Current Scenario of COVID-19 Pandemic: A Review Paper

Richa Sharma^{1*}, Amit Kumar² and Ashima Garg³

¹Scholar, College of Engineering and Technology Roorkee, Uttarakhand, India. Email: richakn17@gmail.com

²Assistant Professor, University of Engineering and Technology Roorkee, Uttarakhand, India.

³Assistant Professor, University of Engineering and Technology Roorkee, Uttarakhand, India.

Email: ashima.2012@rediffmail.com

*Corresponding Author

Abstract: The fast-moving world came to halt with the outbreak of Coronavirus in 2020. In the 21st century, often referred to as the 'Digital Age', where everyone was running to achieve new heights of success everyday, a pandemic applied a break on the world and introduced a new way of life, i.e., lockdown, a life with all the boundations that one can't even thought of. The purpose of this study is to unveil the current situation of the world after the outbreak of the pandemic, the impact of the COVID-19, the new life during the lockdown and the way people adapt themselves towards the new normal. It also presents the positive impact of the pandemic on nature and the efforts of doctors and scientists to protect the world from this pandemic and their invention of vaccine against the virus.

Keywords: Coronavirus, COVID-19, Lockdown, Pandemic, Vaccine, Virus.

I. Introduction

Year 2020, the world witnessed an epidemic affecting more than 190 countries. Such a global outbreak is reported once in a century. Last worldwide pandemic occurred in 1918-1920 known as Spanish Flu hit hard the world population at large. And now it's after 100 years a new pandemic have arrived named COVID-19 forcing the upsurging world at halt.

Meanwhile, year 2021 emerged as a silver lining in the dark which brings vaccine for coronavirus into light. The renowned scientists and doctors of the country developed 2 vaccines working day and night to fight the virus i.e., Covishield and Covaxin. There were talks about the vaccine all around the news channels, newspapers, internet even on the caller tunes. India not only vaccinated its own people but it gives a hope to the world when it started providing vaccine to other countries as well. Life was getting back on track with the beginning of the vaccination. The nation was coming out of the lockdown. Schools, colleges, offices, industries were starting again. People started meeting again. Everything seemed normal. But was this the end of the virus or there was something yet to come? Maybe

it's time for the world to adapt themselves to the new normal, i.e., a life with masks on, maintaining a distance from each other, etc. or can just say 'staying apart'.

II. CORONAVIRUS OUTBREAK

This is how it all started. At the end of Dec 2019, an unknown pneumonia outbreak was reported in Wuhan, China named as COVID-19. International Committee on Taxonomy and Viruses (ICTV) announced official name for the virus causing the disease as "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on 11 February 2020. The World Health Organisation declared a Public Health Emergency of International Concern on 30 January 2020 when coronavirus started affecting the world gradually. Later, on 11 March 2020 WHO declared it as a pandemic as the situation turned out to be lethal.

It was spotted that the virus can be transmitted among individuals when they are in close proximity through air. It can also travel distances and can be spread by surfaces contaminated by infectious person. The virus can remain suspended in air for long at closed or poorly ventilated places. The source of the virus is suspected to be the bats. The symptoms found are highly variable from none to serious life threatening. The fatal part about the asymptomatic cases is that the virus cannot be diagnosed easily but the carrier can transmit the virus to others. The most common symptoms of COVID-19 are fever, dry cough and tiredness making it serious with fatigue, breathlessness, chest pain or inability to wake or stay awake.

The first confirmed case in India was reported on 30 January 2020 in Kerala who had a travel history from Wuhan, China. On 24 March 2020, a nationwide lockdown was announced by the Prime Minister of India for 21 days limiting people to move out of their places in order to restrict the spread of coronavirus in the country. Large number of populations was being affected at a fast pace all over the world. People aged above 60 years were the most symptomatic and prone to more fatality. A research conducted by Imam Abdulrahman Bin Faisal University,

Saudi Arabia offers a convincing indication of less severity and pediatric age group (0-18 years). However, current trends suggest that children may get infected but are less symptomatic with less fatality.

III. IMPACT OF COVID-19

Imposing lockdown was a daunting task. While some families were enjoying the early phase of lockdown safe and together at their homes, there were people left with no shelter and money at all. The part of population that was getting salary on time, had all means of survival available at their doorsteps knew how to keep themselves occupied during the lockdown. Some got chance to spend quality time with their families who used to be busy with their work all the time, some pursue their hobbies. But the worst affected were from the unorganized sector. According to the Economic Survey released in 2019, about 93% of the total workforce comes from unorganized sector. They are the people who are forced to live a hand-to-mouth existence. Painful scenes of migrating workers from all over the country could be seen in news channels and internet who were travelling more than 500 km to reach their homes with no means. They were walking day and night with, some alone some with their families including infants. They had no food, no transport, no money. In a hope to reach their homes from their workplaces safely was only their wish.

