

THE COVID - 19 PANDEMIC IS ACTUALLY NATURE'S RESETTING MODE

Dr. Anirudh Sharma*, *Dr. Kompal Jain*

Department of Medical Sciences, Rama Medical College, Hapur, U.P.

***Government Medical College and Hospital, Chandigarh*

Abstract:

Recently a public health crisis threatening the world with the emergence and spread of 2019- Novel Corona virus (2019-nCoV) which is very much similar to the family of SARS. This outbreak has caused an immense havoc in the whole world by declaring itself a pandemic by WHO. As it is causing harm to human population on one side but on the other one it is giving time to nature Earth to revive itself from the damage caused by harsh humans. This proves that any kind of interference to Mother Earth may cause a rebound effect on us.

Keywords: 2019- Novel Corona virus, SARS, pandemic, Mother Earth

Introduction

Coronaviruses are enveloped positive sense RNA viruses ranging from 60 nm to 140 nm in diameter with spike like projections on its surface giving it a crown like appearance under the electron microscope; hence the name coronavirus. Four corona viruses namely HKU1, NL63, 229E and OC43 have been in circulation in humans, and generally cause acute respiratory distress syndrome.^[1]

Possible explained reason for its origin may be:

(a) natural selection in an animal host before zoonotic transfer; and (ii) natural selection in humans following zoonotic transfer. It is so because that SARS-CoV-2 is not derived from any previously used virus backbone.^[2]

For a preventive measure many of the countries have announced lockdown to create social distancing and to avoid the spread of this pandemic by increasing the number of cases.

CoV-2 pandemic has made chaos to lives and economies because of which our planet is also moving less. Geoscientists are reporting a drop in seismic noise the hum of vibrations in the planet's crust—that could be the result of transport networks and other human activities being shut down. They say this could allow detectors to spot smaller earthquakes and boost efforts to monitor volcanic activity and other seismic events.^[3]

General Features:

The disease is transmitted by inhalation or contact with infected droplets and the incubation period ranges from 2 to 14 d. The symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise among others. Many people are either asymptomatic or has mild disease. However, some (usually the elderly and those with comorbidities), it may progress to pneumonia, acute respiratory distress syndrome (ARDS) and multi organ dysfunction requiring hospitalization.^[4]

Owing to the contagious nature of covid, hospital burdens and ongoing pandemic, extensive use of Protective Personal equipments (PPE) including masks, hazmat suits, gloves at both domestic and hospital level and their haphazard disposal with decreased recycling activities had negative influence on environment. It increased medical waste, plastic waste and environment pollution. In Dhaka and Wuhan around 206 m and > 240 m tonnes of medical waste was generated per day respectively.^[5]

Overlook on India's Data:

India reported overall 600 metric tonnes of covid-19 biomedical waste per day, accounting upto 10% increase.^[6] Ahmedabad also reported an increase to 1000kg/day of medical waste from 550-600kg/day.^[5]

However, covid-19 also had some beneficial effects on globe. Zambrano-Monserrate et al. (2020) described the indirect effect of lockdown on the environment, indicating that it reduced sound pollution and the pollution in beaches and improved air quality.^[7]

Objective : The main objective of this paper is to know about the beneficial effects of covid-19 on the globe in paradoxical situation and chaos .

Effect on the Globe:

Gravity of Corona has pulled humans so well as they are burdening less. Less of pollution, reviving of the species and so many benefits too.

Working from home means fewer Carbon emissions:

Now more than ever companies are realizing that their business can stay afloat by allowing their employees to work from home in order to keep everyone safe and healthy. A major plus to working from home is that it is good for the environment!

It lead to decline in energy demand, reduced fossil fuel consumption will further decrease greenhouse gas emissions and having positive influence in environment. Worldwide, oil demand drastically decreased to 435000 barrels during January to March 2020 as compared to last year.(International Energy Agency,2020) ^[5] According to The Climate Group, working from home has the potential to reduce over 300 MILLION tonnes of carbon emissions per year. ^[8] Furthermore, Climate Science and carbon belief projected that 4 percent of total global carbon dioxide emissions of 2019 i.e. 1600 metric tons would be reduced by pandemic. No2 emissions also declined in many US and many European countries from 25.5 percent and 30-60 percent respectively as compared to previous year. ^[5]

These are the awesome benefits what we get and many more too such as we are so relieved from the traffic congestion and living a balanced life too. ^[8]

Overlook on India's Data:

In Delhi, NO2 emission was reduced by approximately 70 percent. In India, Power generation further declined by 19 percent with generation by coal decreased by 26 percent. ^[5]

Air Quality has improved in Lockdown areas:

It has been reported that air quality has improved immensely in both Italy and China since residents have been staying home due to the outbreak. According to China's Ministry of Ecology and Environment, "the average number of "good quality air days" increased 21.5% in February, compared to the same period last year." Decreasing carbon emissions alone from the daily commute significantly improves air quality. Carbon emissions are also significantly down in China. Between February 3rd and March 1st they experienced a 25% decrease. Because China is the largest polluter in the world, this is good news for all of us as it could potentially measure to an estimated 200 million tonnes. Not only China, in India too people are noticing significant differences. Italy has also seen a significant drop in air pollution caused by human activities. ^[8]

In the context of Malaysia, Abdullah et al. (2020) found that the MCO (movement control order) had a significant influence on the reduction of Particulate Matter (PM)2.5. Muhammad et al. (2020) found that the lockdown resulted in a 30% drop in air pollution while mobility was restrained by approximately 90% in China, USA and European countries. ^[7]

Overlook on India's Data:

With a nationwide lockdown in place in view of coronavirus, India continued to breathe easy as pollution level in 88 cities across the country remained minimal. Overall, there was a drastic decline of Particulate Matter (PM)_{2.5} and PM₁₀ by 46% and 50% respectively. ^[5]

Out of the 103 cities where air quality was recorded, 23 registered 'good' air quality while

65 others recorded satisfactory air quality, according to the data from the Central Pollution Control Board.

