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Global Patterns of Epidemics and Pandemics: Historical Impacts and Modern Challenges

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ABSTRACT

The epidemic (from the Greek f, heresy, "everything" and δῆμος, pretending, "people") is an epidemic of invincible disease that has spread to vast regions such as different countries or around the world, affecting a large number of people. An endemic disease all over the world with a continuous number of pampered people - it's just an epidemic. The large endemic diseases in which there is a continuous number of infected people, such as recurring accidental influenza, are largely prohibited because they occur all the time in large areas of the world, and do not spread all over the world. Throughout human history, there have been various epidemics of diseases such as smallpox and tuberculosis. The most dangerous epidemic in history is the Black Death (also called the plague), where 75-200 million people died in the 14th century. Other notable epidemics include the 1918 flu pandemic (Spanish flu). Current epidemics include COVID-19 and HIV /AIDS.

Keywords: Death, Infection, Global Patterns, Epidemics, Pandemics, Modern Challenges.

Introduction

A pandemic is a very widespread period that can lead to unusually low mortality in large geographical areas and can cause significant economic, social and political disabilities (Tisdell, et al., 2020). Figures suggest that the potential for pandemics expanded in the last century as a result of global travel and reconciliation, urbanization, land use change, and more pronounced abuse of ordinary habitats.

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These patterns are likely to progress and grow. The noteworthy Strategic Discussion focused on the need to differentiate and limit the development of episodes that could cause a pandemic, as well as the need to continue and continue speculation to build the boundaries of preparedness and well-being.

The epidemic is characterized by "a conventional network of predictive, infallible events online or in an area" (Zhaoet al., 2021). A pandemic is characterized by "a plague that occurs over a very large area, transcends global boundaries, and generally affects countless people. Therefore, pandemics are perceived on the basis of their geographical size, in contrast to the severity of the disease. For example, pandemic influenza is characterized by "another influenza that spreads around the world and most is not intact" and not influenza that spreads regularly every year.

Origin of Pandemics

Most new pandemics begin with the transmission of "animal" pathogens from creatures to humans, and the next pandemic can also be a zoonotic disease (Wolfe et al., 2009). Zoonotic diseases enter human populations from both domestic animals (e.g. domesticated pigs and poultry) and wildlife. A noteworthy number of zoonotic diseases are presented through the extension of post-training human-biological relationships, with the most likely zoonotic diseases (including the avian influenza virus) from the animal making framework (Singer et al., 2014). It will continue to increase. Some pathogens (including Ebola) are not predatory and are tracked and used by wild species (e.g., meat of wildlife), wildlife exchanges, and contact with other natural organisms.

The degree of zoonotic control traverses the continuum from the precise transmission within a population of organisms (stage 1) to the transmission within a human population (stage 5). Most zoonotic pathogens are not highly adapted to people (stages 2-3). Overflow events do not consistently increase and cause a limited episode called the Wobbling Chain. These "viral murmuring" scenes increase the risk of a pandemic by giving the opportunity to change infections and spread better within the human population. Pathogens that pass through stage 3 are well adapted to people (legally or indirectly via vectors) to cause long transmission chains between people, so their geographical spread is not enforced.

The global network is more and more ready for pandemics and mitigation.

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Increasing concern over the extreme respiratory status (SARS) pandemic of 2003 and the risks posed by bird flu has led many countries to develop pandemic plans (Gostin et al., 2004). The delay in disclosure of the first SARS case also prompted the World Health Assembly to update the International Health Regulations (IHR), ensuring that all states of the World Health Organization met clear guidelines, identified flares, accountable and responded. The system created by the updated IHR was added to the gradual world reaction planned during the 2009 influenza pandemic (Katz et al., 2010). Universal contributors have also begun to devote resources to strengthen preparedness through improved norms and subsidies to build welfare restrictions.