Thousands of cases of coronavirus were being reported around the world day after day. The virus was killing people on a large scale. Along with it, the economy was drowning, jobs were lost, employers were not able to provide salaries on time, thousands of migrants were there on the roads.

Although, children had less severity form this virus but their well-being was greatly affected during the lockdown. The physical and mental impact could be seen the most on the children. According to a study at the University of the Basque Country UPV/EHU, Spain, the physical well-being of children was disrupted during the lockdown as they had no scope for physical activities, along with playful and creative activities. Children with outdoor spaces showed higher level of well-being. Academic pressure was also faced by the students; however, it was low in younger students as compared to their older counterparts. Also, girls showed more positive emotional expression than boys.

When it comes to emotional aspect, a major breakdown was also seen in the elder people as well. A report of The Hindu shows that social isolation triggered the mental health issues in the elderly. From loneliness to lack of social interaction, the adults found it difficult to cope with the pandemic routine. Lack of digital literacy could also be a major reason for this as youngsters keep themselves busy with the technology but elders are not that tech-savvy. Also, they are not dependent on technology as much as the youngsters are. There life is more social. They were missing meeting people, face-to -face talks, morning walks, hugging their grandchildren, and so on.

News of covid-cases, deaths, migrants all over the news channels; distance from the loved ones, degrading health of family members, work stress; all the negativities were affecting the mental health of people. Those with families considered themselves lucky as they were safe and sound together. But those far away from their families for work purposes only wanted to be with their loved ones. Family was the best and for many only moral supports during this pandemic. We all understood the importance of family while everyone was chasing money leaving behind their friends, family, their hometowns.

IV. New Era of Digitalisation

The 21st century known for its innovations and technology faced a new era of digital dependence. Schools, colleges were shut, education was at halt. There was a need to introduce a new idea of education without harming the health of students and teachers and also complying with the lockdown rules. This was when the concept of online education came into limelight. Although there were some applications which were providing online education for the past few years but it was not that popular among every corner of the world. With this pandemic, all the schools and colleges adopt the method of online education to teach the students so that the students can keep learning at home. Not only schools and colleges, but also some private tutors started teaching online. Soon exams were also conducted online to avoid any barrier to the education system. Several educational applications we never heard of became an important part of our lives. This wasn't easy at all for both the students and teachers but gradually online mode of teaching was adopted well by the teachers and students. All the work from classroom teaching to providing notes to conducting exams, everything was settled in an online mode.

The outbreak of the COVID-19 pandemic and the resulting social distancing requirements have led to major disruptions in the world of work as well. Not only education become digitalized, but office works also become work from home. Whether big or small, all organizations allowed their employees to work while staying home in order to prevent their employees from the virus. While some sectors providing essential services like medical stores, banks, insurance, grocery stores were allowed to function with some preventive measures and restrictions. Entries without masks were banned in the offices and shops. Proper arrangements for social distancing were made for the people waiting for their turn outside and inside the shops. Sanitizers were planted at the entrance of every store to help people clean their hands.

While working from home, people were protected from the infectious virus, but they faced some another issues. Handling work along with children was one of the major issues experienced by the people. Managing work, home and family altogether gave rise to frustration among the people resulting in separation of many couples worldwide. Isolation from outside world, work load, family issues and all the negativity around the world created suicidal tendencies among those who are emotionally weak.

V. PANDEMIC - A POSITIVE SIDE

Despite all the mess going around the world, there was something which was seen as a beacon of hope. Reports of India TV as on 7th May 2020 titled "Earth is healing and it has presented us with an opportunity" states that while people stayed locked down in their houses, the water of the Ganges river become sparkling clean, Himalayas could be seen clearly from towns of Punjab, and the depleting ozone layer which one could never thought of healing, healed itself automatically. Air quality index improved. The most polluting cities experienced clean air. While the virus was making breathing difficult for the people; on the other hand, the environment started providing clean air where for decades, people were inhaling the polluting air. Humans were always considered the major reason for the worsening condition of the earth. And by improving its condition, earth proved that humans were the one who themselves made the earth depleting. Now it was the earth who took the revenge by isolating humans at their homes.

