Impact of Covid-19 on human behaviour, habits and how one should tackle the problem.

Introduction

At Ahmedabad on New Year's Eve 2019, I was attending a new year celebration. Little did I know that the world was about to know about the tsunami of this deadly timebomb which was ticking quietly in a place called Wuhan which most of us had never heard before. Yes, the first COVID-19 case was reported on 31st December 2019. Fast forward to the present day scenario, the world has seen 171,229,676 cases of the virus infection and 3,560,934 deaths due to the virus at the time of writing this article. This pandemic has altered the way we live, we think and how we interact with other human beings.

But how did we end up here in such a situation? This whole escalation of the pandemic can be explained by one very famous paradox called as prisoners dilemma, and it goes like this-

Let's imagine there was a bank robbery and two members of a gang have been arrested and are being interrogated in two separate rooms. But, the authorities have no other witnesses and can only prove the case against them if they can convince at least one of the robbers to betray his accomplice and testify to the crime. Each bank robber is faced with the choice to co-operate with his accomplice and remain silent or to defect from the gang and testify for the prosecution. So, if they both co-operate and remain silent, then the authorities will only be able to convict them on a lesser charge resulting in only one year in jail for each (1 year for prisoner A + 1 year for prisoner B = 2 years total jail time). But, if one testifies and the other does not, then the one who testifies will go free and the other will get five years (0 years for the one who defects + 5 for the one convicted = 5 years total).

However, if both testify against the other, each will get two years in jail for being partly responsible for the robbery (2 years for prisoner A+2 years for prisoner B=4 years total jail time).

In this case, each robber always has an incentive to defect, regardless of the choice the other makes. From point of view, if Prisoner B remains silent, then Prisoner A can either co-operate with Prisoner B and do a year in jail, or defect and go free. Obviously, he would be better off betraying Prisoner B and the rest of the gang in this case. On the other hand, if Prisoner B

defects and testifies against Prisoner A, then Prisoner A's choice becomes either to remain silent and do five years or to talk and do two years in jail. Again, obviously, he would prefer to do the two years over five.

In both cases, whether Prisoner B co-operates with Prisoner A or defects to the prosecution, Prisoner A will be better off if he defects and testifies. Now, since Prisoner B faces the same set of choices, he also will always be better off defecting as well.

The paradox of the prisoner's dilemma can be summarized as follows- Both robbers can minimize the total jail time that the two of them will do only if they both co-operate and stay silent (2 years total), but the incentives that they each face separately will always drive them each to defect and end up doing the maximum total jail time between the two of them of 4 years total.

Thus the prisoner's dilemma exhibits how people prefer personal over collective benefit. The paradox of the prisoner's dilemma can be used to study the behaviour of people during the covid pandemic. For instance, people who had travelled from infected deflected and did not report to authorities to avoid the pain of quarantine, this ultimately led to more cases and an increase in the lockdown period for all. In many countries, the public resorted to hoarding and panic buying of essential commodities leading to short supply and depreciation for the weaker sections of the society. Which lead to more loss to the society collectively.

Covid-19 has altered many of our daily processes from when we wake up/sleep to how we interact with clients and colleagues. Psychologists and scientists are still conducting research and exploring the effects of the pandemic on various spheres. Therefore, this essay majorly highlights the behavioural aspects that changed during and after the pandemic. Emphasis is given to bring out the effects of the pandemic what even though are lesser talked about but have changed human civilization drastically along with the effects which are although well known by many. For ease of comprehension, the effects have been clubbed into three categories

- A) Intrapersonal Impacts
- B) Interpersonal Impacts
- C) Economic Impacts.

Classification of the various impacts into the aforementioned categories does not undermine how interrelated these impacts are and how they have changed the extremely complex psychology of 21st-century humans.