Despite these upgrades, there are significant holes and challenges in responding to the global pandemic. Progress towards addressing the IHR has been biased and in many countries the basic requirement for consistency has not been met. Various episodes show proper disease awareness, accessibility to underlying conditions, contact tracking, isolation and segmentation methods, and global coordination and response activity (World et al., 2023). It shows holes that have been identified as out-of-fitness readiness, including aging. These holes are particularly evident in a constrained asset setting, causing difficulties during a relatively limited runoff, and despair of what could happen during an unmitigated global pandemic.

Pandemics can cause widespread, sudden and unfortunate death and misery, as well as social, political and economic disruption. The world has overcome a number of significant pandemics, including Black Death, Spanish flu, and human immunodeficiency / AIDS infections (Sampath et al., 2021). Because pandemic has a predominantly geographic meaning, it brings together a wide range of incredible situations and common health risks, each of which has its own seriousness, relapse and other illnesses. There are attributes. Each type of opportunity requires its own ideal preparation and reaction methodology. As it stands, this section further explores the fundamental bases of feasible reactions. The incredible diversity of pathogens and their relationships with humans causes the danger of pandemic dangers. Various pathogens vary in measurement, including the system and the elements of disease transmission, severity, and the recognition of associated

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morbidity (Nash et al., 2015). These different components determine whether the case is easily distinguished and contained, or whether flames can spread. Thus, potentially pandemic pathogens usually differ in the magnitude of their potential health, financial, and socio-political impacts, as well as their assets, constraints, and techniques that are moderately needed. You need to be aware of some common types of pandemic dangers. The ridiculous thing is a pathogen that can cause a major pandemic worldwide. This group incorporates a pandemic influenza infection. These pathogens are transmitted effectively in humans, have long asymptomatic and attractive periods, promote unknown development in contaminated persons, and suggest current difficulties in differential analysis It has a profile (especially early in the disease). The second collection of pathogens poses a moderate global risk. Although these experts (e.g. Nipah infection, H5N1 and H7N9 influenza viruses) did not demonstrate supportive face-to-face transmission, changes and adjustments could make them even more productive. A third collection of pathogens (e.g. Ebola, Marburg, Lassa) can cause epidemics in or between regions, but with a moderate rate of transmission or a high level of awareness and regulation, the world is in real danger (Bausch et al., 2007). Among all known pandemic pathogens, influenza is a key risk due to its potential severity and semiautomatic events since the 16th century. The scandalous 1918 influenza pandemic killed some 20 to 100 million people worldwide, leaving most countries unsafe. Its severity reflects, to a limited extent, limited health promotion when infections, antivirals and vaccines were not available to reduce infection and mortality.

During the 1918 pandemic, the population had a higher mortality rate in LMIC than in HIC. This is due to the increased health of the condition and increased levels of comorbidities, lack of access to stable clinical studies, and increased speed of disease transmission.(Belichet al., 2022; Simonsenet al., 2010; Khanet al.,2020).

Current Epidemics

HIV AIDS

Estimating HIV/AIDS prevalence among youth (15–49 years old) by country as of 2008 (Gouws et al., 2008). Although the World Health Organization uses the phrase "global evil" to depict HIV, some content creators use the term "pandemic. It is generally accepted that HIV began in Africa. This currently helps pandemics, with

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incidence rates of up to 25% in southern and eastern Africa. In 2006, HIV prevalence among pregnant women in South Africa was 29%. Effective guidelines on safer sexual practices and blood borne disease precautions have helped reduce pollution levels in several African countries that support national education programs.