Not only this, the pandemic also showed us that humanity still exists in the heart of people. Where people were losing jobs, migrating to their hometowns from their work places without any means, patients were not able to get beds for themselves in the hospitals to get proper treatment, while some notorious elements roaming outside for no reasons breaking the lockdown rules and so on; but there were also some who came out of their houses not to disobey the rules of the government regarding lockdown, but to help those who were in need. Many scenes of distributing the safety guards against the virus, i.e. masks, hand sanitizers, gloves, etc. could be seen to those who need it but could not afford. Also, various groups provide ration, food, milk, and other basic amenities to the needy. Migrating people also got help from people who appear to them as angels. They helped migrating people to reach their home safely. There were many who donated money as well as stuff of basic amenities so that no one would struggle to survive in this difficult situation.

During the mid-year 2020, conditions began to normalize. Removal of restrictions and lockdown took place. Life was back on track, markets were open, people were getting back to work, free roaming of the public was allowed, schools and colleges began. Everything was getting normal. But we were so lost enjoying the freedom that we forgot that the virus was still there.

A false sense of normalcy crept in the people and officials that we forgot about the warnings of the second wave and did nothing to stop it or to protect ourselves from it. 10th February 2021, the date when second wave arrived in India. According to the reports of Ministry of Health and Family Welfare, 11,000 cases were confirmed in India at the beginning of the second wave and in the next 50 days, the daily average was around 22,000 cases and in the next 10 days cases rose sharply with the daily average reaching 89,800. A steep rise could be seen in the cases from February to April.

The second wave spread much faster than the first wave in the country. The reason could be that we let our guards down as

there was a fall in cases during January. Social gatherings, big religious gatherings, political rallies, reopening of public places could be one of the reasons of vast spread of the virus during the second wave.

VI. IMPACT OF COVID-19 ON INDIA

As the economy faced a great downfall during the first lockdown, the nation was not ready for another nationwide lockdown. Some restrictions began to imposed on the public to avoid the spread but the warnings were not taken seriously as they should have been. States were asked to handle the situation as they feel appropriate. States applied basic restrictions on the public to avoid the spread of the coronavirus like restrictions on social gatherings, limited guests at the weddings and another functions, restricted timings for the markets and so on. Interstate and intrastate movements were also restricted by some states. Negative covid reports were made compulsory to carry along with the people travelling from one state to another. For those who didn't carry their negative reports along with them, free testing was made available at the borders to avoid any person infected with the virus travel through different states.

The great auspicious and most important religious gathering celebrated as a festival, The Maha Kumbh Mela, which had to be held in Haridwar, Uttarakhand in the year 2021 was put in dilemma. Organizing such a big event in the situation of pandemic was a great threat to whole society, not only who were going to attend then Kumbh Mela but also to the people residing in the city. But with the support of the concerned officials, police department, akhadas, several social groups working in the pandemic and the public, the Maha Kumbh Mela went well. Although, the duration assigned for the Kumbh Mela was short as compared to the Mela's organised previously, also it was wound up as the earlier against the prescribed time. This was the first time in the history of the country that Maha Kumbh Mela had to be organized with so many restrictions and also that it ended soon.

However, there were no restrictions or curfew on the political rallies. Various influential ministers lead rallies, gathered public which was again considered as irresponsible and immoral behavior as when the whole nation was facing curfew, the political leaders and other politicians were focusing only on their personal interest i.e., winning the elections ignoring the worsening conditions prevailing in other parts of the country.

This was not all. The worst was yet to come.

VII. VACCINE AGAINST THE VIRUS

Year 2021 came with the vaccine against the virus. Doctors and researchers after a great struggle, research, experiments, came up with the awaited vaccines to fight against the virus. The 2 vaccines originated by India are Covaxin and Covishield. The approved vaccines were not only provided to the citizens of India. The nation decided to provide the vaccines to the

countries who need it and don't have any vaccine yet. Vaccine here doesn't mean 100% protection from the virus, but it boosts immunity to that extent so that if infected in the future, the virus would not affect that bad. Vaccinated person can overcome the effects of the virus easily as compared to non-vaccinated person. People aged 60 and above were vaccinated in the first round. Next batch was 45 and above. Vaccination programme was going well until when vaccines fall short. But trying to overcome the shortness, the government modify some rules regarding the vaccination process and with a new beginning, started it again for the age group of 18-44 as well.

VIII. EMERGENCE OF 2ND WAVE

Along with the vaccine came the 2nd wave of COVID-19 in the year 2021. Coronavirus was not the only issue of 2021. New mutants of coronavirus were found in this year. Also, people who were recovered from the virus earlier faced new issues with their health.

