

## REVIEW ARTICLE

## THE ROLE OF WORLD THE FIGHT AGAINST COVID-19

Muhammad Nadir Shabbir, Kainat Iftikhar\*, Mudassar Mustafa\*\*, Muhammad Usman Arshad\*\*\*, Imran Ullah, Mubashir Mustafa\*\*\*\*

Central University of Finance and Economics, Beijing China, \*Quaid-e-Azam University, Islamabad Pakistan, \*\*Virtual University of Pakistan, Rawalpindi Pakistan, \*\*\*University of Gujrat, Gujrat Pakistan, \*\*\*\*PMAS Arid Agriculture University, Rawalpindi Pakistan

## ABSTRACT

In under two decades, the world has encountered three flare-ups of fatal Coronaviruses, including the ongoing pandemic of Coronavirus Disease 2019 (COVID-19) in China. COVID-19 represented a crisis of worldwide concerns, and cases have been accounted for more than 200 nations/districts that came about in wellbeing, lives, and monetary misfortunes. China's financial development is anticipated to tumble to 5.6% this year, the International Monetary Fund (IMF) anticipated that arrangement venture and expense strategies to execute \$3.3 trillion and contributes further \$4.5 trillion. IMF conjectures develop from 3.7% of worldwide total national output (GDP) in 2019 to 9.9% in 2020. Gross domestic product proportion anticipated from 3.0% in 2019 to become 10.7% in 2020, the US proportion expected to increment from 5.8-15.7%. There is a desperate requirement for local and universal co-activity to stretch out hands to forestall further spreading of COVID-19. The IMF has reacted to the COVID emergency with exceptional speed and greatness of financial aid. This paper shows the response of the world against COVID-19. How the countries are helping each other to control the spread and discovering the cure of this virus. Asia has survived usefully and also defending the second wave of virus, but on the other hand, the Europe is the most infected region with the highest rate of death. Why Asia is near to win this fight with a stable economy, but the Europe is not, instead of this the economy is going to be crashed. These questions raises to the Economy, Behavior and Policies, of respective Countries.

**Keywords:** Biosynthesis, COVID-19, COVID-19 Nucleic acid testing, COVID-19 serological testing, Genetics, Mortality, Pathology, SARC-CoV-1, SARC-CoV-2, Sars Cov2 RT PCR, Vaccines.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

## INTRODUCTION

Health disaster, both transmittable and non-communicable infections, have worldwide wellbeing impacts as well as, simultaneously causing wide-extending financial disturbances and misfortunes. To stay away from the universal spread of illness and financial misfortunes, recognizable proof of the natural dangers is of incredible concern. Along these lines, there is a critical need to reinforce national general wellbeing frameworks to accomplish the above-expressed objectives. The COVID-19 pandemic also known as coronavirus pandemic is caused by Severe acute respiratory syndrome coronavirus-2 (SARS COV-2) the chain started in 2003. The first outbreak was registered in the main city Wuhan, china in December 2019. Which was lately WHO declared the outbreak a Public Health Emergency on international Concern on 30 January 2020, and a pandemic on 11 March 2020<sup>1</sup>.

The spread of coronavirus infection (COVID-19) has started to affect even on the universal request. China exhaustingly denied the analysis of US medical analyst that china is was the root of this virus (SARS-COV-2). Simultaneously, in any case, China offered help to nations that were encountering issues because

of the infection. China at that point started to sing its gestures of recognition, guaranteeing it was the rescuer of the world. The nations that endured because of the spread of COVID-19 were surely keen to the help they got from China. This help could be utilized by China as an impact on those nations. Along these lines, one could describe the spread of the coronavirus as furnishing China with a chance to build its help all through the global network.

In China, the first case of the Virus was registered on November 17. However, according to the WHO, the breakout started in December 2019 in china, which causes the total number of cases in China are 87,150 and 4,634 deaths in the country. On the other hand, in the U.S., the break out started in January 2020. It causes 21.11 million cases and 0.36 million deaths. Which is the highest number of deaths in any Country<sup>2,3</sup>.