COVID-19

Another strain of coronavirus, which was first identified in Wuhan, Hubei Province, China, at the end of December 2019, caused a group of cases of acute respiratory diseases called 2019 coronavirus (COVID-19). According to media reports, COVID-19 affected more than 200 countries and regions, with major episodes in Focal China and Iran in Western Europe and the United States. On March 11, 2020, the World Health Organization (WHO) photographed the prevalence of COVID-19 as a pandemic. As of July 1, 2020, the number of people infected with COVID-19 reached 10,591,470 worldwide, of which 5,800,659 were recovered. The loss of life is 514,050 people. It is acceptable to underestimate the importance of these figures, since testing did not begin at the main stages of the episode, and also because many infected individuals have no minor manifestations or may not have been judged. Similarly, the amount of rest can also be reduced because tests are required before cases are officially deemed to be recoverable and mortality is part of the time due to other conditions (Ashley et al., 2000). This was especially the case in large urban areas, where quite a few patients were transferred while remaining in their private homes. It was later discovered that symptoms due to lung disease COVID-19 may be the cause of some of these conditions.

Pandemic Risk Factors

As mentioned above, pandemic risk is caused by a combination of the effects of risk accumulation and risk disclosure. Analysis of these two risks is often duplicated, especially in some LMICs (Central Africa, West Africa, Southeast Asia, etc.), making these areas less likely to be affected.

Spark Risk

The distinction between zoonotic diseases can be made from research or from the symptoms of the disease due to animal life (Shaheen et al., 2022). Zoonotic diseases from trained animals are collected in thick, animal-shaped framed areas, including parts of China, India, Japan, America, and Europe. The major drivers of the hazard

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posed by trained animals include increased ability to contact animals, generalization, breeding, breeding, and production. And organisms late years zoonotic diseases have spread significantly, focusing on China, India, West Africa, Central Africa, and the Amazon basin. Danger drivers were involved in the implementation of functions of characteristics (such as marketability) (e.g. tracking Bush meat and using animals as culture). And logging), extension of pathways to natural life, and ecological resources, including species extent and distribution (Kleinschrothet al.,2017).

After a spark or immigrant, the risk of the virus spreading to the population is affected by the identity of the disease (including various mutations) and patterns of transmission and individual levels (e.g. population density and aversion to disease). The densely populated population, especially in the urban centers of different manufacturing environments, serves as a focal point for the spread of the disease and the rapid spread of the disease. Moreover, social differences, needs, and their interrelationships may further enhance protection against critical illness. For example, in nature, lack of adequate water and sanitation improves infections, but emotions, illnesses, and deficiencies make the body immune. Overall, all of these areas are at risk of vulnerabilities for minorities, including migrants and those living in metropolitan and suburban areas (Donner et al., 2008).

Consequences of Pandemics

Health Impacts

The immediate well-being effect of a pandemic can be disastrous. It is estimated that 30-50% of the European masses died during the black death. Since 1981, the HIV/AIDS pandemic has massacred over 35 million people.

Pandemics can excessively influence younger and economically more dynamic mass debris (Dowling et al., 2014). In light of the fact that during the flu pandemic (rather than regular episodes of flu), a greater number of younger individuals are less sensitive than more experienced individuals and extend the overall longevity lost. The severity and prevalence of the age of death shift towards a younger population. Furthermore, so many fascinating diseases can have infinite effects, which can be increasingly normal due to a pandemic or be fully known. For example, deer related microcephaly affects health and prosperity.

The pandemic's deviant well-being effect can further increase dryness and mortality.

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Factors affecting abnormal well-being include redirection or depletion of integrated assets, which can lead to daily reviews and daily reviews resulting from travel, fear or helplessness on various variables. Access is reduced. Furthermore, fear stimulates the proliferation of "stressed" requests for unnecessary revisions, further annoying the framework of human services.