Impacts

Intrapersonal Impacts

As per Cambridge dictionary Interpersonal means 'relating to or within a person's mind'. The pandemic has made so many changes in our behaviour. These changes have been at the intrapersonal level. From dealing with uncertainty to survivors guilt, various issues have been faced and have changed how we behave or how we think about the world. Some of the intrapersonal impacts of covid19 have been discussed hence-

Survivors Guilt

Why did I survive and others didn't? This Survivor's guilt is experienced when a person has feelings of guilt because he/she survived a life-threatening situation when others did not. It is a common reaction to traumatic events and a symptom of post-traumatic stress disorder commonly known as PTSD (discussed ahead in detail). However, the pandemic has left many people with this situation which was previously very rare. During the research for this essay, I conducted formal and informal inquiries from my friends and colleagues and many responses highlighted the mental health issues people are facing and one of the underlying factors was a mild form of survivors Guilt.

PTSD (Post Traumatic Stress Disorder)

It's not the first time the human race has faced any pandemic. Throughout 12,000 years of human history, pandemics have killed an estimated 300 million to 500 million people. The bubonic plague decimating an estimated 60% of the European population during the Middle Ages. Despite modern advances in medicine, COVID-19 has caused more than 1 million reported deaths in less than a year. Aside from the death toll, the pandemic has triggered significant emotional, physical, and economic problems around the world. But even amid this crisis, nations have an opportunity to share and learn from each other's experiences. (covered in economic aspects ahead)

The emerging literature measures the impact of various traumatic stressors related to COVID-19, as well as the effects of less severe types of stress exposures. COVID-19 has already led to diverse mental health problems, including anxiety, depression, posttraumatic stress disorder,

and other trauma- and stress-related disorders. Different groups have met the qualifying criteria for posttraumatic stress disorder (PTSD) according to DSM-5 as a result of the pandemic: those who have themselves suffered from serious COVID-19 illness and potential death; individuals who, as family members and health care workers, have witnessed others' suffering and death; individuals who have learned about the death or risk of death of a family member or friend due to the virus; and individuals who have experienced extreme exposure to aversive details (eg, journalists, first responders, medical examiners, and hospital personnel).

It is often said that every cloud has a silver lining. The covid-19 pandemic has also affected our behaviour in a very positive way.

Increased gratification

Sailing through the storm of Covid-19 made people realize that how vulnerable our life is. Many people were not able to give their loved ones the last hug or tell them a final goodbye. This has acted as a mirror for people to reflect. Now gratification of all the small pleasures in life which were taken for granted a year and a half ago can be observed. People have claimed that they now experienced and relived life like new.

Tolerance to uncertainty

Decades of scientific research show that how we make meaning out of situations can leave us vulnerable to unhelpful, out-of-proportion anxiety. When our environment is inherently ambiguous, open to interpretation and unknown outcomes, then our interpretations matter. They matter a lot. Ambiguity breeds anxiety: more so when the "facts" change hourly.

Due to the pandemic, many people have learned to live with this uncertainty. Knowing the fact that life is precious, and anything can change in a snap and experiencing that has changed the behaviour of countless.

Impaired health conditions of those who have recovered

Those who have recovered from the viral disease are experiencing many problems and scientists even believe that some of the problems may be very difficult to get rid of. And this has changed how people are living their life. Some of the most observed effects are discussed below

Organ damage caused by COVID-19. Although COVID-19 is seen as a disease that primarily affects the lungs, it can damage many other organs as well. This organ damage can increase the risk of long-term health problems. Organs that may be affected by COVID-19 include:

Heart. Imaging tests taken months after recovery from COVID-19 have shown lasting damage to the heart muscles, even in people who experienced only mild COVID-19 symptoms. This can increase the risk of heart failure or other heart complications in the future.

Lungs. The type of pneumonia often associated with COVID-19 can cause long-standing damage to the tiny air sacs (alveoli) in the lungs. The resulting scar tissue can lead to breathing issues that may last a lifetime.