Some minor side effects were always found in the patients who recovered from the coronavirus. But, recovered patients in the second wave faced some serious health issues. After a research, it was found that some fungus infection is affecting the patients following the recovery that causes the blackening or discoloration over the nose, blurred or double vision, chest pain, breathing difficulties and coughing blood. The disease has close link to diabetes and conditions compromising with immune system and is named as mucormycosis and the fungus spreading this disease is black fungus. Experts have said that overuse of some drugs during the COVID-19 pandemic is causing the surge as it the overused drugs must have suppressed the immune system.

States across the nation have reported more than 7,000 cases of this rare disease. After black fungal infection, a new variant white fungus was discovered by the medical experts. White fungus is considered more deadly and lethal than black fungus. It had more symptoms as compared to black fungus. It also causes facial deformity which is a visible characteristic of the fungus. While black fungus is hazardous, white fungus infection proved to be more lethal. It causes profound damage to the vital organs, including brain, respiratory organs, kidneys and digestive organs. It could even affect the private parts.

This was not over yet when a yellow fungus was noticed by the doctors. Not much is known about the yellow fungus as it is generally found in the reptiles but the news of such infections day by day created panic among the people. According to Dr. B. P. Tyagi, an ENT specialist, yellow fungus is more fatal as it starts internally and it is not easy to note its symptoms. After cases of black, white, and yellow fungus a case of cream fungus was detected in COVID patient in Madhya Pradesh. The reason for all these variants of fungus given are the medical experts is the overuse of COVID-19 antibodies which are eliminating important bacteria from the body which are significant to eradicate fungus from human body.

The 2nd wave is more devastating than the first wave. The rise in cases has been exponential, detection of new variants of fungus day after day, lack of supplies and treatment make situation critical. Many cities reported shortage of beds for the patients. People were dying due to the lack of proper and timely treatment all over the country. Although, Central as well as State governments are trying hard to arrange every possible facility but experts say that it's not going to be easy to keep up with the pace.

"We didn't learn any lessons from the first wave we have reports of some cities running out of beds even in the first wave and that should have been a good enough reason to be prepared for the second wave," Public health expert Anant Bhan says. He also stated that officials didn't use the lean period to boost facilities.

Situation was even worse when it comes to ICU beds. There were just dozens of beds left in many cities and they were trying to provide facilities at the hotels and stadiums. Even there are many Gurdwaras which came forward to provide treatment to the patients who could not get the beds at the hospitals. Also, lack of oxygen with the ICU beds became a major concern as the virus affects the lungs majorly and patients in critical conditions needed oxygen support. The country was running out of oxygen. The nation had no option left other than importing oxygen from foreign countries and many countries came forward to help India meet its oxygen and other requirements.

It was a soothing experience watching nations helped each other whether rich or poor in this pandemic. But there are some self-seeking elements in the society who tries to find opportunities to earn money only. They took this pandemic as an opportunity in order to make money on the cost of the lives of others. They were the groups or individuals who illegally store vaccines, oxygen cylinders, injections and essential medicines. They were marketing these essential items in black. They charged high prices from those who badly need this stuff to save lives of their loved ones. While some individuals and groups are trying to help people as much possible at their ends, these black marketers are also present in the same society who are committing this heinous crime. Many households are destroyed just to provide an injection to their family member while many are left with no food and shelter because they had to pay a great amount for an oxygen cylinder for a loved one. Nothing can be more atrocious than dealing with the lives of people who are already fighting for their survival.

IX. CONCLUSION

The world was not ready for such a pandemic. The COVID-19 pandemic brought all lives to a halt. It not only affected the health and lives of people but also the manufacturing and the service sectors, tourism industry, education, recreation, media and others. Small and medium enterprises suffered a lot. Migrant workers left with no hopes. Many families were destroyed.

Some lost their children, some lost parents, while some lost their spouses. Corona warriors including doctors, nurses, health workers, cleaning and sanitization workers, and all the front line workers who work during the pandemic as well had a dilemma to serve the nation or to protect their families by staying home and safe. New graduates have no jobs, and who have jobs are not secured about it. Small handcarts vendors are still dealing with the dilemma to follow the lockdown rules or to feed their family by breaking those rules. Children lost their interest in studies due to absence of classroom teachings. Lockdown and social distancing disturbed the economy of various nations. Although, lockdown was the only tool to prevent the spread of virus. However, the current downturn differs from the past recessions which destroyed the entire countries.