According to the recent number of cases and situation in both countries, what are the main precautionary measures and rules which have been followed by both countries and what was the difference between both country's approaches which cause the highest number of cases and deaths in the U.S. as compare to China?.

In this essay, our main topic is not the COVID-19 and the number of cases and symptoms, etc. The basic topic which has been discussed here is how the

**Correspondence:** Muhammad Nadir Shabbir, PhD Scholar, Central University of Finance and Economics, Beijing China

Received: 04 Feb 2021; revised received: 25 May 2021; accepted: 26 May 2021

country like developed or the big economies of the world has responded to the COVID-19. According to the recent number of cases and situation in both countries, what are the main precautionary measures and

makes up 20% of GDP, yet organizations are putting off venture as they hang tight for lucidity at the full expense of COVID-19. Assembling makes up 11% of U.S.<sup>8</sup>.

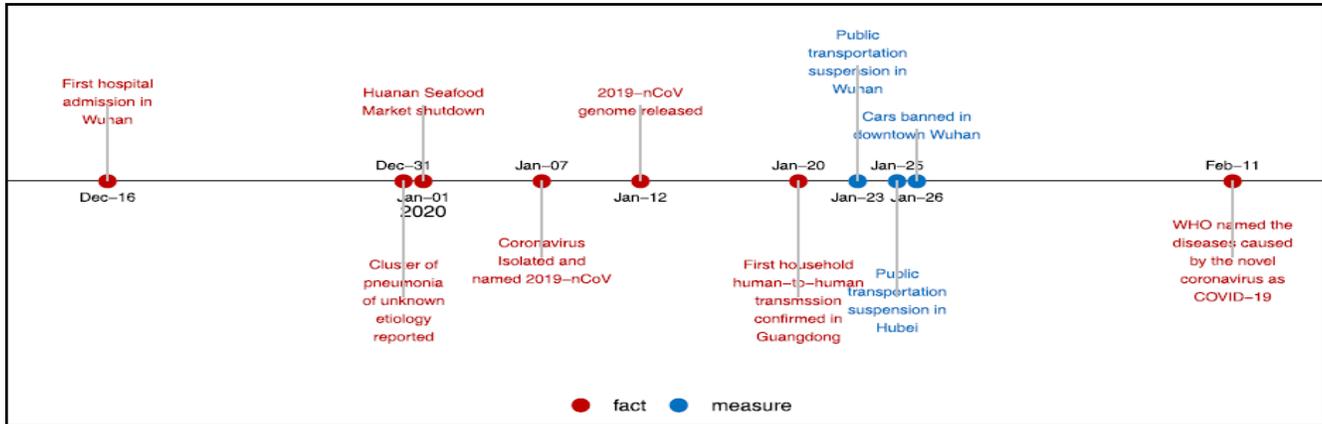


Figure-1: Spreadness channel of COVID-19.

rules which have been followed by both countries and what was the difference between both country’s approaches which cause the highest number of cases and deaths in the Europe as compare to Asia?

This COVID-19 has severely affected the global economy. As a result, the economy of Superpower country has been crashed, due to this economic disaster, most of the states open up their lockdown to continue the economic activity.

Before making a comparison of U.S. and China's response and strategies to control COVID-19, we would like to compare the economy, economic and political system, trade system, because the economies of these countries have been severely affected by the pandemic. Moreover, the reforms or controlling behavior that leads them to control it and flaws have been detected by the government in their policies<sup>4,5</sup>.

**Impact of COVID-19 on Economy**

The COVID-19 outbreak will dampen both supply and demand in China for the first quarter of 2020, while the impact on consumption could be more direct and pronounced due to the National-wide quarantine and city lockdowns<sup>6</sup> (fig-2).

