

Global Impact of Coronavirus Disease 2019 (COVID-19)

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Abstract

The novel coronavirus is a group of viruses with genetic material inside and surrounded by a lipid layer and protein spikes. Coronavirus disease 2019 (COVID-19) is the official name given by the World Health Organization (WHO). SARS-CoV-2 erupted from Wuhan, China, in 2019. By May 2020, COVID-19 was ubiquitous, infected millions of people on this planet, and became the worst outbreak of this disastrous pandemic. The pandemic's impact such as a high mortality rate and economic imbalance. Random viruses constantly affect humans' and animals' health like severe acute respiratory syndrome. SARS COVID 2 followed. However, initially, coronavirus was identified in 2019. COVID-19 affected several sectors: transportation, health care, education, tourism, food sector, unemployment, trading, agriculture, sports, pharmaceutical industries, and global poverty.

Keywords

COVID-19, Pandemic, Virus, Vaccine, Symptoms, Prevention, Impact

1. Introduction

Transmission of the disease can occur through cough or sneezing of infected persons. Air is the transmitter of COVID 19 Viruses can also survive on surfaces for up to many hours. The spread of the virus can also be possible by exposure to an infected person. The incubation period is one to fourteen days; the symptoms appear mild. Therefore, there might not be any symptoms in rare cases [1] [2] [3]. However, symptoms range from mild to severe or absent. Some people do not have any symptoms, but they are tested positive for the virus. Some symptoms include high temperature, loss of taste and smell, breathing problems, lung problems, cardiac issues, sore throat, and even death. [3] [4] are seen in many

cases: Dry throat/sore throat (initial infection), dry cough (unproductive cough/little to no expectoration), fever (above thirty-seven degrees Celsius), myalgia (muscle pains), rigor (chills), malaise (feeling unwell), sweating fatigue dyspnea/shortness of breath (viral infection is spreading in the lower respiratory tract) pneumonia secondary bacterial infections (opportunistic infections) [5].

2. Diagnosis

Diagnosis of the disease can be possible through a swab test (Nasopharyngeal swab test) from the nose and throat, which is well known as RT-PCR. It then sends the collected samples to a lab to examine the virus. At present FDA approved home testing kits for viruses [6]. There is rapid antigen testing, CB-NAAT, and RT-PCR. All 3 require a nasopharyngeal swab. As the name suggests, a quick antigen test is fast and performed bedside using a simple kit. The results inform the patient if they are infected or not. A positive test should be treated as positive and requires no further confirmation [7]. A positive impact on CB-NAAT needs no further proof, but RT-PCR should confirm a negative effect with a high degree of clinical suspicion. Another test available is the antibody titer test, where people see the level of antibodies against COVID-19 in their bodies. Some of them include covering the nose and mouth with a mask, washing or sanitizing hands regularly, and maintaining social distance (minimum 1 meter). Using N95 masks and wearing personal protective equipment. It is crucial to stay at home if not feeling well and contact a medical professional. Suppose someone has a fever, cough, or difficulty breathing. It is essential to consult a doctor immediately in case of symptoms and provide the travel history—treatment options for COVID-19 Remdesivir. The FDA approved remdesivir, an antiviral drug, in October 2020 to treat coronavirus infection. FDA gave the green signal based on the data indicating that a select group of hospitalized patients administered remdesivir improved their symptoms and recovered faster. In India, the DCGI (Drug Controller General of India) approved Remdesivir lyophilized (in powder form) for emergency treatment of hospitalized people [3]. The drug can be given to children above the age of 12, weighing a minimum of 40 kgs, and adults; since the pandemic, doctors have been using corticosteroids to treat critically ill COVID-19-infected people. This drug effectively affects people experiencing a cytokine storm (hyper-immune reaction) [8].

In such cases, the hyperactive immune system of a person damages the lungs and other body parts, often leading to life-threatening complications. Dexamethasone and similar corticosteroids make potent anti-inflammatory medication choices. In addition, these are readily available and reasonably priced. Baricitinib with Remdesivir According to a clinical trial, Baricitinib and Remdesivir make a promising combination when treating COVID-19. Baricitinib is an anti-inflammatory medicine. When combined with Remdesivir, it helps reduce the recovery time in hospitalized people. While the combination shows positive results, more clinical studies are needed. Anticoagulation drugs or blood thin-

ners most people who require hospitalization for COVID-19 treatment get medications to prevent blood clots [9]. According to a recent study, preventive blood thinners are likely to reduce fatalities in COVID cases [10].