The national capital witnessed a slight dip in air quality after the effect of rain subsided but it remained in the satisfactory category. ^[9] In Delhi, PM_{2.5} declined almost by 70 percent. ^[5]

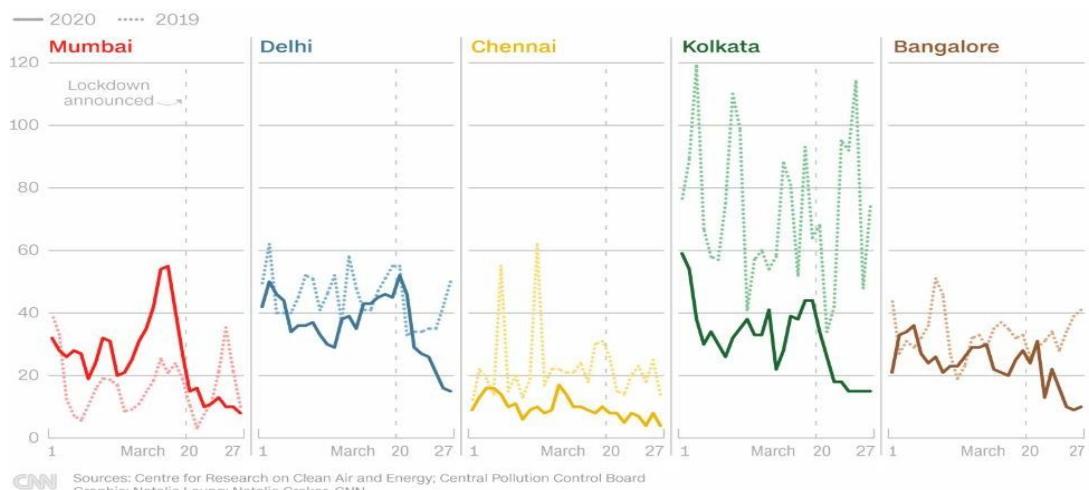


Fig1: NO₂ levels fell dramatically in India after lockdown. Average daily Nitrogen dioxide emissions in March(micrograms/squaremetre)^[10]



Fig2: Difference in air index in Delhi from November,2019 to March,2020^[10]

Since due to CoV-2 we are facing lockdown all over the country by paying our patience and on the other hand we are getting safer and cleaner air too.

Water Pollution levels have come down:

Amid the lockdown, as the industrial sector has come to a halt, the water bodies of the world are experiencing a big relief. The Venice Canal appears to be running clearer and cleaner than ever before. Residents of the city have been marvelling over its appearance.^[8]



Fig3: Seaweed can be seen in clear waters in Venice as a result of the stoppage of motorboat traffic.^[11]

Overlook on India's Data:

The Yamuna near Delhi which once was said to be the 'Drain of Delhi' and was seen to have thick lather coming from industrial waste, is now so clean that residents being surprised are sharing pictures of the beautified river.^[12]



Fig4: Yamuna clear flowing water after lockdown^[13]

The Ganga has been declared fit for 'achaman' or drinking in Haridwar and Rishikesh. ANI reports that the ghats in

Haridwar are also shut to the public in light of the lockdown. With no people taking dips in the water or dumping waste in it, the water looks visibly cleaner. Even fish and other marine life can be seen in the waters.^[14]

Thus, we ended up having clean water bodies and also with the reason which was making it polluted.

Noise Pollution has also reduced:

Noise pollution has a potential of causing hearing loss in around 360 million globally. Amid the lockdown, reduction of economic activities resulted in reduction of noise pollution.^[5]

Overlook on India's Data:

In Delhi, during the lockdown the noise level declined around 40-50 percent. Metro station also reported reduction in noise from 100 db to 50-60 db.^[5]

Effect on other life forms:

As the coronavirus crisis changes the rhythms of urban life, there are some early signs that animals – especially the creatures that lurk in the periphery of big cities and suburbs – are feeling emboldened to explore.

In Nara, Japan, sika deer wandered through city streets and subway stations. Raccoons were spotted on the beach in an emptied San Felipe, Panama. And turkeys have made a strong showing in Oakland, California.^[15] The dolphins also returned in the coast of Bay of Bengal (Bangladesh).

Overlook on India's Data:

In Uttarakhand, three Sambar deer were spotted walking on the streets, while a nilgai was found strolling in Noida. An elephant was captured in Uttarakhand's Dehradun, a small Indian civet was seen in Kerala's Kozhikode, Olive Ridley Turtles came ashore a beach in Odisha, a bison passed through a marketplace in Karnataka, peacocks danced on the streets in Mumbai, and a leopard reached close to an Air Force base near Patna in Bihar.^[16]



Fig5: Goats sauntered on abandoned streets in Jaipur on March 24.^[17]

Other effects:

Furthermore, a reduced pressure at tourist destinations, decreased flights led to decreased carbon emissions, decrease noise pollution leading to ecological restoration.

Conclusion

We humans have been a great burden on the earth and the other life forms, and due to this pandemic when people are afraid of even stepping out of their homes, the earth seems to be healing itself. From the ozone hole, to the return of turtles and dolphins to seashores, it won't be wrong to say that the COVID 19 pandemic is the reset button of mother Earth.

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