IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

TIMELINE & CURRENT SCENARIO OF COVID-19 on Various Levels (Phase-1)

[1]Rohan, [2]Dr.Ajay Kaushik

[1]Masters of Urban and Regional Planning Student, [2]Head Of Department

[1]Faculty of Planning and Architecture

[1]Pandit Lakhmi Chand State University of Performing and Visual Arts, Rohtak, Haryana

Abstract: India, which has surpassed Brazil to become the second longest population in the world, who are suffering severely from COVID 19 disease. India has more than 5 lakhs population in December suffering by this rate it will reach 10 lakhs by January. Lockdown, Social distancing and sanitization are the key weapons suggested by Government of India (GOI). Fear of food insecurity, job insecurity, health insecurity causes mental pressure has a very severe effect on socio economic life. Whereas a positive was observed in the environment because of decrease in carbon emission. This study has been undertaken to investigate the current situation of COVID 19 cases throughout different level i.e., National, State, District and City. Timeline of how the virus emerged its travel to India, effects of virus on various age groups and gender, steps taken by GOI till December 2020 has been discussed along with case study of Jind city.

Index Terms **– Corona cases, Timeline, COVID-19, Jind, Lockdown, Pandemic, Outbreak.**

I. INTRODUCTION

The corona virus disease also known as COVID-19 or 2019-nCoV is a highly contagious disease caused by a virus named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus is believed to be originated in the city of Wuhan, China in December 2019 (WHO, 2020) [1]. The virus soon started spreading in the major European countries like France, Italy, UK and soon to The United States of America, Russia, Brazil, India and slowly to many other nations causing an outbreak of the disease. In march 2020, WHO recognized and declared the covid19 outbreak as a pandemic. India noticed its first COVID-19 case in January 2020 in the state of Kerala but the disease didn't cause an outbreak (Time of India, 2020) [2].

The signs and symptoms of the disease starts showing up in 2-14 days known as the maturation period for the virus. Some early common signs and symptoms include fever, cough, tiredness, shortness of breath, and loss of taste and smell (WHO, 2020) [15]. Other symptoms include chills, sore throat, fatigue, muscle and head aches, congestion, nausea, vomiting, diarrhea, conjunctivitis, chest pain. The symptoms may vary from mild to severe depending on the patient's immune system and any other serious medical illness. While most of the symptoms subside themselves, some patients have reportedly found symptoms lasting even after testing negative for the disease such as chest pain, tiredness, loss of taste and smell. The main cause as explained for the loss of smell in initial research suggests the inflammation of the nasal passage caused by the virus which in some cases takes time to recover (Dr.Larry Wu, 2020) [3].

According to Chinese Center for Disease control (CDC), 81% cases are mild,14% require hospitalization and 5% require ventilators (District Containment Plan,2020) [4]. There can be various factors that can affect healthcare facility like lack of specialty hospital, reduced hospital fund, Shortage of staff, approach to facility, governance factor and many more. Also, in circumstances like COVID-19 pandemic, again we get to understand the need of good hospitals, specialty hospitals, specialized doctors. There is very high rate of increase in COVID-19 case in whole country but good news is recovery rate is above 96% as per GOI reported in December itself due to better immune system of Indian we are surviving this situation but we are facing a swear treat of life due to shortfall of infrastructure and facility (Business Standard,2020) [5].

To understand the chronological outbreak and impact of virus, major affected groups are identified and action taken by government are studied along with growth of virus, then impact of various target group will be identified. After analyzing impact of virus on target groups and action taken by government conclusion are made.

II. RESEARCH METHODOLOGY

The study aims to understand the trend of COVID 19 outbreak at International and National level, along with monthly statistics of cases India-state-district-city level. For this study Jind city has been chosen of Haryana state, as Jind is the centre of Haryana State. All facility can be avail here very easily. Travel distance is also low for whole state due to being centre of State. Even after that Jind district doesn't have any good facility. Government and people of Jind have to understand potentials of this location. Even urban residents have to travel in other district for treatment, not only for this pandemic; even for simple operations. To achieve this aim firstly we will study about the virus and its effects, then timeline of virus how it travels from Wuhan city to India and then in India. By identifying major incidents and action taken by government at international and national level. By this

we will interrelate the growth and effectiveness of COVID-19 cases with action taken by govt. Then monthly statistics will be identified (starting of each month) at all levels i.e., India, Haryana, Jind district and Jind city. Statistics of cases in Jind city are of May to October only. Respective data will be gathered from Civil hospital, Jind and various government websites. Age wise and gender wise distribution details are to be studied at National and City level, by this we will identify spread pattern of virus. Most Importantly impact of COVID 19 Pandemic has far more critical than a health crisis, so adverse effect of COVID 19 On individual to societies related to economic, employment, travel, tourism, food insecurity, mental health and positive effect on environment are studied.