Monoclonal Antibody (mAB) Treatments Monoclonal antibodies are lab-made variants of the antibodies naturally made by our body to fight foreign particles, such as the SARS-CoV-2 virus. The mAB method decreases the chances of developing severe COVID-19 symptoms. **Convalescent Plasma Therapy** People who have recovered from the coronavirus infection develop antibodies in their blood that help them fight the virus and recover. Convalescent plasma therapy uses the recovered patients' blood products (plasma) to treat coronavirus-infected people. It is safe and widely used. At present, vaccinations have become very influential. However, those are not treatments. Instead, they are preventative [11].

3. Impact of COVID 19 on Goods and Services

COVID-19 is one of the most killing disasters in the world after World War II. Public service departments that support the social distancing for the safety of people have restricted their working, but they supply their services online. During the pandemic, digital media and technology tend to attract people when they are physically isolated [12] [13]. They include entertainment services like movie halls, performing theatres, restaurants, clubs, gyms, and swimming pools. People would be reluctant to visit these places due to fear of contagious diseases. These places would need to decrease entry costs to lure people back to their business [14].

3.1. Food Industry

The food sector, which comprises food supply and marketing, has been stressed out due to Increasing purchases and accumulation of stocks. The food sector mainly includes meat, fruits, vegetables, and dairy products [15]. Primary food requires high investment. However, the limitations among countries and states resulted in adverse effects on product distribution [16]. There is high demand for consumers, but consumers are preparing food at home due to restrictions. Due to the pandemic, consumers do not want to go outside because of the virus's rapid spread. In economically developing nations, temporary or seasonal employment is regularly available for planting, harvesting, and transporting crops to the market. During the lockdown, a decrease in the food supply was due to restrictions in the city [17]. Especially shortfall of workers during the pandemic gives rise to disturbances in planting, harvesting, horticulture, and shifting crops to the market, which depends on workers. Because of the pandemic, the government of the United Kingdom distributed food packages and accessible means to older adults in families with unemployment. Although food markets have high requirements are forced to shut down, which results in unemployment for many ordinary people.

3.2. Health Care

The significant effect of COVID 19 was on health care systems. If there is a need

for an emergency, the health care sector is the first to respond. The usage of technology has also increased during pandemics. The sites or apps trace the spread of COVID 19. The apps gather information about a location and find the people affected by the virus. There are also insufficient beds and medication and medical equipment [18] [19]. As lockdown continues in the country, there is a sharp reduction in jobs in this sector. In 2020, employment in the health care sector fell by 9.3% within one month. Positions in Non-health care departments fell by 14%.

The health sector collapsed due to COVID-19 in the last month of 2019. COVID 19 pandemic disease almost 170 plus countries are affected due to the COVID-19 India is also a victim of this virus [20]. Thanks to COVID, the health sector budgets were depleted. The government invested in building up the infrastructure of the COVID-19 in the hospitals. People need much more time to support the budget in the different health sectors in the upcoming years. Additionally, funding for the defense sector decreased due to the economic problem, the GDP collapsed, and the unemployment rate rapidly increased as many people lost their jobs in different sectors [21].

3.3. Education

The COVID-19 long-term effect leads to threatening and as well as very critical to some economists [22]. It hampers indifferent sector sectors like health, economy, sports, and social life, and it is not so easy to remove the environment from this sector in a few weeks. The quality of education is in jeopardy [23]. In the online mode of study, some people can afford it, but many students who belong in the village due to network problems attend the online class appropriately and have gadgets. The government introduced society to social distancing, and individuals spent most of their time isolated from friends and family. The isolation caused additional stress and anxiety. When the world health organization announced, schools' and colleges' global contingency were closed immediately. The main idea of social distancing is to protect public health and stop the virus. Isolation led schools to offer online classes. Potential students showed interest in using online platforms to learn, but in many cases, schools closed, resulting in unemployment for educators. As a result, the students tend to learn through digital media [24] [25] [26].

3.4. Tourism

The unexpected arrival of the virus affected the Tourism industry. Post vaccinations, the tourism sector is working to get back to their pre-COVID numbers [27]; however, the tourism industry is still struggling to restart. The remaining sectors have an option to continue their services online, but the tourism sector has nothing to do with it. The journey planners lost their jobs. The tourism sector also has a poor crash in the food supply, aviation, road, and transportation. The USA is the only country to gain much from the profits of travel and tour-

ism, which is also one of the worst-hit pandemics [28]. The revenue generated from tourism in 2019 in the U.S. was almost \$210.7 billion, which is even more than half of Spain's earned. As it became the primary hotspot for COVID-19, all traveling facilities have been closed for good. This sound decision is somewhat against the employees in travel and tourism. The collection of paradise lies here, in Europe. From westernmost Portugal to far east Ukraine, every country in Europe is worth a watch. That is the prime reason why countries like France, Spain, Italy, the United Kingdom, and Turkey remain top destinations among every enthusiastic traveler. In 2018, about 713 million people visited Europe. Unfortunately, due to the spread of the deadly coronavirus, no one is visiting these countries and can only imagine worsening the situation.