Brain. Even in young people, COVID-19 can cause strokes, seizures and Guillain-Barre syndrome — a condition that causes temporary paralysis. COVID-19 may also increase the risk of developing Parkinson's disease and Alzheimer's disease. Some adults and children experience multisystem inflammatory syndrome after they have had COVID-19. In this condition, some organs and tissues become severely inflamed.

Blood clots and blood vessel problems. COVID-19 can make blood cells more likely to clump up and form clots. Large clots can cause heart attacks and strokes. However, much of the heart damage caused by COVID-19 is believed to stem from very small clots that block tiny blood vessels (capillaries) in the heart muscle. Other parts of the body affected by blood clots include the lungs, legs, liver and kidneys. COVID-19 can also weaken blood vessels and cause them to leak, which contributes to potentially long-lasting problems with the liver and kidneys.

Problems with mood and fatigue etc. People who have severe symptoms of COVID-19 often have to be treated in a hospital's intensive care unit, with mechanical assistance such as ventilators to breathe. Simply surviving this experience can make a person more likely to later develop post-traumatic stress syndrome, depression and anxiety.

Interpersonal Impacts

Covidification of our social interactions

"Just the idea of having normal conversations with my friends in real life just excites me and energises me". This was the response from a friend of mine when I was researching this topic by asking experiences of my colleagues, friends and family on the topic of this essay. This is evident that we still cherish real-life personal interactions. However, the pandemic and resultant lockdowns have covidified (covid + codified) our interactions. Now we are sending

emojis instead of seeing people in person, we are hosting virtual parties etc (further highlighted in work-related changes in the economic impacts)

Change in Outlook on Mental Health Issues

Mental health issues are real and need to be considered due importance. In the Indian context, a lot of stigmas is attached to it. It was the first time that even many mentally healthy and strong people faced various mental health issues. The major reasons being loneliness, uncertainty. This has changed the outlook of people towards mental health by dilution of stigma to a considerable extent.

The emergence of new forms of social media like Clubhouse

In continuation of how the pandemic has changed the interactions, a new social media platform 'Clubhouse' has emerged and it is considered as the next Facebook or WhatsApp. Clubhouse in contrast to conventional social media is an audio-based interactive platform where anyone can create a voice chat room and interact with anyone from anywhere in the world. Recently during the rising tensions between Israel and Hamas (terror group of Palestine), a voice chat room was hosted where Israeli and Palestinian citizens interacted to reconcile their differences of opinion. This was unprecedented and was made possible through the increased acceptance of the newer way of social interaction (voice chat through Clubhouse application)

We are in this together sentiment

When everyone was experiencing tough times, there is often a feeling of oneness once the crisis are over. The same is being experienced in our social interactions. During the first wave of pandemic India assumed its responsibility to provide vaccines and other essential medicines and commodities to the world and now when India is facing the second wave many countries came forward to help India. Not only at the international level, but many NGOs have also been formed out of this feeling of oneness, to help the underprivileged

Anti-China sentiment resulting in racism against the northwest)

As tension risen in India over the spread of coronavirus, people originally from northeastern states faced racially motivated attacks in cities around the country. They were being blamed for bringing COVID-19 to India due to their appearance. The facial features of people from northeastern India can look quite similar to a Han Chinese appearance. Some north Indian citizens living in other parts of India were not allowed to enter grocery stores and some were

even attacked and verbally abused in public. Thus due to this kind of response feeling of insecurity has risen among the people living coming from the seven sisters.

Economic Impacts

Covid pandemic involved not only a disease infecting human, but it ended up putting the whole world economy on a ventilator. Along with crippled GDPs and international trade scenarios, covid altered the way people performed economic transactions at the very grass root level. Economic Impacts majorly comprise of the changes that involve interactions with the economy, which involve money. Some of the important effects of covid on the economy are discussed hence.