III. TIMELINE OF PANDEMIC OUTBREAK

3.1 Timeline of early stages of 2019-nCoV or COVID-19 outbreak

The World Health Organization (WHO) picked up a trail of unknown virus causing pneumonia in cluster through media report on 31st December 2019 in Wuhan City, Hubei Province of China. On1st January 2020 China closed Huanan Seafood market, while on 7th January 2020 the virus was identified as Novel (new) coronaviral (2019-nCoV). On 11th January China reported the first death due to this new corona virus and on 12th Chinese government shared its genetic sequence with the WHO. On 13th first case was reported in Thailand. Then on 16th January new case was found in Japan. Simultaneously various countries identified same virus with in less than a period of one week like on 19th new case was found in Republic of Korea, two cases in Beijing, one case in Guangdong. As this virus is communicable, on 20th January first healthcare worker was found infected. Due to this swear threat China government announced lockdown in Wuhan to contain spread of corona virus on 23rd January 2020 & so China become first country to impose nationwide lockdown. On very next day (24th January 2020) China reported total 835 cases in which 549 was from Hubei itself (WHO, 2020) [1]. On 30th January 2020 India reported total 3 cases of coronavirus but Indian Government does not cause any outbreak, out of these three cases first case was from Kerala (Aritra Ghosh, Srijita Nundy, Tapas K. Mallick,2020) [6]. On 11th February 2020 the coronavirus was renamed as COVID-19 as the UN health agency avoid naming it after group, people or any geographical locations. Meanwhile Italy and Iran emerged as the new epicenter of outbreak. On 3rd march one more case was found in Delhi and one in Hyderabad and hence start outbreak. On 11th March 2020 WHO declared COVID-19 as pandemic and urged countries to take immediate & aggressive actions regarding the same. Then on 18th March 2020 UN agency launched international randomized trial for COVID-19 treatment and termed it as Solidarity Trials. While other countries started looking forward towards trials and vaccine, Indian government imposed nationwide lockdown. Within a week over a million cases were reported worldwide with more than 51000 deaths (Hindustan Times,2020) [7].