Many airline companies in Europe like EasyJet and Ryanair are looking forward to opening their airports in June to compensate for losses. Asia is full of majestic countries. Whether going from north to south or east to west, the culture diversifies. Everything is globally trending, from mouth-watering Chinese, Thai, or Japanese food to fiery Indian dishes. Asia remains a top tourism destination among many [29]. Thailand, which attracts around 34 million tourists around the year, is expecting to see only 6 million visitors if the spread of COVID-19 stops. This industry is highly crucial to Thailand because it constitutes about 22% of its GDP. Last year, approximately \$62.5 billion came into this country because of travel and tourism. About \$15.6 billion could be lost if the current scenario prevails, as stated by the Tourism Authority of Thailand (TAT). The COVID-19 crisis badly hits the travel and tourism industry. It is impossible to predict when it will recover fully from the pandemic and travel will return to pre-COVID levels. Fortunately, the curve has flattened, even declining in some parts.

Consequently, borders are gradually opening, and travel is restarting. So, there is some good news, the travel industry is on the path to recovery. The travel industry always recovers from disasters and emerges on the other side more resilient than ever before. Based on experience, travel the industry's recovery will happen but not equally for all brands. Cruises, for example, are likely to remain badly hit for a while. So will the group tours segment. Business travel tends to reduce as corporates get used to virtual meetings [30]. Still, government support is available to many businesses, but it is not enough to keep all the brands survive this pandemic. Travel brands must remain calm, focus on local travel, and minimize spending in this pandemic situation. One of the best ways for travel firms to bounce back into action is to invest in technology solutions that will help them survive and thrive in the future [31].

3.5. Unemployment

The overall count of unemployed individuals in the country is still a concern. The authorities are finding optimum solutions to tackle the situation. This fight against corona is on the front of unemployment and financial crisis, and it must fight. From the above graph, the employment rate sharply decreased from April

2020. The unemployment levels remain constant when matched with February 2020. There is a decrease in Labor share, although it reached peaks in April 2020. There has been a decrease in the unemployment rate on the graph since April 2020 might be helpful to laws established in the reform of both slowing down the pandemic [32] [33]. Additive only, the government established unemployment insurance schemes and increased the duration of coverage. Many people say that this scheme is a negative way. COVID-19 is the latest and most significant enemy of human beings. It has also affected our employment.

It has wholly ruined primary industries such as travel and hotels—the famous rule of Economics, *i.e.*, Demand and Supply. When the supply of aspirants is higher than its demand, it will have no importance. It means the competition will be higher. Unemployment will be higher. If there are 100 openings, there will be 10,000 aspirants for a job because of the lack of demand in respective fields. They will shift their position because they have no other choice. Either they will switch, or the company will fire them. The corporate has no other alternative but to send them on leave without dismissing the staff. Things depend on revenue in the industry, and all are interrelated to another sector. If one sector crashes, then another sector will be affected too. In this severe scenario, nobody knows how to handle the situation. The government should try to help all the directly affected industries honestly.

People are familiar with red tap-ism in the system and its culture. So, nobody knows better how they survive in this challenging situation. If lockdown is over, people might be affected by COVID-19, and if it does not die, then the virus will crash the economy entirely, and unemployment will be at the top level. Many corporates have already cut their salary and fired many staffs [34] [35] [36] [37].

India has the largest population of youth, with half of 1.3 billion. A massive percentage of that youth has an education, especially a college education. Hence the requirement for jobs is a lot. The unemployment rate of 6.1% reached its peak over four decades. In addition to this struggle, the coronavirus pandemic has harshly hit every sector. It led to pay cuts and, in many cases, the loss of jobs.

Unemployment and inflation will be the norm for some time. There is a need to understand that the demand and supply of the economy were also impacted by COVID 19 [38]. The supply chain has crumbled, and this prolonged lockdown has not made the situation more manageable. Demand has also shrunk significantly. If people do not have money, how will the order be generated? Again, if people do not demand or buy goods, why would firms produce them? Because it is a vicious cycle. If the firms do not have, they will not earn profits and reduce their cost by laying off more workers. In general, few goods in the economy are at higher prices. The lowest strata of society will suffer the most. People having stable jobs and earning income have a steady flow of cash. These people do not have much to worry about, and they will just spend money from their stream of money flow [39].