During the 2014 Ebola outbreak in West Africa, the lack of routine attention to jungle fever, HIV / AIDS and tuberculosis resulted in 10,600 additional transits expected in Guinea, Liberia and Sierra Leone (Oppong et al., 2016). The loss of life due to this deviation was 11,300 deaths legally caused by Ebola in these countries. Wealth, clinical wealth and redirection of the workforce also reduced routine vaccination coverage by 30% in the affected countries. During the 2009 flu pandemic, a more pronounced wave of flu and pneumonia claims in emergency clinics was associated with intense myocardial dead tissue and a noticeable increase in the course of stroke. However, during a pandemic, it may be impossible to recognize which pathways are due to the pandemic itself, and simply unintentional. Sign in or avoid daily social insurance. A study of 45 open offices in Guinea found that Ebola episodes reduced outpatient visits for routine maternal and child health care by 31% . Among children under 5 years of age, clinics reduced running visits by 60% and visits to severe respiratory diseases (ARI) by 58%. In Sierra Leone, visits to open offices for conceptual social insurance decreased by up to 40% during a spike. During a pandemic, human service workers become less accessible due to disease, asylum and fear. Viral hemorrhagic fever, for example Ebola, involves particularly extreme costs for health professionals who face huge presentations on interesting materials. An important episode of Ebola in the Democratic Republic of the Congo in 1976 (During that period (known as Zaire), the hospital at the focal point of the restoration of the Yangbuk mission was closed because 11 out of 17 employees died of illness. During the Ebola Kikwit relapse in 1995 in a similar country, cases occurred between known or suspected social security workers. Human service workers suffered high mortality during the 2014 Ebola in West Africa 7% in Sierra Leone and 1% in Guinea (Shoman et al., 2017). At the height of a severe flu pandemic, up to 40% of social insurance workers have to think about their relatives who are sick and have to think about their children following school retirement.

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Economic Impacts

Pandemics cause violent and temporary dizziness in currencies with long-term damage to economic development (Tanzi et al., 2022). Early public welfare efforts to regulate or limit augmentation (e.g., close contact, renewal isolation, and attractive cases) are huge in terms of human and human resources. As the regime progresses, new offices can be created to handle the most significant cases. This, combined with the widespread interest in consumables (clinical distribution, personal care hardware, and drugs), can significantly increase wellness facility consumption.

Decreasing valuation revenues can increase financial insecurity caused by high consumption, especially in ICICE, where tariff frameworks are more fragile and government financial controls are more intensive. The move was notable when the 2014 Ebola outbreak in West Africa in Liberia. Response costs have increased, economic activity has decreased, and isolation and curfew have reduced governments' ability to earn income. In the event of a mild or moderate epidemic, unaffected HICs will be assisted by financial assistance by providing Extended Authority Progress Assistance (APS), including direct budgetary support to affected countries. The LMC can have a happy response in the event of an acute outbreak of financial insecurity similar to that of HIC and unable or unwilling to help. Higher public expenditures may face a setback or general weakness or other government spending cuts. In most cases, the direct economic impact of a pandemic is, in any case, almost nonexistent with backward damage to behavior and economic development (Songet al., 2020). The negative stock of economic development is directly driven by the reduction in workforce caused by turbulence and mortality and the drastic changes in behavior in a cyclical manner. Terrorism manifests itself in many changes in behavior. A 2014 study on the economic implications of Ebola in West Africa said, Fear of relationships with others reduces interest in the workforce, closes workplaces, disrupts traffic and convinces some. Close trade, travel and business by closing suburbs, restricting residents from distressed countries, abandoning planned commercial flights, and reducing delivery and transportation management for private leaders. These impacts go beyond the direct effects and mortality of pandemics, reduce occupational interests and regulate local and neighborhood trade. Measuring the impact of a pandemic's cyclical money is

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fundamentally driven by a reconstruction of the general equilibrium that can be reconstructed. Observational writing is not so extensive. World Bank restructuring has shown that extreme pandemics can reduce global GDP by approximately 5% (Duggan, et al 2020). Common deficiencies caused by malicious behavior (e.g. exercise, restaurants, open space movements, and lack of a defensive work environment) have immediate economic consequences for anxiety and death. Overtake these findings are in line with the country's clear assessment. A study of the effects of pandemic flu in the United Kingdom suggests that severe pandemics reduce GDP by 1% but high severity by 3-4% GDP. The 2014 World Bank assessment of Ebola in West Africa indicates that the economic crisis in low-income countries (LICs) is significant. For example, Liberia's economic development index for 2015 was 3% (before Ebola was 6.8%). In the case of Sierra Leone, it was -2% (the index before Ebola was around 9%).

