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A REVIEW ON "HEALTHCARE INNOVATIONS FOR COVID-19"

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ABSTRACT :

In late 2019, a new and mysterious virus began circulating in the Chinese city of Wuhan. What started as a localized outbreak soon morphed into one of the largest global health crises in modern history. COVID-19, caused by the SARS-CoV-2 virus, would later overwhelm millions of lives, upend economies and transform how societies operated. The objective of this article is to track the journey of the COVID-19 pandemic through its origins and spread, in addition to the attempts that have been made to control/stop it and its larger-scale implications.

Introduction

The COVID-19 pandemic started in December 2019, when cases of pneumonia of unknown cause, were reported in Wuhan, China. The virus causing this illness, which was subsequently named SARS-CoV-2, is a new kind of coronavirus that had never been seen in humans before. It belongs to a family of viruses that includes those causing the common cold as well as more serious diseases, including SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome).

Confirming that the virus spreads between humans, Chinese health authorities made the announcement in early January 2020. By then the virus had already left Wuhan and the World Health Organization (WHO) was worried. But it was not until the virus began spreading around the world that the scale of the threat truly hit home.

By January 30, 2020, when the WHO announced that COVID-19 was a Public Health Emergency of International Concern, the virus was already present in several countries including Thailand, Japan and South Korea. The Philippines reported the first death from the virus outside of China on Feb. 2, 2020. Soon cases were confirmed across Europe, the Americas and elsewhere in the world as numbers of infected people grew exponentially.

Governments across the globe imposed measures to rein in the virus — travel restrictions, social distancing and quarantines. Health systems in many countries became Overwhelmed as hospitals scrambled to keep up with a steep rise in cases. Without a vaccine, or a treatment the virus's, containment efforts have concentrated on preventing it from spreading, to the point of overwhelming medical facilities.

March 11, 2020: The World Health Organization (WHO) officially declares COVID-19 a global pandemic, a dark milestone in the coronavirus battle. By that time, the virus had infected more than 118,000 people in over 110 countries, and the picture had been getting worse day by day.

Symptoms

There are different symptoms that can be demonstrated into the COVID positive individual yet a portion of the normal symptoms that are by and large seen are loss of feeling of scents and taste, it might be additionally confront issues during relaxing, cerebral pain, fever, constantly runny nose, and furthermore shows some stomach related issues like the runs and so forth

The symptoms of Covid 19 usually occurs in 2-14 days after a person is infected or come in close contact with another infected person.

Causes

Mainly via cough, sneezing or with the droplets released when an infected person exhales. These droplets are so heavy that they can't hang into air they fall into certain surface and contaminating it.

Impact

While by late 2022 the acute public health emergency had lifted in many parts of the world, the long-term consequences of COVID-19 continue to pile up. The economic toll of the pandemic was enormous, forcing many industries to contend with prolonged disruption. Unemployment rates soared and the tourism and hospitality sectors, among others, were crushed.

There were also significant concerns around mental health. The (psychological) toll from the isolation, fear, and uncertainty generated by the pandemic. Lockdowns and social distancing measures, while necessary to control the virus, also resulted in elevated levels of anxiety, depression and other mental health problems. These issues will have lasting impacts for many years to come.

PREVENTION

The first wave of COVID-19 hit some countries hard. Governments around the world imposed draconian lockdowns to prevent the spread of the virus, closing borders, barring international travel and imposing stay-at-home orders.

Cities fell silent as activity faded and people locked down, with only essential workers heading out to work. Public health campaigns stressed wearing masks, social distancing and good hygiene.

Treatment

In early 2021, the first wave of COVID-19 vaccines started rolling out around the world. Countries around the world began administering vaccines with priority given to health care workers, the elderly and those with underlying health conditions.

The Pfizer-BioNTech vaccine was authorized for emergency use in various countries, including the United States and the European Union. Not long after, the Modern vaccine did the same. These mRNA vaccines were a new generation of a vaccine technology, using messenger RNA to tell cells to make a protein to respond to the virus.