People who do not have a permanent job but have some savings will survive

this period by finishing their stores. However, some of the service and technology sectors will be hard hit. For instance, the Auto sector, tourism sector, and aviation industry will not see recovery anytime soon. Their incomes have evaporated suddenly, and there is very little hope for these industries to earn a pre-COVID level income anytime soon. There will be extreme unpredictability about the future, which will affect the investment component of the economy [40]. It is a no-brainer that investment has negatively corresponded with uncertainty. Investment is an integral part of GDP, and delayed investments would make recovery challenging.

3.6. Trading

If the average investor becomes disillusioned or scared, this can create a risk of panic selling by the retail groups and smaller funds. If corporations have steeper declines in revenues and earnings and rising costs for payroll due to safety requirements, this will be reflected in earnings reports through the end of this year and next year and keep unemployment high. If small businesses keep failing at this rate, many big corporations will lose a high percentage of their revenues. Small Businesses are rarely competitors to giant corporations. Instead, small businesses are a huge revenue source for most of the S & 500 companies [41] [42]. If the second wave comes, and there is no guarantee, then the lockdown of state economies may create panic selling of stocks. There is more uncertainty than answers. When the market is stressed right now, it is a wise investor who pauses to consider risk, inherent risk, hidden risk, and potential risk before making decisions. Speculators, aka gamblers, can create substantial speculative runs that collapse [41].

When trading, the market remains humble rather than arrogant or overly confident, or the market will humble people. 2020 has depletion in trade and the results for manufacturing and trading goods since WWII. The effect of goods and services along with trading was sharply varied. The year 2020 represents the downgrading of trading and its output volumes. Saw trade fell by double compared with trading goods and services [43]. The trade decline did not hit all the goods equally. With economies everywhere in recession, people will buy less and reduce cargo. Lower oil prices due to the recession would allow ships to run faster. Procedures at every port will be more elaborate [44]. Health checks for all crew; decontamination of containers probably not needed. Reduction in Cargo handling by the need to keep a separation between dockworkers. The contents in the container might get contaminated until they reach their destination. Charter rates fall for liquid and dry bulk cargo because of the worldwide economic slowdown.

3.7. Agriculture

During a pandemic, everyone is thinking about the loss in business such as hotels, airlines, and income sources [45]. The purchaser assumes that farmers are doing good. There are unconfirmed assumptions that estimate the current retail

cost of milk is down 40%. The rates for farm products, corn, and cattle are also fallen. Farm Bureau has tried to cover 23.5 billion USD two support farmers [46]. The future of agriculture depends on reasonable prices. Every year, during spring, thousands of farmers migrate to the United States of America for their survival. Due to the non-availability of workers, many harvestings work mainly in India, where Plenty of pulses and wheat or supplied [47].

There are also difficulties in supplying food from markets due to lockdown restrictions. Even though the prices are off, decreased chicken products are, and People are still in fear of infecting coronavirus—some major problems faced by the Indian farmers due to COVID-19. Farmers in India were inadequate to sell their fruits and vegetables on time because there was no transportation facility during the beginning of the lockdown period. In agriculture, farmers faced many issues like workers' scarcity, supporting all cultivate that were rotten and thrown away from the land. India has the second-largest arable land in the world. This lockdown pushed agriculture employees to be unemployed [48].

3.8. Impact of COVID 19 on Movie Theaters

Some of the big chains and smaller movie theaters will likely go out of business [49], and without federal bailouts, an airline, or two, and perhaps some hotel chains. COVID-19 has temporarily, and in some ways, permanently, changed our social patterns. Businesses cannot survive indefinitely under these conditions [50]. They can reduce variable costs but have fixed costs that accrue regardless of revenues generated. The good news is that the physical assets of a failed company remain, waiting to be purchased and used by a new business once conditions improve [51]. Suppose AMC were to go out of business, the theaters, projectors. Same with the airplanes and gates if American Airlines went belly up. At some point, and at some price/cost, conditions will improve to that extent. Someone will view it as profitable to get back into these businesses. So long as the demand for these services supports the prices needed for the company to turn a profit [52].