Changes in Consumerism

The lockdown disrupted supply chains all over the world, people had to change their consumer habits. As a result, many businesses made or enhanced their online presence. Those who were already online and into serving delivery/logistics business got tailwinds. The rising trend of buying products online can be observed in India too. But, in pre-covid India the products popularly brought were consumer durables like mobile phones and electronics (majorly because these products were either not available in the nearby shops or even if available, were not competitive in terms of pricing and other features. However, to get their groceries and other FMCG products, Indians usually prefer brick and mortar shops. However, the trend is gradually changing. The pandemic has now turned the tables. Due to the pandemic, many people had only one safe option i.e. to purchase online and this helped in breaking the stigma. Now people who frequently ordered groceries or other essential products online became habitual to buying online. This has proved to be a very big game-changer. Many companies like Big Basket, Grofers, ZopNow were rewarded with high valuations as the business model now became more effective. Reliance Industries has also seen this as an opportunity and boosted Jiomart. This change in habit of consumers has changed the cashflows of rich and poor.

Work-related changes.

The changes in the work and business lives have been different for every individual. For some, it turned out to be an increased amount of available time and they ended up investing in some related skillset and for others, work was so hectic that all days of the work remained felt the same. However, the most common factor was a pivotal change in the work-related interactions.

Now, after covid businesses are interacting with clients, Managers with their subordinates through four corners of a screen. The use of technology and savings in transit cost and time has been leveraged by companies to maintain growth in the bottom line even after crippled toplines. Now the interactions have taken a digital avatar. Now people are sharing animated emojis to substitute the gestures which would have been made in case of physical presence. Now raising a hand and keeping oneself mute on zoom calls unless asked otherwise on zoom calls has been the new office and meeting etiquette.

Increased confidence in medical science

Allopathy has been a centre of criticism for side effects caused usage even in the recent debates. After the outbreak vaccines were made available at the rescue of the general public within a year of the detection of the Covid-19 virus. This was the first time in the history of humanity that with the aid of advanced technologies and a deep understanding of genomes we were able to deliver the vaccine shots in much less time. Usually, a vaccine takes 10-12 years to make effective vaccine. (As per criver.com)

Selfless efforts of health care workers and the importance of advanced technologies used in medical sciences during the pandemic have changed the mindset of people and increased the confidence of people in medicine.

The rise of the extremely poor

Covid-19 hit worst on the people who were living on the edge. Poor became extremely poor. The report, titled 'The Inequality Virus', indicated how the pandemic made the rich even richer, while the poor population suffered. The report showed that the few top billionaires in the country became richer by 35% during the pandemic period, while millions of poor Indians lost their bread and butter. On the other hand, over 1.70 lakh people lost jobs every hour during April 2020, according to the report. The Centre for Monitoring Economic Research, a Mumbai-based think tank, has often pointed out that the employment outlook is not improving even as the country's economy recovers.

During the first few months of the pandemic, most of the job losses were from the informal sector, which is still struggling. 75% or over 9 crore of 12.2 josh lost due to the pandemic were from the informal sector, where income levels are already low as suggested by the Oxfam report.

Impact on international relations

The second wave of Covid-19 and its agonizing consequences has prompted India to accept foreign aid after a gap of 17 years. This is bound to have far-reaching strategic implications for India.

As a direct consequence of the pandemic, India's claim to regional primacy and leadership may take a major hit. This in turn will impact the content and conduct of India's foreign policy in the years to come.

Regional Primacy: India's traditional primacy in the region was built on a mix of material aid, political influence and historical ties. Now, India's political influence is steadily declining, its ability to materially help the neighbourhood will shrink in the wake of Covid-19, and its historical ties alone may not maintain India's regional hegemony.

Chinese Intrusion into India's Strategic Space: China, due to its chequebook diplomacy has been already pushing India in its strategic space i.e. Indian subcontinent.

The second wave of Covid-19 has quickened this process, as India's ability to stand up to China stands vastly diminished today: in material power, in terms of the balance of power considerations, and political will.

Affecting India's Engagement with Quad: Covid-19, will prevent any ambitious military spending or modernization plans and limit the country's attention on global diplomacy and regional geopolitics.

With reduced military spending and lesser diplomatic attention to regional geopolitics, India's ability to project power and contribute to the growth of the Quad will be uncertain.