Other treatments, including the antiviral drug remdesivir, were authorized for use in some countries, and monoclonal antibodies showed promise in treating patients. The identification of benefits with corticosteroids such as dexamethasone in improving mortality in critically ill patients.

CONCLUSION

But the pandemic would have an irreversible impact on society. COVID-19 exposed the fragility of global systems and the interconnectedness of our world. It also highlighted the value of science, global collaboration and resilience against extraordinary challenges.

Moving into a post-COVID world, the lessons learnt from this pandemic will inform our actions for any future pandemic related to global health. The pandemic might be over, but the world is still figuring out what came next. We have a long way to go to recovery, yet together with resilience, cooperation and keeping vigilant we can forge a stronger tomorrow.

The COVID-19 pandemic was a defining event of the 21st century, challenging the capacity of public health systems, global collaboration, and social resilience.

COVID-19 has gone from a local problem in Wuhan to a global vaccination effort. Change is of course always possible, and while the world may never return completely to the way things were pre-pandemic, we have come through the other side stronger and knowing that preparing for the future is the way forward. How the COVID-19 pandemic is going to be tackled in the future will be undoubtedly influenced by lessons learned today from the current pandemic.

REFERENCES

- 1)Broughton, J. P., Deng, X., Yu, G., et al. (2020). SARS-CoV-2 detection via CRISPR-Cas12. Nature Biotechnology 38(7), 870-874 (2020).
- 2) Beigel, J. H., Tomashek, K. M., Dodd, L. E. (2020). Final report of a randomized trial of remdesivir for the treatment of COVID-19. New England Journal of Medicine, 383(19), 1813–1826.
- 3. 3)Smith AC, Thomas E, Snoswell CL, et al. (2021). Implications of telehealth for global emergencies: COVID-19. It was published in the Journal of Telemedicine and Telecare, 27(2), 99-105.
- 4. 4)Ahmad FB, Cisewski JA, Miniño A, Anderson RN. Provisional Mortality Data United States, 2020. [PubMed]MMWR Morb Mortal Wkly Rep. 2021 Apr 09;70(14):51PMC free article]
- 5) Ahmad FB, Cisewski JA, Miniño A, Anderson RN. Provisional Mortality Data United States, 2020. PMCID: PMC819829627. MMWR Morb Mortal Wkly Rep. 2021 Apr 09;70(14):513.
- 6) Teuwen LA, Geldhof V, Pasut A, Carmeliet P. COVID-19: the vasculature unleashed. Nat Rev Immunol. 2020 Jul;20(7):389-391. [PMC free article] [PubMed].
- 7) Joyner MJ, Bruno KA, Klassen SA, Kunze KL, Johnson PW, Lesser ER, Wiggins CC, Senefeld JW, Klompas AM, Hodge DO, Shepherd JRA, Rea RF, Whelan ER, Clayburn AJ, Spiegel MR, Baker SE, Larson KF, Ripoll JG, Andersen KJ, Buras MR, Vogt MNP, Herasevich V, Dennis JJ, Regimbal RJ, Bauer PR, Blair JE, van Buskirk CM, Winters JL, Stubbs JR, van Helmond N, Butterfield BP.
- 8) Neutralizing Antibodies to SARS-CoV-2 and Other Human Coronaviruses (Jiang S, Hillyer C, Du L). May 2020, Trends Immunol. 41(5):355-359. [PMC free article] [Med]
- 9)Lo T, Tsang OTY, Ko FW, Ng SS, Gin T, Chan MTV, et al. Dispersion of exhaled air during high-flow nasal cannula therapy compared with CPAP with different masks. Eur Respir J. Apr. 2019:53(4) [Med]
- 10) Hui DS, Chow BK, Lo T, Tsang OTY. Aerosol dispersion from high-flow nasal cannula (HFNC) compared with CPAP with different masks. Eur J. Apr. 2019:53(4) [Med] One