3.9. Impact of COVID-19 on Small Businesses

Today, many countries try to help enterprises survive and small businesses. Disaster loans, for example, the administration of the USA today offers low-interest loans available through the Small Business Administration [53]. Thus, small businesses will be able to pay all debts, survive, and save their job—paid leaves. The government must ensure the payment of paid leaves to employees working for small companies. It is topical if employees cannot work remotely. If the type of business allows them to do everything remotely, then it is a good option for small businesses, it will survive. All civilized countries enable firms to extend tax payment periods, and tax will not impose fines for non-timely payments. Payment flexibility is significant during the COVID-19 outbreak.

4. Sports

There is a delay in many sports events in 2020 due to the pandemic. Cycling, Rug-

by, snooker, ice-skating, and many sports have delayed or canceled their plans. The pandemic and financial status also affected this sector [54] [55].

4.1. Pharmaceutical Industries

China is the largest supplier of medical devices. The effect of the pandemic resulted in a decrease in profits [56]. As a result, some companies decided to unite with the US-based companies to develop the vaccines. COVID-19 shows the long-term and short-term impacts on pharmaceutical industries.

4.1.1. Short Term Impacts

High demand for oral medications, which is called panic buying, mainly in the case of long-term diseases. This idea also results in shortages of medicines. Maximized hospitalization, increased demand for ventilators, frequency of COVID-19-related problems, lack of difficulties in supplying medicines: The need for FDA includes anti-COVID-19 drugs like hydroxychloroquine, chloroquine, and other medications for COVID-19. There is also a shortage of antibiotics and anesthetics. After the emergence of COVID-19, there is a dearth of medical equipment and personal protective equipment (PPE), shortages and increased demand for masks, sanitizers, disinfectants, and detergents. Panic buying in people resulted in a lack of medications. Pharmaceutical ingredients are imported mainly from India and China [57] [58]. Due to this pandemic, they are severely affected, and decline in production. Because of social distancing, promotions, and marketing of medical goods to suppliers are transferred face to face for Communication.

4.1.2. Long-Term Impacts

Because of the slow acceptance of non-COVID-19 drugs, there is a shortage of medications. The primary concern of all countries is to control of pandemic. They are going towards self-supporting in Pharma companies. There is a dearth of medicines imported from India and China [59]. Due to this, the central commission in Europe has released a newly created plan to determine a course of action concerning constant overseas investment and apparent motion of capital from foreign lands. And they also said that the canned issues might create turbulence in the health market. And these kinds of impacts might concern the health necessities of Europe citizens.

During COVID-19 in Iran, the imports of raw materials to create medicines have gone down. Due to this, Iran's self-sustainable pharmaceutical market has started walking towards a severe crisis. The coronavirus pandemic has made a massive impact on the pharmaceutical industry by creating a significant economic imbalance and crushing the needs of people [60]. The longstanding and far-sighted effects on clinical investigations of this coronavirus are due to inadequate data & Testimony-centered treatments. And there are many hypothetical therapies that top doctors and scientists propose that might come up with longstanding side effects, and these therapies must be checked thoroughly and made a proper and harmless decision.

Many patients are being prescribed appropriate medications due to their health issues. Do you think a pandemic can affect their medications? Indeed, yes, because due to pandemics, many industries which provide raw materials to pharmaceutical companies to make medicines were shut down because of high mortality and the speedy spread of coronavirus. And due to this, people cannot get their medication on time or may get them anymore. So, what happens now? Their habits got changed. Such as, In India, many people, when they do not have medicines due to unavailability, start preparing their medication with the help of Ayurveda.

4.2. Impact of COVID-19 on Children

Even though children were also a part of and victims of this horrible pandemic, the children's harmful effects were a bit less [61]. Children slide into extreme poverty as their parents die due to coronavirus, adding almost 386 million kids into poverty. The most crucial loss is staying away from education. Due to the pandemic, nearly 1.5 billion children & youth stayed away from school due to worldwide closures. Around 70% of countries started practicing distance learning classes on various online hubs. Due to substantial economic imbalances, many families faced several financial struggles, resulting in poverty, malnutrition, and medicine unavailability, leading to many infant deaths. Many children experienced exploitation, assaults, and violence [62]. Many infants are living in unfavorable and unsanitary locations such as refugee camps. The result for children depends on the time it takes to eradicate the pandemic.

Children older than a year (not Infants) have a lower infection rate. According to an article on Mayo Clinic's website, children account for less than 2% of cases. If a child contracts COVID-19, the disease is generally less severe than adults. This fact presumes that affected children have no underlying conditions like diabetes [63]. Common symptoms in children include fever, runny nose, cough, diarrhea, muscle aches, and vomiting babies or infants are at speculative risk of difficult COVID situations. There is a belief that this issue is due to immature immune systems and smaller airways.

