

An Understanding about COVID-19 during the Days of Lockdown

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Abstract

The pandemic caused due to the novel corona virus has halted the world. In the late months of 2019 few cases of severe pneumonia has been reported in Wuhan in China. Studies revealed it to be caused due to a virus, which is novel and temporarily named as acute respiratory syndrome coronavirus 2. This unexpected outbreak of the pandemic has shaken the entire part of the human population, business, and industries, factories without any difference between rich or poor. This has essentially compartmentalized or categorized the human mankind into immune or healthy ones, susceptible, infected and recovered classes. The non-pharmaceutical intervention to control over the spreading of the contagious disease like lockdown, washing hands, masks and social distancing have made a great control over this disease. The purpose of this review is to quantify how much these non-pharmaceutical intervention has reigned the virus spread.

Keywords: COVID-19; Lockdown; Virus; SARS-CoV-2

Introduction

Background

The ongoing global pandemic caused by a microorganism has attracted and attacked the human life to an extend that the world is falling prey to it. Accepted by the name COVID-19, the world understands the growth of science is not saturated, and a lot to be learned discovered. Originated from the wet streets of one of the most populated country China during the late December of 2019 [1], Novel virus named as coronavirus, because of its crown-like spikes structure is making its rule over the world in this short period of time. The epicenter being the wet markets of Wuhan in China, this virus has centered the newspaper, electronic and social media with the latest related news and with advisories from government and various other private, national and international agencies taking care of health related affairs. It took about a month for the World Health Organization to declare (30th January 2020) the outbreak a Public Health Emergency of International concern.

Moreover, on March 11th 2020, WHO aired the world about the pandemic COVID -19 [2-4].

The first person to have contracted with COVID-19 was a 55-year old person from Hubei province, China, this dates back to November 17, 2019 [5]. Just a month after in Wuhan, the capital city of Hubei Province in the center of China recorded cases pneumonia and symptoms of COVID-19. There was a suspicion among the doctors that the virus originated from something sold from the wet market. However, cases of infection was found in people who had no connection to the market too. The sickness is presently spreading between individuals with no creature delegate. Researchers presently presume this coronavirus, SARS-CoV-2, started in a bat and by one way or another bounced to another creature, potentially the pangolin, which at that point gave it to people [6]. The illness is presently spreading between individuals with no creature mediator.

In the world around a number of research is going on to find out the actual cause for this virus, about its origin, whether it is natural or manmade. And thereby a treatment for this.

Today, about 130 days (by 30th April 2020) after the first case of COVID-19 more than 3090445 confirmed cases have been reported in 213 countries and territories. Data shows about 217769 deaths (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>) [7].

Exponential development isn't just undermining lives, yet in addition affecting organizations and upsetting travel the world over.

Symptoms

Regular indications of disease incorporate fever, coughing, fatigue and breathing troubles. Some exceptional symptoms include sputum production, headache, hemoptysis, and diarrhea [8].

Few cases complained of pleuritic chest pain. In extreme cases, it can cause pneumonia, multiple organ failure and demise. The incubation time of COVID-19 is believed to be somewhere in the range of one and 14 days [9]. It is infectious before side effects show up, which is the reason such a significant number of individuals get contaminated. Contaminated patients can be additionally asymptomatic, which means they don't show any indications notwithstanding having the infection in their frameworks.

The spread of COVID-19 can be controlled by identifying and isolating infected individuals but it is difficult to test everyone and priority has been given in most countries to individuals presenting symptoms of the disease. There is therefore a need to identify symptom groupings that can rightly pinpoint to infected individuals. A study conducted in UK [10] has come out with a common symptom in infected people that is commonness of loss of smell (anosmia). Anosmia could be utilized as a screening technique to identify initial stages of disease and could be told to self-isolate.

There are asymptomatic cases, where the individual shows no signs of common symptoms and shows the results positive on a test. Hence, doctors has issued advice for monitoring of people those who had close contact with confirmed cases and to opt for self-isolation.