Social and Political Impacts

Proof means that plagues and epidemics have major social and political consequences, cause conflicts between states and populations, disrupt state controls, promote mass change, and increase social tension and isolation (Price-Smith et al., 2008).

Extreme pre-modern pandemics are associated with social and political changes caused by mortality and subsequent segmental changes. The emergence of smallpox and various infectious diseases in the US has legally brought Europe's success with the collapse of the social order of many indigenous peoples. The resulting epidemic does not affect political and social health. Essentially, this is because forecasting and care innovation are likely to reduce mortality. Following the 2014 Ebola outbreak in West Africa, measures to mitigate the spread of the disease, such as the isolation of the security forces, curfews, and suspicions of sections of the public and political pioneers. This has led to legitimate uprisings and fierce conflicts with the security forces. The dysfunctional political tensions from a militia in Liberia reappear shortly after the pandemic related to risks to social insurance workers and attacks on public welfare workers and offices. It was. In Guinea, Liberia and Sierra Leone, Ebola has led to incredibly strengthened political tensions. Resident government officials accused the state of emergency and disease control of strengthening their political practices and blocking the response (Gostinet al., 2020).

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The development of stress did not promote political violence or instability, but the general happiness response approach was complex. In Sierra Leone, restricted zone inserts were postponed due to fear of being considered politically motivated. In countries with significant political polarization, existing civil wars, or weak states, the supportive flames become more stable and encourage the testing of political tensions. Similarly, pandemics can have long-term consequences for state regulations. The HIV / AIDS pandemic offer an important model. In the mid-1990s and mid-2000s, the general proportion of HIV / AIDS in African armies was tremendously high, leading to the proliferation of the unseen and decreased military control and status. Similar effects may occur during an acute epidemic that increases in the short term, which reduces the ability to observe the state. Therefore, weakening the security forces increases the risk of casual wars and various forms of brutal conflict.

The vast array of episodes of persistent illness has immediate social consequences (Alonzo et al., 2000). For example, when infections increase, a large open refractory population can quickly replace them. In the 1994 Surat plague episode in India, only a few detailed cases occurred, but the fear caused more than 500,000 people (20% of the city's residents and ubiquitous clinical cases). Doctors, including the doctor, left home. Rapid mass development can have false implications, and the health risks associated with poor hygiene, poor nutrition, and various stresses can cause transient conditions. The movement also represents the danger of the episode becoming more circulating. Finally, the episode of unhealthy illness denounces a social cohesion that is effectively helpless, such as the ethnic minority population, and is blamed for the disease and its consequences At the time of the black death, European Jewish groups faced secession due to repeated illness, stigma and negligence, including extermination and public violence. Today's flyer-ups are tuned into the minority groups associated with the disease, and have seen discreet classifications of exclusion and fear (Ranganathan et al., 2006). For example, Africans living in the Hong Kong SAR of China declared that they were experiencing social segregation, anxiety, and economic hardship due to fear of contact with Ebola.

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Risk Communications

Risk communication can play a major role in the development of plague or pandemic countermeasures by providing data that individuals can use to take effective and defensive actions. The dissemination of important data (e.g. pathogen transmission methods, gentle directions of care, high probability methods, preventive behavior, etc..) can reduce the spread of disease quickly and completely. The question of how to transfer dangerous communications; they must be communicated by clear, basic, positive, and faithful angels. Factors include, for example, educational rates, social susceptibility, generalizability to rational standards (e.g. bacterial theory of disease), and oral and written practice to guide the way messages are designed and communicated.