4.3. Effect of COVID-19 on Females

COVID-19 is a Single-stranded RNA. The immune system's response to the virus depends on the functioning of the immune system [64]. The virus at first shows its effect on the lungs—the transfer of CD4⁺ T cell groups between Th2 phenotype Th1 throughout the pregnancy. In the immune system, the reduction in Th1 sensitivity follows variations in the clearance of virus-infected cells. The response of Th1 and Th2 to the COVID-19 virus implicates the infection of COVID-19. The reduction in the moving plasmacytoid cells of dendrites. These cells are vital to producing type 1 interferons, which help defend against the virus. PDC pregnant made reduced responses to the virus. One of the critical reasons pregnant women are affected by H1N1 is the rise in progesterone levels. The steroid hormone progesterone produces immunomodulatory effects. Progesterone

plays a crucial role in improving the damaged lung, which is affected by the influenza virus. In studies conducted on mouse models with influenza A virus, unexpectedly, Progesterone was used to cure mice. There was a decrease in the infection. Modification in the immune system of pregnant women has significance for the path of COVID-19 along with treatment and prevention of the virus [65].

It leaves confusion that these modifications result in the high sensitivity against COVID-19. Further studies must examine the inflammatory response, antibody secretion, virus, and acquired immunity stage. In ordinary people affected with COVID-19, the virus or the disease relates to thromboembolic-based difficulties. The study on 184 sickly females reported that 31% of females had faced problems with thrombotic events. The reason behind this was coagulation pathways, which are already activated. During pregnancy, there is elevated thrombin production and intravascular inflammation.

The higher levels of fibrinolytic factors and coagulation and plasmin are complicated in the pathogenesis of COVID-19 [66]. It is the leading cause of pregnant women with high synergistic risk factors. This idea depends on the test conducted on females under the gestation period of the 29th week, with COVID-19 elevated pulmonary infarction. Endothelial cell function helps in the process of ARDS. ARDS is an acute respiratory distress syndrome [67]. The mural cells surround the endothelial cells in the body, decrease inflammation, restrict the immune cells, and avert coagulation. Improper function of endothelial cells is a main causing factor for COVID-19.

False-positive mammograms can occur after immunizations in men. Men who don't carry one of the risk genes for breast cancer tend not to get mammograms. Anyone receiving a vaccine in the upper arm should have swollen lymph nodes in the armpit for weeks as the lymphocytes multiply and differentiate to make antibodies and memory cells. Since swollen lymph nodes can also signify breast (or other) cancer, it is best to schedule mammograms at least weeks after immunizations [68]. Women's clotting systems seem to be more susceptible than men's to the rare VITT syndrome, in which one of the classes of vaccines confuses the immune system into attacking a person's platelets.

Menstrual irregularities or fertility problems (in women or men) after any of the COVID-19 vaccines, and there is no reason for any immunization to cause those problems. So, there is one side effect: just the vaccine (any vaccine given in the arm) doing its job in women, men, or children, but more likely to be noticed in women because women have mammograms. Then is one infrequent problem with platelets interacting with some (but not all) COVID-19 vaccines, happening more often in women than men because women's clotting and immune systems are more susceptible to that interaction [69]. Then throw in some nonsense about fertility and menstruation and try to make this into a story about the COVID-19 vaccines being bad for women when the evidence supports just one rare issue for one class of these vaccines. COVID-19 vaccines save lives—male and female, young and old—and preserve fertility by keeping men and women alive.

4.4. Impact of COVID-19 on Mental Health and Anxiety

Anxiety occurs when an individual becomes extremely worried and scared about developing an illness [70]. During previous pandemics, the public has expressed a fear of developing the concerning disease. When an individual experiences health anxiety, s/he becomes highly aware of how they feel, commonly if even some normal feelings or conditions could lead to the illness. Hence, the person might attribute a mild cough or allergy to the COVID-19 infection and become preoccupied with it. To a certain extent, being scared during a threatening situation such as this pandemic is good. It can help a person immediately understand if they show symptoms and ensure good health. However, while a limited amount of health anxiety is a normal response, too much of it can be handicapping and challenging. People often also report using health-related websites like WebMD too much to find out more information regarding the pandemic. With social and popular media constantly triggering this behavior, it can sometimes be highly distressing. Even if the pandemic causes these conditions, a person must seek help for the same [71].