The coronavirus outbreak triggered a plunge of stock prices in the Chinese market on the first day of trading after the Chinese New Year holiday, marking the big-gest fall since 2015<sup>7</sup> (fig-3).

**World Before and After COVID-19**

To comprehend COVID-19's hit on the economy, think about its impact on various ventures. Speculation

The U.S. Congress has passed a considerable improvement charge that accommodates many billions in new spending, extending joblessness protection and giving money present to low and center salary Americans, which should help laid-off laborers get by until the economy starts to recuperate. The enactment addi-

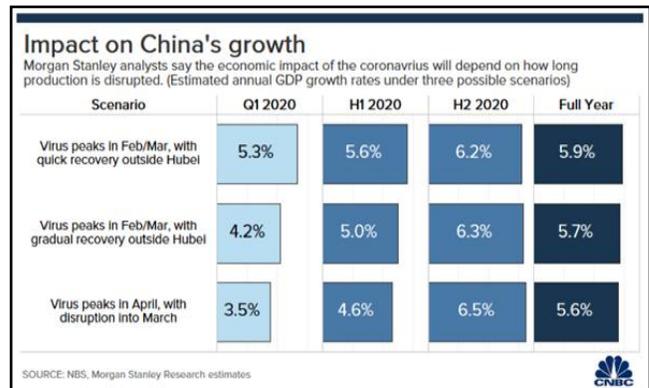


Figure-2: Impact of COVID-19 on China’s growth.



Figure-3: Impact on stock market.

tionally accommodates \$350 billion in "advances" for organizations, directed at firms with less than 500 representatives<sup>9</sup>.

According to statistics from the U.S. Bureau of Economic Analysis, the U.S. current account deficit was narrowed by \$0.1 billion, or 0.1%, to \$104.2 billion in the first quarter of 2020. The revised fourth-quarter

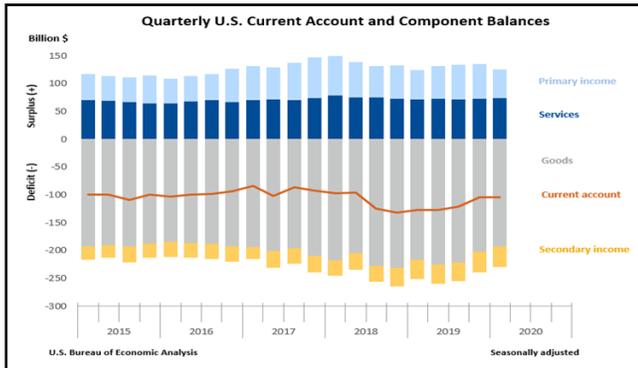


Figure-4: US balance sheet during COVID-19.

deficit was \$104.3 billion<sup>10</sup> (fig-4).

**Role of IMF and WHO**

The IMF has reacted to the COVID-19 emergency with exceptional speed and greatness of monetary help to help nations, outstandingly ensured financial recuperation (fig-5).

Crisis financing, grant for debt relief, calls for bilateral debt relief, Improving liquidity, changing existing loaning courses of action, capacity development.

Till 21<sup>st</sup> of December 2020, total debt relief for 29 countries:

1st Tranche: SDR 183.13 million/US\$ 251.24 million.

2nd Tranche: SDR 168.40 million/US\$ 237.46 million.



Figure-5: Demographic areas where IMF's AID has been granted.

Debt service relief total: SDR 351.53 million / US\$ 488.7 million.

In Addition, extra financial aid for medical facilities has been approved, e.g. for Pakistan 1.4 Billion \$ has been approved.

**Pandemics COVID-19, Origin**

In December 2019, a group of pneumonia cases, brought about by a recently distinguished  $\beta$ -coronavirus, happened in Wuhan, China. This coronavirus was first named as the 2019-novel coronavirus (2019-nCoV) on 12 January 2020 by World Health Organization (WHO). WHO authoritatively named the ailment as coronavirus malady 2019 (COVID-19) and Coronavirus Study Group (CSG) of the International Committee proposed to name the new coronavirus as SARS-CoV-2, both gave on 11<sup>th</sup> Feb 2020. The Chinese researchers quickly disengaged a SARS-CoV-2 from a patient inside a brief timeframe on 7<sup>th</sup> January 2020 and came out to genome sequencing of the SARS-CoV-2<sup>11</sup>.