Fast and accurate diagnose of COVID 19 is crucial and is done based on the symptoms and tested using reverse transcription

polymerase chain reaction (rRT-PCR) [11], real time RT-PCR testing of infected secretions or CT imaging of the chest, which detects presence of viral RNA fragments Nasopharyngeal and oropharyngeal swab tests [12], have become a standard assessment for diagnosis of COVID-19 infection where samples taken from individual respiratory system, such as cotton swabs of the inside of your nose. Some tests are point-of-care tests, where the results are collected within an hour, whereas other tests requires process which may take a day or two. The severity of COVID-19 can be tested using Chest CT scans [13]. Joining appraisal of imaging highlights with clinical and laboratory discoveries could encourage early findings of COVID-19 pneumonia.

Transmission

As per current proof, Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) the causative agent for COVID-19 infection is basically transmitted between individuals through respiratory droplets and contact ways [14,15]. Transmission of the COVID-19 infection can happen by direct contact with contaminated individuals and roundabout contact with surfaces in the prompt condition or with objects utilized the infected individual. The infectious person's sneeze droplets, saliva falls on to the ground or surfaces rather than remain in air for long distance. Other people in contact with these contaminated surface and then their face, becomes a reason for spread. The virus survive on surfaces for about 72 hours. However, these transmission don't clarify all cases. According to Cai. J., *et al.* [16], a study conducted in a shopping mall in China about the transmission of infection, it was concluded about the possibility of asymptomatic carriers for spreading of virus to about 7 mall staff and 10 mall customers. This indicated low intensity transmission occurred without prolonged close contact.

Ways of control the epidemic

With no legitimate medication and treatment, the control and fix of this ailment stays equivocal. To the extent the specific explanation of this overall affected pandemic is obscure additionally, the elements that increases or smother them, the treatment stays in problem.

Governments of the effected countries issues and implements series of stringent rules for strict prevention and various control measures to cut the spread of the epidemic. As of today still lacking consensus for effective strategies to fight.

Healthy diet care, exercise, self-cleanliness, cleanliness of the surrounding we stay and so on are the first recommended formula to resist the invasion of external pathogen and stay safe from diseases [17].

The idea of self-distancing, leading to city, residential and countrywide lockdown are control methods adopted to fight this non-pharmaceutical epidemic. This must be inversely effecting the economy of the world moreover finance of the individual, but considering the importance of a life, this is for sure an effective way to control COVID-19. This has effectively controlled the spread of the epidemic and allowed proper treatment of infected patients under lockdown conditions. The ignorance and negligence towards the epidemic had led to vast disaster in some parts of the country. The productive work of specialists and medical attendants in clinics, the persevering police who maintains the distancing, the media columnists assumes a colossal job in compelling control of this pestilence.

Giving consideration to individuals in different populations such as elderly, children, men and women, pregnant women, patients with past chronic comorbidity diseases in hospitals and in prevention programs can enhance the control technique. Patient classification like infected, suspected cases, confirmed negative cases also the area categorization like contaminated areas, transition areas and clean areas can significantly reduce the danger of COVID -19 epidemic. Introduction of computer, printer, cashless money above all paperless system contribute significantly for the reduction in spread of this virus.

The non-pharmaceutical intervention for the control of epidemic has proved effective but ambiguity remains after lockdown period. The stage wise reopening, the priority wise resuming job, the banning of spitting in open places, minimizing the travel, avoiding hugging and other PDA, following the advisory and regulations ordered by government as a responsible citizen and being a human can withdraw such epidemic from our planet [18].

Conclusion

As this evolving acute respiratory infectious disease is deficient of effective and powerful techniques to treat and control in this tech savvy era, it is reasonable to travel back to our ancestor period in search of their strategies where they overcome handful of deadly epidemic diseases. Current trends followed to prevent be-

ing a victim to this infectious disease like maintaining social distancing dates back to the GuruKul system of learning in Vedic era when shiksayas (students) were made to sit at a distance when Guru gave his piece of advice. The mask covering the mouth reminds of the ancestral behavior where people used to cover their mouth while talking, the washing of hands and legs with water preserved in copper vessel when individual return home from work field, taking bath from outside before entering the home after attending a funeral. To follow the forgotten culture we do not need regulations or feel embarrassed.

The prevailing epidemic have proved the inefficiency of human brain before a virus.

But, human will power will come out victorious as history has proved.

Today the world has united to fight against this unseen virus and have begin to move towards the end of current pandemic. But, as and when the horizon is seen we should not forget the lessons we learned today.

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