STRESS AND FATIGUE

The COVID-19 Pandemic has been significantly stressful for everyone. Many people have claimed to feel increased stress levels due to the changes they have to manage. The pandemic and lockdown have restricted people's access to their loved ones, mainly causing them to indulge in virtual and digital interaction [72]. Not only does this cause stress, but increased use of technology has led to increased tiredness, reduced productivity, and loss of motivation. It has also made people feel annoyed, irritated, and dissatisfied. It leads to mental and physical exhaustion and can highly damage an individual's well-being [73].

5. In General, the Mental Health Effects of COVID-19 Can Address in Various Ways

5.1. Communication

Everybody needs to reach out and express their feelings during these pressing times. During a pandemic communicating more often with friends and family and providing support to loved ones when necessary. Communication and expression do not always have to be with other people. Journaling and writing down what one feels can also help [74].

5.2. Self-Care Can Include Many Things

Starting from devoting a part of the day for "me time" or meditating for, say, 15 minutes in the morning.

5.3. Ensuring Physical Health

It is also essential to take care of one's physical health. Physical and mental health are two interconnected concepts. Hence, monitoring one's exercise, activity, sleep quality, and nutrition intake becomes extremely important. In addi-

tion, there is a suggestion to dedicate a part of the day to exercise to help the person feel fresher and happier.

5.4. Limiting Consumption of Social Media and News

It is also crucial for one to limit the number of social media. While everyone needs to be aware of what is happening globally, it can sometimes be toxic and difficult to scroll through harmful content throughout the day. Deciding on a routine can also help in this case.

5.5. Engaging in Hobbies and Activities

One can also engage in hobbies and fun activities to reduce monotony and boredom. This fact can be anything, starting from painting to dancing to one's favorite song or simply binge-watching a show for a while.

5.6. Do Not Hesitate to Seek Help

Lastly, if it becomes tough to cope with the situation, it is always advisable to seek help. Various mental health spaces provide online consulting services, and it is integral to seek therapy if it becomes unmanageable. Though the effects of the pandemic can seem overwhelming and scary, while this might be partly true, pandemic-induced mental health issues are equally important [75]. They are under observation, and one should seek help for the same. Spaces provide individuals with the freedom to express and heal through the pandemic, and it is essential to use these resources to ensure self-care and personal wellbeing.

6. Impact of Face Masks on Children

At present, face masks are routinely wrong. There is still an unanswered question of whether children need to wear a mask or not because there is no evidence that children are spreading the virus. Many parents believe that face masks might create problems for children. There is no truth in this belief [76]. In August 2020, UNICEF and WHO suggested no harm in using face masks for children. It also advises that children aged five and below need not wear masks. The guidelines released by UNICEF and WHO suggest that Kids ages Six to Twelve and above are considered adults. Only a couple of studies have been performed on children using N95 masks. Depending on the publications in 2019 and 2020 provide information on safety, fitting, and comfort. The second one focuses on the wearability of masks in school children. The adult studies are conducted, which reveal that there is no harm in using cotton or surgical masks. The studies assume that there were no issues with oxygen intake when testing participants wore masks. One study, performed before the COVID-19, proved an effect on the heart and lungs after walking with a face mask for an hour. So based on these studies, there is no harm in wearing a face mask for children of any age, but a face mask is not mandatory for children below five [77].

COVID-19 IMPACT ON THE MALE REPRODUCTIVE SYSTEM

The main thing to concentrate on is to be aware of the long and short-term effects of COVID-19 on the male reproductive system.

VIRUS ENTRY INTO THE REPRODUCTIVE SYSTEM

The virus initially enters the host cell through S proteins and ACE2. The S protein combines with ACE2 and identifies the host cell's surface. It helps qualify the other proteases and S protease into S1 and S2 units [78]. This conversion allows the way to the virus into the host cell. Generally, the virus releases the RNA after the virus's entry, and replication is started [79]. Many types of research conducted on male reproductive systems revealed an impact of SARS-COV-2. In males, hormones differ in their baseline, starting with mild stress—a study conducted on men affected with COVID-19 and suffering from—androgenetic alopecia. Because the trinucleotide is also present in androgen receptors, the migration of semen is less [80]. Many reports are available on viral tropism, but the critical point of viral entry is the co-expression of the TMPRSS2 and ACE2 in small quantities. Unfortunately, there is not enough data on the male reproductive system and semen.

7. Advanced Therapies for COVID-19 Immunization Development

Many doctors and scientists have tried many diagnostic immunoassays and efficacious treatments. In addition, the advanced technologies involving computers and biological medicines have given a chance to develop immense instruments, which helped speed up the vaccine development process [81].