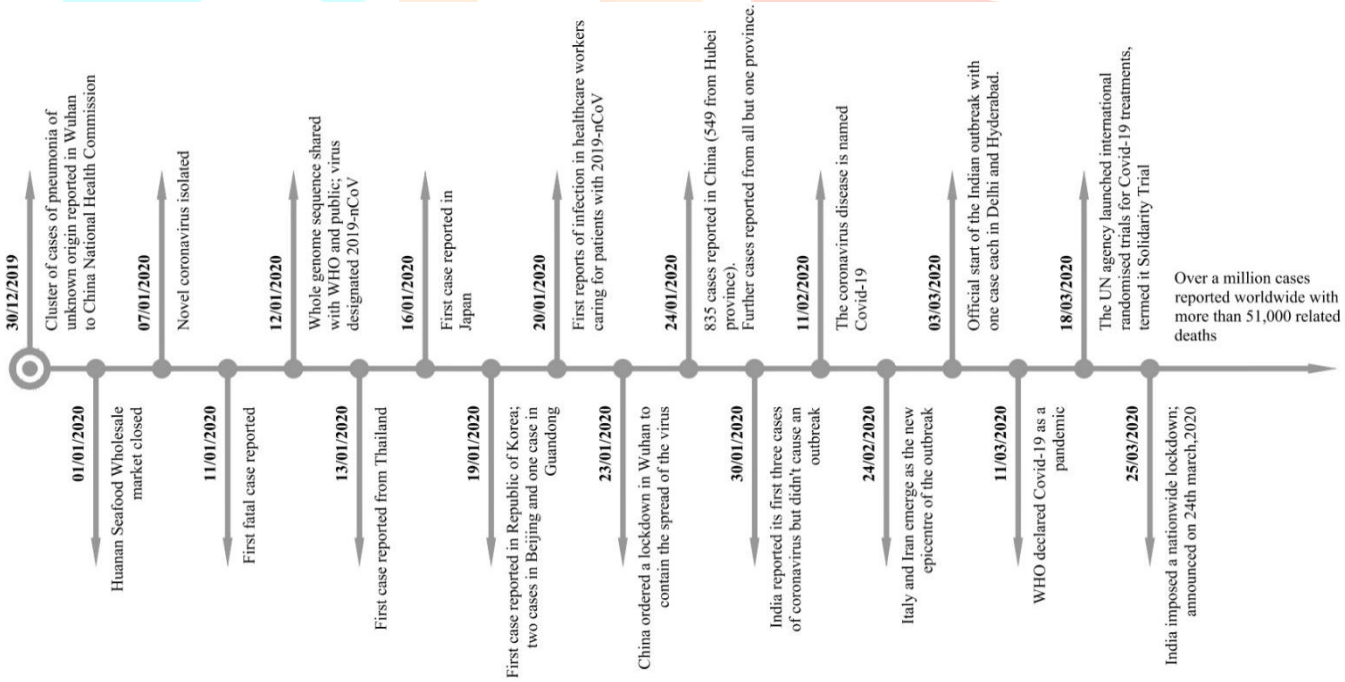


Figure 1: Timeline for early stages of corona outbreak

3.2 How coronavirus spread in India

At initial stage no international flights were banned, so some of the migrants returned from Wuhan China and three of them were found infected due to coronavirus on 30th January 2020 and first one was identified in Kerala. One – one case was also reported in Delhi and Hyderabad on 3rd March 2020, patients having travel history from Italy and Dubai respectively (Mohana Basu,2020) [8]. On the very same day some new cases were also identified in Jaipur. Then on 17th March 2020 Government of India (GOI) calls for social distancing as cases in India rise to 124. On 22nd March 2020 Prime Minister (PM) Narender Modi influences Indians to follow 14 hours of Janta Curfew. On 24th March 2020, GOI announced Lockdown Phase-1, which was from 25th March to 14th March. Because of this lockdown mobility in grocery and pharmacy was reduced to 64.2% and 70.51% and recreation and retail areas to 65.6%, transit to station visits to parks to 46.17% and workplaces reduced by 60.03% (Aritra Ghosh, Srijita Nundy, Tapas K. Mallick,2020) [6]. Due to continues growth in corona cases GOI announced Lockdown phase-2, on 14th April 2020 which was from 15th April to 3rd May. Afterwards Lockdown phase-3, on 3rd Mary 2020 which was from 4th may to 17th May and on Lockdown phase-4 on 15th May 2020, which was from 18th May to 31st May. During lockdown phase-2 Pfizer-BioNTech started Phase 1/2 trial to test immune response and safety. During lockdown phase-4, India crossed China in corona

cases with 100,000 cases on 19th May 2020 (Hindustan Times,2020) [7]. While cases were growing so rapidly, GOI eased coronavirus restrictions and called for "Unlock-01" on 31st May, which was from 1st July to 31st July 2020. In Unlock-01, Ministry of Home Affairs (MHA) released guideline for inter-state travel (Zee Media Bureau,2020) [9]. On 11th June 2020 India surpasses Britain in corona cases and became fourth worst affected country in world. On 30th June unlock-02 was announced from 1st July to 31st July. In Unlock-02 MHA provide relaxation in night curfew, clearance for more than 5 persons in shops and provide provision for domestic flights and trains (Deeptiman Tiwary, 2020) [10]. Till now WHO reported corona virus as communicable dieses but on 3rd July WHO announced that virus is airborne and advised to wear facemask and India is on unlock. On 16th July India crosses one million cases. On 21st July the interim results of AstraZeneca's