All things being same, logical examination directed throughout the most recent 20 years gives signs about how and why the COVID-19 pandemic showed up. We should comprehend these fundamentally significant logical discoveries, depicted in the accompanying content, with the goal that we can more readily address huge existential dangers we will keep on looking for a long time to come.

Infections are minimal nucleic corrosive bundles of one or the other DNA or (on account of COVIDS) RNA related with proteins, and at times with lipids. Infections are not living creatures and can just duplicate inside living cells defenseless to viral passage and with the ability to imitate viral nucleic acids and make an interpretation of nucleic corrosive signs into amino acids to construct viral proteins. Infections are hence nonliving independent hereditary projects equipped for diverting a cell's hardware to create a greater amount of themselves<sup>12,13</sup> (fig-6).

COVIDs are RNA infections universally conveyed in a huge however obscure number of creature species. COVIDs significant for people are found inside phylogenetically un-mistakable ordered subgroups, marked as the  $\alpha$ -and  $\beta$ -COVIDs in figure. Four endemics human COVIDs, which arose at some unsure time before, cause (generally) mellow self-restricted upper respiratory plot contaminations<sup>14</sup> (fig-7).

**Spreading Pattern of COVID-19**

According to Wodarz *et al*<sup>14</sup>, by using power and exponential law, they argue that It is imperative to

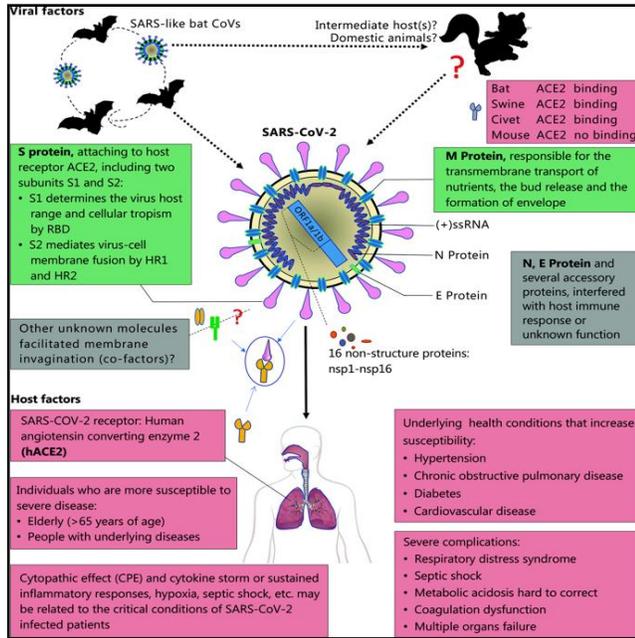


Figure-6: Viral transmission channel.

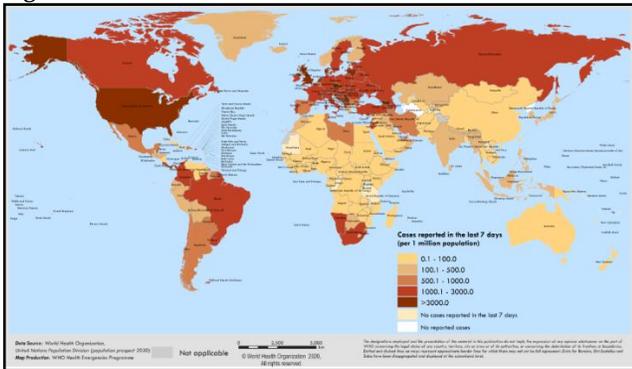


Figure-7: COVID 19 World map showing number of cases.