7.1. RT-PCR

The polymerase chain reaction is the best accurate technique to discover certain diseases. SARS-CoV-2 uses results from RTPCR tests [81].

7.2. Chest CT Scans

Few studies concentrated on the accountabilities of RT-PCR tests. Few publications, as well as assays, pronounced the best factors depending on performance. Serology test usually searches for antibodies in the blood capable of fighting against any virus [81].

7.3. RT-LAMLAMP

LAMP is nothing but (Loop-mediated isothermal amplification) a test that can detect viral RNA. There is also an RT-LAMP, which involves reverse transcription [81].

7.4. CRISPR/CAS

CRISPR is a group of DNA segments initiated in the genetics of prokaryotic systems like bacteria. CRISPR inactivates the coronavirus in human cells by cutting the order of the virus [81].

7.5. Positive Impacts on COVID-19

From COVID-19, hopefully, the government in countries like India will now understand that treatment should be more of a community service. It is the fundamental right of every person, including the poor, to avail themselves of the best remedies. In countries like India, only a few big organizations can provide the faculty of work from home for employees. Most of the companies are not even prepared [82]. Corona outbreaks show that companies should focus on implementing WFH more as it saves electricity and decreases carbon emissions in nature. Many companies would prefer to allow work from home, thereby saving the cost of operating office space. Most meetings would now be online, reducing the cost of offline travel and stay. Sanitation agencies would flourish.

Just as terrorism threat once triggered security services substituting door guards, sanitation agencies will replace the regular housekeeping personnel post-COVID-19 pandemic. People would avoid public transportation and prefer using their commute to avoid crowded places. The sale of cars and two-wheelers would increase. Tourism would take a long time to get back to its previous glory. Leisure travel will become calculated. People would prefer to visit less crowded destinations. The cost of hotels would decrease by trying to lure more guests into covering their running costs. Home food would get preference over outside food. People would love being healthy. The Digital and internet economy will rock on the floors of the Indian economy as online-based products and services companies will find new opportunities and places in the market and find recent takers of their products.

Online education and skill development have awakened the values of students and youth in this pandemic situation, and the education system is turning more digitally than in previous years, and students are relaxing at home and studying quickly, lesser pressure is on them. So, because of this, it reduces stress and anxiety level in them and professional bodies and corporate people pre working from home now, and with that, they are also giving time to their personal life and their family, which previously was scarce. Online groceries have comforted household people with advanced technology. People buy necessities and other items with one click. The most beautiful thing is that the streets of Delhi and Bombay, which were the best example of the highly polluted city, have now become pollution-free, and India's environment can retake a deep relaxed breath because of this COVID-19, as no one is allowed to move outside the house due to lockdown so, all the environmental issues are solving. FMCG and the retail industry will benefit. Colossally at some point, as demand for natural/organic ingredients food products is increasing rapidly, cosmetic products are stepping downwards in their demand chain. So, as a result, they have changed the consumer behavior in buying habits for these products.

In this season of COVID-19, on the other side, demand for personal hygiene products like hand sanitizer, masks, hand wash, and other hygienic products are ruling the top of the Indian market and across the globe [83]. They are about to

increase exponentially in the coming months, and it has also created a lucrative situation for domestic and international players in upcoming years. As the world overcomes this pandemic, the following years will be crucial for the media and entertainment industry, and internet-based b2c will stand in the line of gain. Once again, there will be a high boom and jump in travel and tourism, and some sectors like construction and the food industry will also be on an uptrend [84].

8. Conclusion

COVID-19 has spread, and it has shown effects on human lives and the world by creating economic imbalances across the globe and displacing people, creating extreme poverty, making vaccines unavailable due to a shortage of workers and raw materials. The virus can enter your body by breathing, ears, & eyes. The spittle can go 20 feet away. A virus has many places to enter your body. Not everyone takes precautions and gets a vaccine for stupid reasons, and it would have saved millions of lives. Instead, they continue to save lives. Continue to wash your hands frequently for 20 seconds. Wear a mask. No vaccine is 100% effective. Lesser efficacious for each variant, the virus is still mutating and getting stronger every day. The Delta variant is two times more infectious & deadly. There are reasons why it is getting worse. People must wear earplugs, wrap-around glasses, disposable gloves, a mask, & shield. Safety is paramount in vaccine development. All the available vaccines have proven to be highly safe, and the slight variations in their side effects are divided mainly along with vaccine technology platforms.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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