Phase 1/2 trials of its vaccine candidate showed promise. On 27th July Moderna started phase third trials (Hindustan Times,2020) [7]. GOI has announced unlock-03 from 1st August to 31st August and during this unlock GOI reported corona related deaths over 50,000 on 15th August. In unlock-03 MHA remove restriction during night and allowing yoga institutes and gymnasiums to open (The Indian Express,2020) [11]. On 31st September GOI announced unlock-04 from 1st September to 30th September, during this unlock India surpasses Brazil in corona cases and become the second worst country in world on 7th September and on 29th September India crosses one million deaths in corona cases. In unlock-05, MHA provide major relaxation by starting Metro and allowing senior students to come school on voluntary bases (Deeptiman Tiwary,2020) [12]. On 30th September GOI announced unlock-05 from 1st October to 31st October and on 2nd October US President Donald Trump was Tested positive by corona virus. In unlock-05 MHA liberate state to take decision whether to open school or not, allowing post-graduate students and PhD students of science and technology stream requiring laboratory work to join but decision by Head of Higher Education in consultation with Home Ministry, also Cinemas, Theater, Multiplexes, Entertainment Park, Swimming pools for sport person are allowed but outside containment zone (Dipankar Ghose,2020) [13]. On 31st October GOI announced unlock-06 from 1st November to 30th November. In unlock-06 MHA doesn't provide any new guidelines but some of the states announced partial reopening of school (The Indian Express,2020) [14]. During this unlock Moderna announced its Covid-19 vaccine candidate has 94.5% efficacy rate and on 18th November Pfizer announced 95% efficacy in the final trial results and on 23rd November AstraZeneca announced its vaccine candidate can be around 90% effective. On 2nd December Pfizer-BioNTech approved vaccine and UK became the first country who successfully releases vaccine. On 8th December Margaret Keenan a 90year old lady, became the first person in the world to receive a clinically approved vaccine. On 14th December US started distributing Vaccine from Food and Drug Administration and on 18th Inia crossed 10million cases. As things are getting to settle down London again entered lockdown on 19th December due to a new variant of COVID-19 stem. So, on 22nd December 2020 India joined dozens of countries to ban travel from the UK amid concerns over the new virus strain (Hindustan Times,2020) [7].