comprehend the elements with which the combined case tallies increment after some time, to such an extent that we have a superior capacity to judge whether non-pharmaceutical intercessions (for example social removing) affect the course of the scourge. The COVID-19 plague is regularly thought to develop exponentially. If so, a deviation from exponential development following the presentation of non-pharmaceutical intercessions can show the achievement of those mediations. Conversely, if the contamination becomes as indicated by a force law while development is mistakenly thought to be exponential, a log jam of the combined COVID-19 cases after some time on a log scale can bring about the bogus end that the non-pharmaceutical intercession strategies are working. If the aggregate cases develop like a force law, effective intercession would bring about the development straying from the force law, and not from exponential development<sup>15</sup>.

We found that a few nations, (for example, the US, the UK, and Canada) follow an exponential plague development, while others (like Italy and a few other European nations) show a force law like development. Simultaneously, paying little mind to the best fitting law, most nations can be appeared to follow a direction like that of Italy, yet with differing degrees of deferral. We found that nations with "more youthful" pestilences would in general display increasingly exponential like conduct, while nations that are nearer behind Italy will, in general, keep a force law development.

**Current Situation**

WHO discussed in its special COVID-19 situation report, which has been published on 27 Dec 2020. Around the world in the previous week, >4 million new cases were accounted for. Even though this is a 12% decline contrasted with the earlier week. The Region of the Americas represents 48% of every new case and 42% of all new deaths around the world. While new cases and deaths stayed high in the Euro-pean Region, which represented 37% and 42% separately, both diminished contrasted with the earlier week<sup>16</sup>.

**Role of "Danwei System" to Control COVID-19**

China is anxious to change its picture in the international strategy domain, seeking to be viewed as the universal network's driving donor in the battle against COVID-19, as opposed to as the wellspring of the pandemic<sup>17</sup>.

When the urban areas were secured, the exercises of China's Militia, which are ordinarily imperceptible, turned out to be substantially more open. Private people group and their locale boards of trustees, along with working environments (which used to be classified as "work units," or Danwei), assumed a critical job in controlling people. It turned out to be evident that these associations, despite everything capacity as apparatuses for watching people, particularly in urban zones. While China's strategies are frequently portrayed with attention on advanced reconnaissance, here and there, the nation depended on increasingly conventional control methods.

The Militia is framed by military veterans and gathering individuals and its assignments are portrayed as "(making) arrangements for war and barrier activities and helping with keeping up open requests." It is accepted that its job during the lockdown included obligations identified with "keeping up open request".

China isn't where there is a reasonable differentiation between the state and the network. Instead, the

country has driven the three wedges of government, gathering, and military into the Chinese people group to guarantee exhaustive administration. These wedges structure the center of the nation's dictator framework<sup>18</sup>.

### Role of Eruption System

Regardless of whether financial developments in the United States were not being shut down in favor of social isolating, the current spread of the COVID-19 pandemic around the world diminishes the solicitation on the planet's economy. It confounds chains deftly, and the drop in value cost brings family wealth down to the extent that would have caused a sizable respite in the U.S. economy<sup>19</sup>.

There are two central approaches to help small firms: advances or direct awards. Little firms are now observing incomes vanish as a component of constrained terminations or absence of purchaser movement. The coming rush of terminations of little firms-not with standing an intercession-will probably predominate anything seen previously. The size of the issue additionally dominates the Small Business Administration and its staffing and assets. A sizable government mediation will be required.

A sensible methodology is to concede portions (charge filings, understudy commitment portions, and privately owned business advance installments), whatever amount as sensibly expected to help family units and firms through the most testing quite a long time in the downturn. Then again, the governing body can enliven installments to suppliers and venders to improve their income during this troublesome time. None of these exercises includes positive budgetary repercussions as they significantly improve the planning of payments, yet given the organization's ability to get at near zero loan fees and the troubles various families and associations are searching until further notice, these activities could help.