Affecting Diplomacy in Indo-Pacific: India is pivotal to the Indo-Pacific project, but India's inability to take a lead role and China wooing smaller states in the region will eventually turn the balance of power in China's favour.

Economics Affecting Geopolitics: Covid-19 has led to general economic distress, a fall in foreign direct investment and industrial production, and a rise in unemployment will also limit India's strategic ambitions.

Post-Covid-19, Indian foreign policy is therefore likely to be a holding operation.

US-China Relations: With the rise of China and India's Covid-19-related troubles could prompt the US to normalise relations with China.

India-China Relations: Another potential impact of COVID-19's devastating return and the damage it has done would be that India might be forced to be more conciliatory towards China.

India-US Relations: A post-COVID-19 India might find it harder to resist demands of a closer military relationship with the U.S.

How to tackle the situation

As discussed initially the fundamental conflict of self-interest over the uncertain collective benefit has been the driving force of the pandemic. Even though most of the measures to prevent the spread of the virus are pretty straightforward, they are fairly important to be properly understood and accepted

Vaccinations

Vaccines are being used to achieve immunity from viruses since 1796. During a vaccination program, the body is exposed to either a weakened microbe (bacteria or virus), fragments of a microbe. When the active substances in the vaccine injected are detected by the body's immune system, immune cells and antibodies are produced that will recognize the "Actual" microbe as the active particles have similar genetic formation as the virus. After recovery from a disease or a vaccination, some of the immune cells will "remember" these microbes. This is called immunological memory. Whenever, next time the body is exposed to the same type of microbe, the immune system will be able to recognize it. The body's defence against the disease becomes better more powerful and can prevent the person from falling ill. When the vaccinated person encounters this virus, the immune system will provide a faster and better immune response to fight that can prevent disease. In an ideal case, a vaccine will provide adequate and prolonged protection against the disease.

Although the stigma around vaccinations is reducing vaccination of a significant proportion of the population is still a distant dream. The government is planning to get everyone vaccinated by the end of the year however considering the population in India and frequent mutations in the virus getting everyone vaccinated is very important.

Sanitization and washing hands.

Even though carrying sanitisers is now the new norm in metros, many people can be observed not doing it that often. Washing hands can keep you healthy and prevent the spread of respiratory and diarrheal infections from one person to the next. Now after the detection of

black fungus and another type of funguses in covid recovered patients, sanitization and proper cleanliness have tremendous importance.

Wearing Masks

Wearing masks is a social responsibility than personal protection. The purpose of wearing masks is to reduce the distance of the aerosols coming out of an infected persons mouth and nose. Many people consider it as a way of personal protection. The covid-19 virus can easily pass through most of the masks available in the market.

Following points should be kept in mind while wearing a mask as per CDC

Do not touch your mask while it is being worn.

Do not wear the mask under your chin with your nose or mouth exposed.

Do not keep your nose or mouth uncovered.

Never remove the mask while around others in public.

Don't share your mask with family members or friends.

Social Distancing

Social distancing also called "physical distancing," means keeping a safe space between yourself and other people. To practice social or physical distancing, one has to stay at least 6 feet (about 2 arm lengths) from other people. COVID-19 spreads mainly among people who are in close contact (within about 6 feet) for a prolonged period. Studies have indicated that people who are asymptomatic infected people also play a role in the spread of COVID-19. During the second wave of the covid-19, the social distancing is now not followed adequately

Following are tips for social distancing as suggested by CDC

- a) Know Before You Go
- b) Prepare for Transportation.
- c) Limit Contact When Running Errands
- d) Choose Safe Social Activities
- e) Keep Distance at Events and Gatherings
- f) Stay Distanced While Being Active
- g) Hands should be washed for at least 20 seconds before and after touching a mask

Avoiding touching frequently touched surfaces.