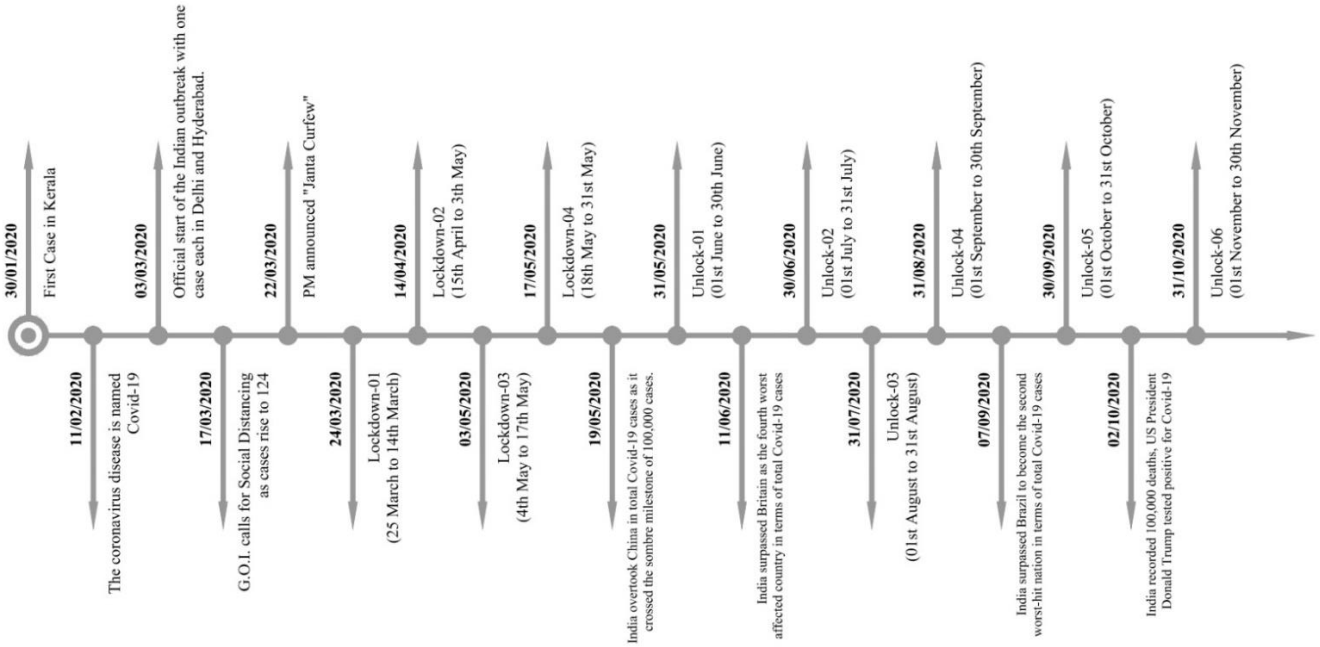


Figure 2: Timeline for Corona outbreak in India

IV. CORONA CASES AND VACCINATION

4.1 COVID-19 Status

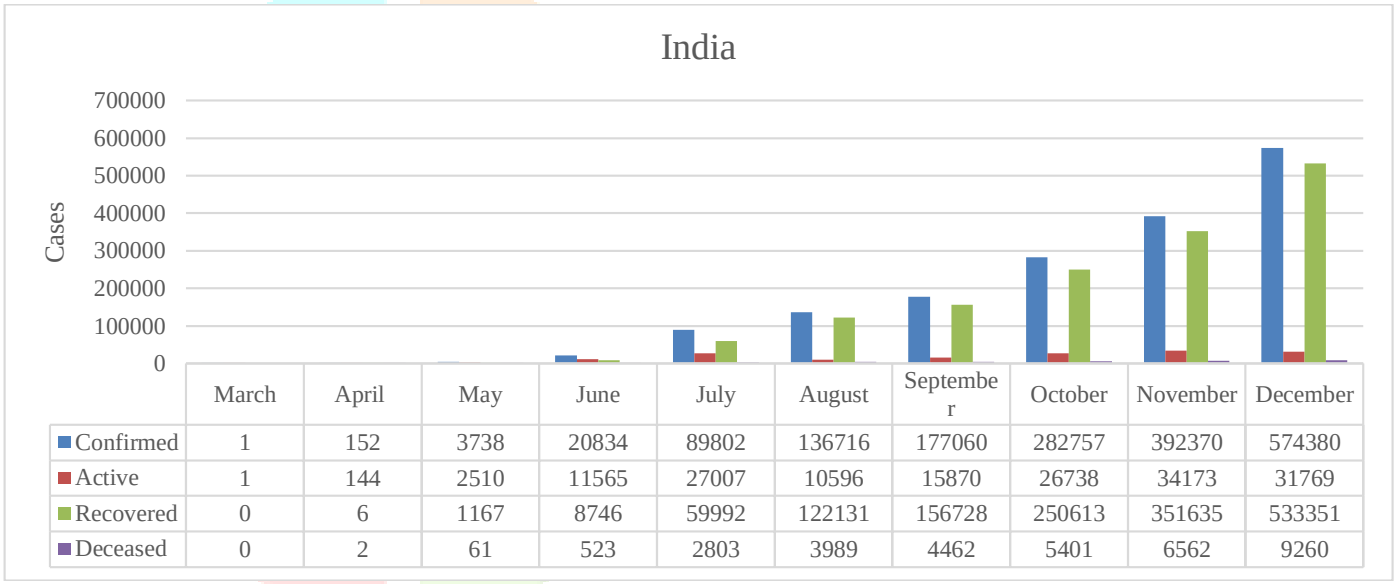
India reported the first confirmed case of the coronavirus infection was of Kerala. The affected had a travel history from Wuhan, China. Since the Wuhan coronavirus outbreak in China, the first case of coronavirus in India, the second most populated country in the world, was reported in the state of Kerala (Mohana Basu,2020) [8]. New confirmed cases are being reported in multiple cities such as New Delhi, Mumbai, Bengaluru, Hyderabad, and Patna. Thousands of suspected cases have been tested resulting in more than 2,000 confirmed coronavirus cases in India by May 2020 end. The regions with the highest number of cases include Maharashtra, Kerala, Delhi, Karnataka, Andhra Pradesh, Uttar Pradesh, Rajasthan and Tamil Nadu. Two cases were reported in Nagpur, Maharashtra, on 13th March. An employee of Google in Bangalore tested positive on 13 March, while a COVID-19 positive case was confirmed in Noida on the same day. First death due to coronavirus in India was reported in Karnataka on 12 March, a total of 52 deaths have been reported in the country. On 15th March, Maharashtra overtook Kerala to bring the total number of confirmed cases to 100. Cases double every 5 days. On 22nd march, 50 days after the virus was first reported in India, a 14-hour voluntary lockdown called 'Janata Curfew' was observed in India 25th March, A nationwide lockdown was imposed till April 14, two days after the 'Janata Curfew'. On 31st March, the national capital's Nizamuddin area, emerged as one of the COVID-19 'hotspots' in India with a large number of attendees at a religious congregation held at the headquarters, or Markaz, of the Tablighi Jamaat, being tested positive (Business Standard,2020) [5]. On 14th April, 10,000 confirmed cases were recorded, as the nationwide