### CONCLUSION

COVID-19, is a pandemic, which doesn't differentiate between stronger or weaker, developed or undeveloped, high economy or low economy, etc. US and as the highest growth economies of the world, have the responsibility to fight against viruses and help other economies in this perspective<sup>20</sup>.

Along with the US-China trade war, the second biggest clash amid the pandemic is the blame game. China's purposeful publicity endeavors to cast its reaction to the flare-up as a model for the remainder of

the world are falling to some degree level, with examination mounting over the believability of China's accounted for quantities of diseases and passing's (Foster Kofi Ayittey). Its delicate force effort to different pieces of the world, especially Europe, is beginning to look more delicate than incredible: various governments have needed to toss out or review Chinese-sent clinical supplies as a result of worries over imperfections<sup>21</sup>.

In the meantime, the United States has become the focal point of the pandemic, with the most revealed cases on the planet, and the inauspicious probability that things will deteriorate in the nation's significant urban communities.

What's the reason behind the increased number of cases in the US? No one can give an authentic answer. Although the US is the superpower, what happened to its economy, got crashed. The US has a financially strong side, its helping other countries, but the final solution is the vaccination for virus, full fills the necessities of low living people, daily wages people. We must help each other based on humanity instead of spreading racism hate<sup>22</sup>.

### RECOMMENDATION

We try to explain the reason behind the main issue that why china controlled the virus but the US doesn't. The basic answer to this question is human behavior towards COVID-19 and government policies. We have discussed the government policies of both countries in detail. In addition, the second thing is the belief of people on their leaders. Chinese people show respect, and belief that we will get through this difficult time<sup>23</sup>.

US government and the nationals should take is serious on an emergency basis to control the virus to spread. We can win the battle against Virus by following these three aspects which have been followed by china's government. First, safeguarding the health and wellbeing of the people of the world is just as important as protecting one's people. With this in mind, China has taken up its responsibility.

Second, the initial success in China has bolstered international confidence in beating the virus. China's experiences containing COVID-19 have been also helpful in the global response to this challenge. The first experience is the importance of saving lives and safeguarding public health. The second is to enforce measures that are based on science, including the principle of early quarantine and treatment<sup>24</sup>.

Lastly, the battle cannot be won unless the world comes together, as no country is immune to the virus. Since the beginning of the outbreak, China has carried out international co-operation in an open, transparent, and responsible spirit<sup>25</sup>.

Future pandemics can be prevented, but it relies on unprecedented global cooperation. Pandemics are preventable, and the world can complete three things to forestall them. To start with, we can make a world-wide early admonition framework. Much like frameworks for waves and tremors, an early admonition framework could take into consideration the early location of and quick reaction to a flare-up before it spreads. It would accumulate knowledge through a mix of zoonotic observation, man-made consciousness (AI) reconnaissance, and flare-up examination.

Pandemics for the most part start when an infection or other pathogen hops from creatures to individuals in what is known as a zoonotic overflow. The coronaviruses that caused extreme intense respiratory disorder (SARS), the Middle East respiratory condition (MERS), and now COVID-19 pandemics all hopped from bats to people through a delegate creature have-civets in SARS, camels in MERS a still obscure go-between in COVID-19<sup>26</sup>.

Sleuthing for overflows over the globe is vain except if you realize where to look. Simulated intelligence can help. Utilizing AI calculations to filter through sub-atomic, epidemiologic, natural, and atmospheric information, researchers have mapped out world-wide geographic hotspots generally defenseless against zoonotic overflows.

Artificial intelligence can likewise help with early notice once a flare-up has happened. The Global Public Health Intelligence Network, an AI-based reconnaissance framework began by Health Canada and the World Health Organization.

Third, we can forestall future pandemics at their source by limiting the danger of overflows. Shielding common territories from persevering human infringement and making cradle zones around ensured zones are significant long haul objectives. All the more promptly, we can stop untamed life exchange, not just by controlling, checking, or closing down live creature markets, yet additionally by upholding global law to battle illicit and impractical natural life exchange.