COVID-19 virus can live for hours or days on a surface, depending on factors such as sunlight, humidity, and the type of surface etc. It is possible that a person may get COVID-19 by touching a surface or object that has the virus on it and after that immediately touching their mouth, nose, or eyes. This type of infection is called indirect infection. However, this is not thought to be the main way the virus spreads.

Knowing when should you get yourself tested.

If one has come in contact with a COVID positive patient or you are showing any of these following symptoms - cough, cold, fever, body ache, diarrhoea, loss of smell or taste then one should get oneself tested.

Knowing when one should get admitted.

To reduce the load on hospitals, Dr Ravindra suggests, "If fever persists for longer than 5-6 days you should get in touch with your doctor. The criterion for admission includes shortness of breath with oxygen saturation <94 per cent, diarrhoea and vomiting with the worsening condition, falling blood pressure and other COVID manifestations." As per the Times of India Article

The aforementioned measures are direct and have been advertised adequately to make everyone aware. However, the following are few other factors that even though not directly but indirectly have an impact on either reducing the pandemic spread or minimizing the damage caused by it to the body and the mind.

Avoiding misinformation

Fake news regarding the pandemic, lockdowns can worsen the situation. Staying away from fake news and misinformation not only helps in preventing one from taking wrong actions but also prevents one from unnecessary anxiety and stress too which has more far-reaching implications.

Keeping updated with relevant information

Keeping relevant information regarding the availability of vaccines, new treatments, local, national, global situation of the virus is also very important.

Avoiding getting panic when detected Covid positive

"For the most part, the Covid-19 is a self-limiting viral infection and around 80-90 per cent of people recover on their own. So, maintaining a positive outlook and not panicking is crucial in these times. Anxiety and panic might affect the healing process," says Dr Sudha Menon, internal medicine physician as per an article from the Times of India

Checking on close relatives/friends

Checking on someone could involve calling friends and relatives or holding virtual parties. In the pandemic period when mental issues including depression and anxiety have become a rule than an exception, it is necessary to call near and dear ones casually just to check whether they are okay.

Although the recovery rate of covid is very high, people who recover often have a wide range of new and returning health issues. Some of the ways that can help in the situation can be

Adding more protein to the diet

Still, many people believe that a protein-rich diet is only for professional athletes. Protein is considered as building blocks of life. It has been found in many research that the typical Indian diet is low in protein and high in carbohydrate content. Proteins are made up of amino acids that play a role in achieving immunity. Immune cells that are benefited by protein include leukocytes, cytokines, phagocytes which are necessary for normal immune function and stave off infections. (Times of India)

Adopting the Ancient Practice of Yoga

Yoga even after gaining popularity nationally and internationally in recent years is still underestimated for its capabilities. Breathing exercises in yoga (also known as Pranayama) can be adopted for people who have recovered. Following are few very powerful yoga techniques one can perform

Kapalbhati

This technique includes forceful breathing which ultimately strengthens the lungs. For Kapalbhati, one has to sit straight in a comfortable posture. Take passive inhalations, while the exhalations are more active and forceful.

Bhastrika Pranayama

This is a good exercise for people who suffer from any respiratory disease like cough, flu, respiratory issues, allergies or breathlessness. Sit straight, breathe in and breathe out forcefully

through the nose. The breathing is deep and engages abdominal, thoracic and clavicular breathing.

These are a few yoga techniques for healthy lungs. There are many other asanas and techniques that one can explore.

Conclusion

Even after more than a year, we know very little about the virus. There is a lot to be known about the virus and what impact it led on the economy and human behaviour.

Psychologists are conducting interviews and observing how the behaviour of people have changed during this tough time. But the fight is not over yet. Our country is still fighting with the virus in the second wave. Still, there is a need to take preventive measures and get vaccinated on time. Even after so much loss phenomenal growth in medical science, fast recoveries of economies has been observed. We have collectively fought the virus and many countries are now COVID-19 free. As said by Mr Bob Riley

"Hard times don't create heroes. It is during the hard times when the 'hero' within us is revealed." – Bob Riley

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