lockdown was further extended till May 3. Till 31st May, 5000 confirmed deaths were recorded. 8th June, Phased reopening begins after 75 days of lockdown, as India records more than 2,50,000 COVID-19 cases and 7200 deaths (Worldometer,2020) [17]. At the start of the lockdown, India had reported only 606 cases and ten deaths. On 10 June, India's recovery cases exceeded active cases for the first time. In September significant drop in the infection rate, the number of daily new cases and active cases started to decline rapidly. July 17, India's COVID-19 tally crosses the 1 million mark, 17 days after the government starts phased reopening or Unlock 2.0. India becomes the third worst-hit country in terms of COVID-19 after the US and Brazil (Hindustan Times,2020) [7].

The first case of the COVID-19 pandemic in the Indian state of Haryana was reported on 4 March 2020. The Ministry of health and family welfare has confirmed a total of 2,59,745 positive cases as of 24 Dec out of which 4,983 are still active and 2,854 deaths so far. The recovery rate in Haryana is 96.98%. On 4th march 14 cases were confirmed in Haryana and they were increased rapidly till July. On 1st July 14,941 cases are confirmed out of these 4, 202 were active and 10,499 were recovered. While the cases were increasing, its recovery rate was also increasing. As of 16 July, total number of cases in Haryana was 24002, including 5495 active cases, 18185 recoveries and 322 deaths. As of 3rd August, the total figure in Haryana had reached 39234. This includes 6193 active cases, 32583 recoveries and 458 Deaths. As of 1st September, the total number of COVID cases in Haryana had reached 66426. This includes 11885 active cases, 53835 recoveries and 706 Deaths. As of 4th November, the total number of COVID cases in Haryana had reached 174082. This includes 14110 active cases, 158136 recoveries and 1836 Deaths. As of 2nd December, the total number of COVID cases in Haryana had reached 237604. This includes 16673 active cases, 218443 recoveries and 2488 Deaths (COVID India tracker, 2020) [18].

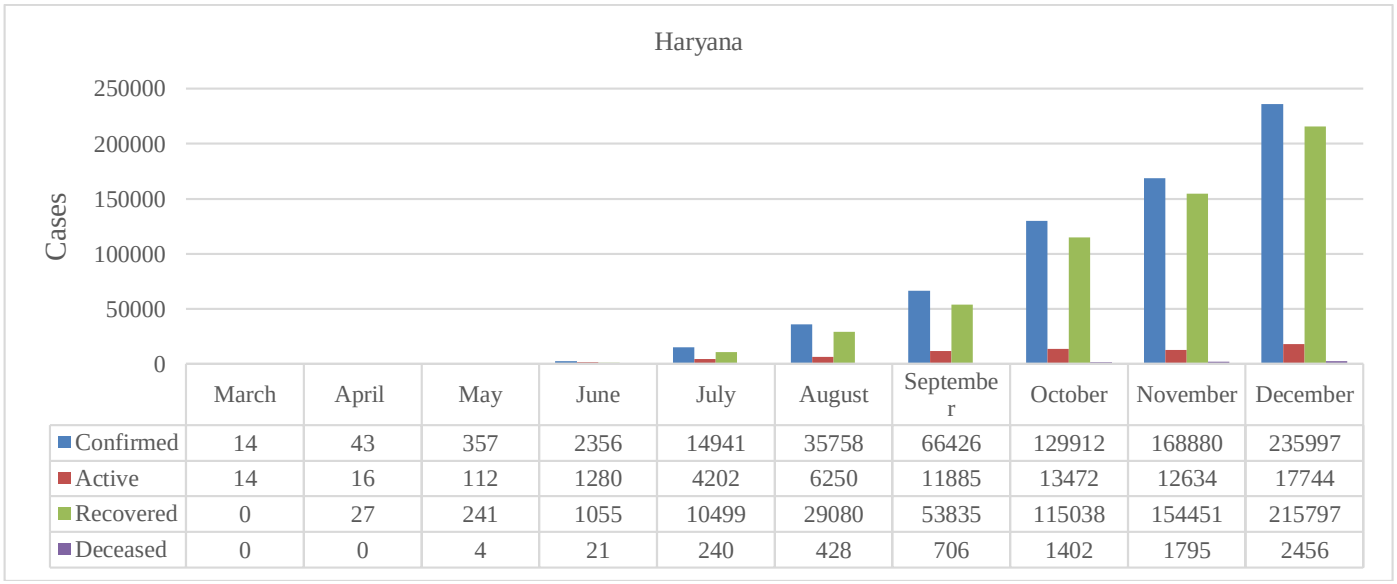
If we talk about Jind in Haryana, there were 2 confirmed cases on April 26. Cases started to grow slowly in Jind and till 01st October,2020 2,059 cases were confirmed, out of which 1,565 were cured and 27 died (COVID India tracker, 2020) [18]