In addition to general welfare authorities, falsehoods, gossip stories, and tensions need to be identified and resolved. During the 2014 Ebola epidemic in West Africa, several networks rejected the natural explanations of society on the prevalence of the disease, and regular rehabilitation and disruption rehearsals conflicted with disease management rehearsals. Others promote gossip about the welfare of pollution. For example, in Liberia, some network bosses claim that the infection was caused by a government agency.

About Fashion and Possibility

During the pandemic, welfare professionals are working to reduce the severity of disease through patient care and treatment (Hussain-Gambles et al., 2004). This reduces the risk of extreme outcomes such as hospitalization. Drugs range from vague and persistent considerations to unpleasantly explicit drug therapies. In the pre-epilemic era, plans for implementing these measures need to be developed and tested through entertainment. A strong consideration between infectious diseases and infectious diseases can improve mortality by alleviating the signs of the disease. For example, during the 2014 Ebola outbreak in West Africa, evidence is recommended to reduce the severity of premature death to distinguish effective and powerful studies from reconstructive treatments. In fact, despite the lack of access to anti-viral drugs and antibodies, attempts to pull in networks with clinical supplies and prepared clinics have led to more patients trusting, investigating, It has steadily

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reduced the proportion of cases and casualties with increasing clinical attention. The clinical supplies needed for constant review during a pandemic include emergency clinic beds, disinfectants, ICU supplies (e.g. ventilators), and personal protective equipment (Goh et al., 2020).

Conclusion

Preparing for a pandemic is a direct result of examining a number of factors, many of which are unique among catastrophic events. Epidemics are rare and the risk of occurrence depends on anthropogenic changes in common habitats. Responsibility for preparedness is also widespread, and the countries with the highest risk have limited control and reduced risk of epidemics. The development of epidemiological thinking is unpredictable, as well as coordination with departments, the general public and special disciplines, as well as different drugs and different criteria (disease transmission, clinical medicine, coordination and disaster response). However, a well-measured and well-trained luxury workforce (e.g. packaging specialists, midwives, disease transmission specialists, veterinarians, laboratories, etc..) should have basic support with proper coordination mechanisms. Needs-WHO has 23 wonderful experts for every 10,000 people. Analysts need to fill a large gap in available information about pandemic preparedness and response. To maximize efficiency, we need to improve the following costs and aid flows that are directly related to pandemic forecasting and preparedness: Insufficient intentional information on response costs in low-wage settings, including information on response costs such as clinical departments, human resources, and Chamber. Overcoming these information holes can improve your pandemic preparedness and response through dynamic, supportive virtual assistants that prevent pests and epidemics.

References

Alonzo, A. A. (2000). The experience of chronic illness and post-traumatic stress disorder: the consequences of cumulative adversity. Social Science & Medicine, 50(10), 1475-1484.

Ashley, E. A., Myers, J.,Froelicher, V. (2000). Exercise testing in clinical medicine. The Lancet, 356(9241), 1592-1597.

Bausch, D. G. (2007). Ebola, Marburg, Lassa, and other hemorrhagic

Online ISSN 3007-3197
Print ISSN 3007-3189

fevers. Emerging infectious diseases. New York: Springer Publishing Co.: New York, 133-57.

Belich, J. (2022). The world the plague made: The Black Death and the rise of Europe.

Donner, W., Rodríguez, H. (2008). Population composition, migration and inequality: The influence of demographic changes on disaster risk and vulnerability. Social forces, 87(2), 1089-1114.

Dowling, C. A., Santi, P. M. (2014). Debris flows and their toll on human life: a global analysis of debris-flow fatalities from 1950 to 2011. Natural hazards, 71(1), 203-227.

Duggan, J., Morris, S., Sandefur, J., Yang, G. (2020). Is the World Bank's COVID-19 Crisis Lending Big Enough, Fast Enough?: New Evidence on Loan Disbursements (No. 554, pp. 1-30). Center for Global Development.