*“Preventing future pandemics will require an unprecedented level of global cooperation. The question is whether we can get our act together before the next pandemic strikes”<sup>27</sup>.*

## CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

## REFERENCES

1. Mustafa N. Research and Statistics: Coronavirus Disease (COVID-19). *Int J Sys Dynamics App* 2021; 10(3): 1-20.
2. Ayittey FK, Ayittey MK, Chiwero NB, Kamasah JS. Economic Impacts of Wuhan 2019-nCoV on China and the World. *J Med Virol* 2020; 92(5): 1-5.
3. Huang Y, Lin C, Wang P, Xu Z. Saving China from the coronavirus and economic meltdown: experiences and lessons. 2020. [Internet] Available from: <https://voxeu.org/article/saving-china-coronavirus-and-economic-meltdown-experiences-and-lessons> [Accessed on February 25, 2020].
4. Chinazzi M, Davis JT, Ajelli M, Gioannini C, Litvinova M, Merler S, et al. The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak. *Science* 2020; 368(6489): 395-400.
5. Lin Q, Zhao S, Gao D, Lou Y, Yang S, Musa SS, et al. A conceptual model for the coronavirus disease 2019 (COVID-19) outbreak in Wuhan, China with individual reaction and governmental action. *Int J Infect Dis* 2020; 93(1): 211-16.
6. Institute for Contemporary China Studies (ICCS) 2020. Report: China's fight against COVID-19 contemporary China study [Internet]. Available at: <http://en.iccs.tsinghua.edu.cn/NewsSt/515.html> [Accessed on February 25, 2020].
7. Tong S, Yao L. How Much Will the Chinese Economy Be Damaged by COVID-19? BRINK-News and Insights on Global Risk. 2020 [Internet] Available from: <https://www.brinknews.com/how-much-is-the-chinese-economy-going-to-be-damaged-by-covid-19-coronavirus/> [Accessed on February 25, 2020].
8. Ahmad T, Haroon, Baig M, Hui J. Coronavirus disease 2019 (COVID-19) pandemic and economic impact. *Pak J Med Sci* 2020; 36(COVID19-54): S1-S6.
9. Komarova NL, Schang LM, Wodarz D. Patterns of the COVID19 epidemic spread around the world: exponential vs. power laws. *Med Rxiv* 2020; 3(30): 20047274.
10. Maliszewska M, Matoo A, Dominique M. The potential impact of COVID-19 on GDP and trade: A preliminary assessment, World Bank, Washington, DC. [Internet] Available from: <https://openknowledge.worldbank.org/handle/10986/33605> [Accessed on February 25, 2020].
11. Beijing Center for Disease Prevention and Control (CDC). Prevention and control measures of COVID-19 in Beijing China. [Internet] Available from: [https://www.uclg.org/sites/default/files/1\\_cdc-prevention\\_and\\_control\\_measures\\_of\\_covid-19\\_in\\_beijing\\_0.pdf](https://www.uclg.org/sites/default/files/1_cdc-prevention_and_control_measures_of_covid-19_in_beijing_0.pdf) [Accessed on February 25, 2020].
12. Chen WH, Hotez PJ, Bottazzi ME. Potential for developing a SARS-CoV receptor-binding domain (RBD) recombinant protein as a heterologous human vaccine against coronavirus infectious disease (COVID)-19. *Hum Vaccines Immunother* 2020; 16(6): 1239-42.
13. Guo YR, Cao QD, Hong ZS, Tan YY, Chen SD, Jin HJ, et al. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak - an update on the status. *Mil Med Res* 2020; 7(1): 1-11.
14. Liu Y, Gu Z, Xia S, Shi B, Zhou XN, Shi Y, et al. What are the underlying transmission patterns of COVID-19 outbreak? An age-specific social contact characterization. *E Clin Med* 2020; 22(1): 100354.
15. Ohara B. The effect of the spread of COVID-19 on the US-China political warfare and the international order | SPf China