Initially Jind city has a very low rate of increase in COVID-19 cases but by increase of time cases are increasing steeply. 616 people are affected till October 31st in Jind, Haryana by novel coronavirus covid-19. 98% have recovered. 11 patients have died due to coronavirus in Jind, Haryana. Currently there are Zero active cases in Jind City (Civil Hospital Jind, 2020) [19].



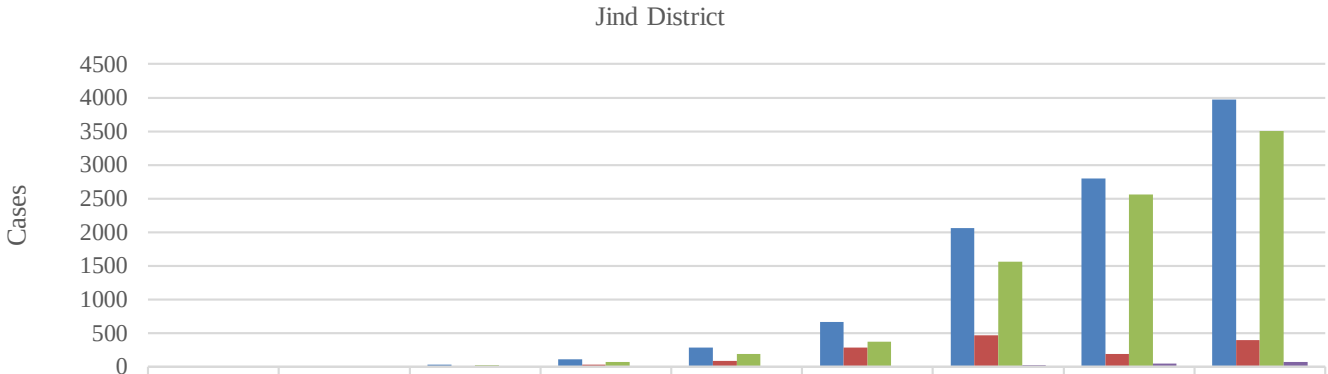
	March	April	May	June	July	August	September	October	November	December
Confirmed	1	152	3738	20834	89802	136716	177060	282757	392370	574380
Active	1	144	2510	11565	27007	10596	15870	26738	34173	31769
Recovered	0	6	1167	8746	59992	122131	156728	250613	351635	533351
Deceased	0	2	61	523	2803	3989	4462	5401	6562	9260

Figure 3: Statistics of Corona cases in India



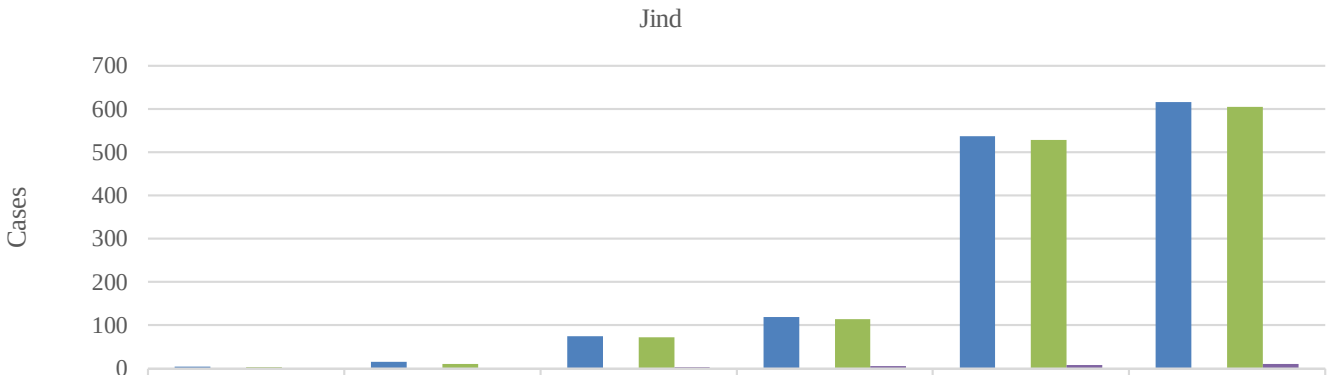
	March	April	May	June	July	August	September	October	November	December
Confirmed	14	43	357	2356	14941	35758	66426	129912	168880	235997
Active	14	16	112	1280	4202	6250	11885	13472	12634	17744
Recovered	0	27	241	1055	10499	29080	53835	115038	154451	215797
Deceased	0	0	4	21	240	428	706	1402	1795	2456