As seen from the nature's perspective, such a pandemic was important to let earth heal itself as no technology, no industry, no pollution by the humans was present to disturb the ecological balance for few months. The COVID-19 pandemic has a clear message to adopt the sustainable development and environmentfriendly frameworks. It showed as that it's not us who control the nature. Instead, it's the nature who control our lives.

X. FUTURE PERSPECTIVE

Several warnings of 3rd wave are given by experts. If strong measures are adopted, it could be possible to avoid lethal effects of third wave. Its high time to learn the famous proverb "If Not Now, Then Never". It will be better to understand that we have to be more precautious now onwards. If not, we should be ready for something more disastrous.

REFERENCES

- [1] https://www.who.int/health-topics/coronavirus/ origins-of-the-virus
- [2] https://www.medicalnewstoday.com/articles/ coronavirus-causes
- [3] https://en.wikipedia.org/wiki/Indian migrant workers during_the_COVID-19_pandemic#:~:text=There%20 are%20an%20estimated%20139,workers%20 would%20be%20poverty%2Dstricken
- [4] https://indianexpress.com/article/india/the-long-walkof-indias-migrant-workers-in-covid-hit-2020-7118809/
- [5] https://economictimes.indiatimes.com/news/india/oneyear-since-a-complete-lockdown-was-announced-welook-back-on-how-india-fought-covid/first-lockdownannounced/slideshow/81662838.cms
- [6] https://en.wikipedia.org/wiki/COVID-19 lockdown in India#:~:text=On%20the%20evening%20of%20 24,COVID%2D19%20pandemic%20in%20India
- [7] https://blog.wego.com/india-lockdown/
- https://www.civilsdaily.com/newsblack -marketing-during- the-pandemic/

- https://www.bbc.com/news/world-asia-india-56811315#:~:text=On%2010%20February%2C%20 at%20the,average%20was%20around%20 22%2C000%20cases.&text=%22I%20said%20in%20 February%20that,urgent%20actions%20were%20 not%20taken
- https://www.indiatvnews.com/opinion/news-life-2-0-earth-is-healing-and-it-has-presented-us-with-anopportunity-614893
- [11] https://theprint.in/health/steep-fall-in-covid-cases-by-1-july-but-a-3rd-wave-could-hit-in-6-8-months-expertpanel-chief/662546/
- [12] https://economictimes.indiatimes.com/topic/ corona-warriors
- [13] https://www.webmd.com/lung/mucormycosis -black-fungus-infection
- https://timesofindia.indiatimes.com/life-style/ health-fitness/health-news/covid-white-fungussymptoms-coronavirus-white-fungus-infectioncases-on-rise-signs-symptoms-and-who-is-at-risk/ photostory/82825862.cms
- [15] https://www.hindustantimes.com/india-news/blackfungus-white-fungus-yellow-fungus-what-we-knowabout-post-covid-infections-101622102847311.html
- https://www.netmeds.com/health-library/post/ [16] mucormycosis-the-causes-symptoms-treatment-of-thisdeadly-fungal-infection-in-covid-19-patients
- https://www.globaltimes.cn/content/1189830.shtml
- https://journals.lww.com/ijo/Fulltext/2020/68110/ Impact_of_COVID_19_pandemic,_national_ lockdown, 18. aspx
- N. B. Sancho, N. I. Mondragon, M. D. Santamaria, [19] and A. E. Munitis, "The well-being of children in lock-down: Physical, emotional, social and academic impact," Children and Youth Services Review, vol. 127, Aug. 2021, Art. no. 106085.
- [20] G. Guler, H. Ozdemir, D. Omar, and G. Akdogan, "Coronavirus disease 2019 (COVID-19): Biophysical and biochemical aspects of SARS-CoV-2 and general characteristics," Progress in Biophysics and Molecular Biology, vol. 164, no. 3-18, 2021.
- [21] S. Rehman, T. Majeed, Mohd. A. Ansari, U. Ali, H. Sabit, and E. A. Al-Suhaimi, "Current scenario of COVID-19 in pediatric age group and physiology of immune and thymus response," Saudi Journal of Biological Sciences, vol. 27, no. 10, pp. 2567-2573, 2020.
- O. Tonnessen, A. Dhir, and B.-T. Flaten, "Digital [22] knowledge sharing and creative performance: Work from home during the COVID-19 pandemic," Technological Forecasting & Social Change, vol. 170, 2021, Art. no. 120866.
- [23] R. Wyatt, "Predicting community attitudes towards alternative virus-management plans," Journal of Urban Management, vol. 10, no. 2, pp. 125-138, Jun. 2021.