Gostin, L. O. (2004). Pandemic influenza: public health preparedness for the next global health emergency. Journal of Law, Medicine & Ethics, 32(4), 565-573.

Gostin, L. O., Hodge, J. G., Wiley, L. F. (2020). Presidential powers and response to COVID-19. Jama, 323(16), 1547-1548.

Gouws, E., Stanecki, K. A., Lyerla, R.,Ghys, P. D. (2008). The epidemiology of HIV infection among young people aged 15–24 years in southern Africa. Aids, 22, S5-S16.

Hussain-Gambles, M., Atkin, K.,Leese, B. (2004). Why ethnic minority groups are under-represented in clinical trials: a review of the literature. Health & social care in the community, 12(5), 382-388.

Katz, R., Fischer, J. (2010). The revised International Health Regulations: a framework for global pandemic response. Global health governance, 3(2).

Khan, A. S., Khawaja, R. (2020). Social media could be a threat for an "Infodemic" throughout COVID-19 pandemic. Journal of Community and Preventive Medicine, 3(2), 1-4.

Kleinschroth, F., Healey, J. R. (2017). Impacts of logging roads on tropical forests. Biotropica, 49(5), 620-635.

Nash, A. A., Dalziel, R. G., Fitzgerald, J. R. (2015). Mims' pathogenesis of infectious

Online ISSN 3007-3197
Print ISSN 3007-3189

disease. Academic Press.

Oppong, S. (2016). Infectious Diseases as Threat to International Security-The Case of West Africa (Doctoral dissertation, University of Ghana).

Price-Smith, A. T. (2008). Contagion and chaos: Disease, ecology, and national security in the era of globalization. MIT press.

Sampath, S., Khedr, A., Qamar, S., Tekin, A., Singh, R., Green, R.,Kashyap, R. (2021). Pandemics throughout the history. Cureus, 13(9).

Shaheen, M. N. (2022). The concept of one health applied to the problem of zoonotic diseases. Reviews in medical virology, 32(4), e2326.

Shoman, H., Karafillakis, E.,Rawaf, S. (2017). The link between the West African Ebola outbreak and health systems in Guinea, Liberia and Sierra Leone: a systematic review. Globalization and health, 13(1), 1.

Simonsen, L., Viboud, C., Taylor, R. J., Miller, M. A. (2010). The epidemiology of influenza and its control. In Influenza vaccines for the future (pp. 27-54). Basel: Springer Basel.

Singer, M. (2014). Zoonotic ecosyndemics and multispecies ethnography. Anthropological Quarterly, 87(4), 1279-1309.

Song, L., Zhou, Y. (2020). The COVID-19 pandemic and its impact on the global economy: what does it take to turn crisis into opportunity?. China & World Economy, 28(4), 1-25.

Tanzi, V. (2022). Fragile futures: The uncertain economics of disasters, pandemics, and climate change. Cambridge University Press.

Tisdell, C. A. (2020). Economic, social and political issues raised by the COVID-19 pandemic. Economic analysis and policy, 68, 17-28.

Wilcox, B. A.,Gubler, D. J. (2005). Disease ecology and the global emergence of zoonotic pathogens. Environmental health and preventive medicine, 10(5), 263-272.

Wolfe, N. (2009). Preventing the next pandemic. Scientific American, 300(4), 76-81.

World Health Organization. (2023). Managing epidemics: key facts about major deadly diseases. World Health Organization.

Zhao, L. (2021). Event prediction in the big data era: A systematic survey. ACM

Annual Methodological Archive Research Review
http://amresearchreview.com/index.php/Journal/about
Volume 3, Issue 12 (2025)

Online ISSN 3007-3197
Print ISSN 3007-3189

http://amresearchreview.com/index.php/Journal/about

Computing Surveys (CSUR), 54(5), 1-37.