- Observer EN. Sasakawa Peace Foundation, 2020 [Internet]. Available from: <https://www.spf.org/spf-china-observer/en/document-detail025.html> [Accessed on February 25, 2020].
16. The Macroeconomic Impact of the COVID-19. Statistics and Application. Liu orange 2020; 9(5): 862-69.
  17. Ayittey FK, Ayittey MK, Chiwero NB, Kamasah JS, Dzuovor C. Economic impacts of Wuhan 2019-nCoV on China and the world. J Med Virol 2020; 92(5): 473-75.
  18. Al-Takarli, Nourah S. China's response to the COVID-19 Outbreak: A model for epidemic preparedness and management. Dubai Med J 2020; 3(2): 44-49.
  19. Brodzicki T. Empirical analysis into the impact of COVID-19 on global traderelations. IHS Markit 2020 [Internet]. Available from: <https://ihsmarkit.com/research-analysis/empirical-analysis-into-the-impact-of-covid19-on-global-trade.html> [Accessed on February 25, 2020].
  20. Malden K, Stephens S. Cascading Economic Impacts of the COVID-19 Outbreak in China, 2020. [Internet] Available from: <https://www.uscc.gov/research/cascading-economic-impacts-covid-19-outbreak-china> [Accessed on February 25, 2020].
  21. Tharoor I. Analysis | No one will win the U.S. and China's Coronavirus contest. Washington Post. 2020 [Internet] Available from: <https://www.washingtonpost.com/world/2020/03/30/no-one-will-win-us-chinas-coronavirus-contest/> [Accessed on February 25, 2020].
  22. Lu MC. Perspective | Future pandemics can be prevented, but that'll rely on unprecedented global cooperation. Washington Post, 2020. [Internet] Available from: [https://www.washingtonpost.com/health/future-pandemics-can-be-prevented-but-thatll-rely-on-unprecedented-global-cooperation/2020/04/16/0caca7b8-7e6d-11ea-8013-1b6da0e4a2b7\\_story.html](https://www.washingtonpost.com/health/future-pandemics-can-be-prevented-but-thatll-rely-on-unprecedented-global-cooperation/2020/04/16/0caca7b8-7e6d-11ea-8013-1b6da0e4a2b7_story.html) [Accessed on February 25, 2020].
  23. Daszak P, Olival KJ, Li H. A strategy to prevent future epidemics similar to the 2019-nCoV outbreak. Bio-safety Health 2020; 2(1): 6-8.
  24. Roberts D, Dollar D. THE Brookings Institution Dollar & Sense How will the Chinese economy rebound from COVID-19? 2019 [Internet] Available from: [https://www.brookings.edu/wp-content/uploads/2020/03/DollarAndSense\\_Transcript\\_How-will-the-Chinese-economy-rebound-from-COVID-19.pdf](https://www.brookings.edu/wp-content/uploads/2020/03/DollarAndSense_Transcript_How-will-the-Chinese-economy-rebound-from-COVID-19.pdf) [Accessed on February 25, 2020].
  25. Chen K, Zha T. Macroeconomic Effects of China's Financial Policies. Federal Reserve Bank of Atlanta, Working Papers, 2020. [Internet] Available from: <https://www.frbatlanta.org/research/publications/wp/2018/12-macroeconomic-effects-of-chinas-financial-policies-2018-11-16> [Accessed on February 25, 2020].
  26. De Clercq E. Potential antivirals and antiviral strategies against SARS coronavirus infections. Expert Rev Anti Infect Ther 2006; 4(2): 291-302.
  27. Wu C. How Chinese citizens view their government's coronavirus response. The Conversation, 2020 [Internet] Available from: <https://theconversation.com/how-chinese-citizens-view-their-governments-coronavirus-response-139176> [Accessed on February 25, 2020].
-