The same applies to wet markets where wild animals and pets are sold. It echoed the origin and dispersal of SARS-COV-2 from wet markets in Wuhan in December 2019. Buyers and sellers in such markets should be mandated to don PEP and have appropriate disinfection infrastructure before leaving the markets to the general populace. Lastly, governments should improve their disease surveillance capacities to ensure early detection of infectious diseases and quick reporting to designated international health authorities. In cases of unknown disease outbreak or endemic disease in more than the expected frequency, governments are enjoined to comply with existing regulations. The WHO stipulates reporting of such incidents within 24 hours. This is to ensure prompt situation analysis and risk assessment to mitigate escalation of an outbreak into a cataclysmic pandemic with devastating socio-economic and political impacts.

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