Figure 4: Statistics of Corona cases in Haryana



	April	May	June	July	August	September	October	November	December
Confirmed	2	2	29	109	285	668	2059	2796	3974
Active	0	0	4	30	89	289	467	187	395
Recovered	2	2	24	75	191	371	1565	2558	3505
Deceased	0	0	1	4	5	8	27	51	74

Figure 5: Statistics of Corona cases in Jind District



	May	June	July	August	September	October
Confirmed	4	16	75	119	537	616
Active	0	0	0	0	0	0
Recovered	3	10	72	114	529	605
Deceased	1	0	3	5	8	11

Figure 6: Statistics of Corona cases in Jind City

4.2 About Vaccine

Initially WHO partnered with Chinese authorities and global experts to learn more about the virus. The research includes how virus is being transmitted, which of the populations is most at risk, the spectrum of clinical disease, and the most effective ways to detect, interrupt, and contain human-to-human transmission. This strategic preparedness and response plan outline the public health measures that the international community stands ready to provide to support all countries to prepare for and respond to 2019-nCoV (WHO, 2020) [1].

Since the outbreak of the disease many companies in different countries have made their efforts for the manufacture of vaccine against the virus. In May 2020 Pfizer-BioNTech of United States (US) started Phase1/2 trials of the vaccine. In July 2020 the interim results of AstraZeneca's a British-Swedish multinational pharmaceutical and biopharmaceutical company phase 1/2 trials showed promising results. Also, in July 2020 Moderna an American biotechnology company started their Phase 3 trials of the vaccine and in November 2020 Moderna announces that their vaccine shows 94.5% efficacy rate. In the same month Pfizer announces 95% efficacy of their vaccine and AstraZeneca's vaccine efficacy is about 90% (Hindustan Times,2020) [7]. In December 2020 UK became the first country to formally approve Pfizer-BioNTech vaccine. According to the statements released by the Indian Government five different vaccines are in different trial phases in India, two of them are in third phase of trial. In December 2020, the ICMR-Bharat biotech vaccine is in Phase III trial (Hindustan Times,2020) [16]. In December 2020 The Drugs Controller General of India is reviewing the applications of Bharat Biotech, Serum Institute and Pfizer and are expecting to start vaccination by January 2021 in India. According to a public advisory released by the Ministry of Health and Family Welfare in December 2020 the administration of vaccine will be voluntary. Until the vaccination for the disease starts precautions and safety measures are the only prevention to this disease.

Since the disease spreads easily by contact it is advisory to avoid close contact with people and practice hand hygiene frequently like washing hands with soap for about 20 seconds and use of hand sanitizers. Use of masks in public places and maintaining social distancing are necessary for preventing the spread of the disease. Avoid going outdoors unless necessary. Frequent touching of face, eyes and common surfaces like door bells, door knobs and other surfaces should be avoided. One should always try to keep his hands and surroundings sanitized and avoid going out if sick and take proper medical advice.

V. PATENTS DISTRIBUTION DETAILS

5.1 Age Distribution of Patients in India

COVID-19 patients in India in the age group 0-10 are about 4.42% while people from age group 11-20 are 9.82%. The percentage of patients of age group 21-30 seems to have a rise to about 25.92%. Patients falling in age group 31-40 are about 22.51% while those in age group 41-50 are 15.69%. Patients in age group 51-60 are about 12.30% and in age group 61-70 are 6.54% which dips down to about 2.19% for age group 71-80. About 0.51% patients fall in age group 81-90 and 0.08% are patients with age >90 (National Centre of Disease control,2020) [20]. The pattern visible in India clearly says that the infection is relatively common in age group 21-30 as compared to children or the elderly population of the country. The data shows that more working age people are getting affected by the virus. Since the disease spreads through a highly contagious virus that spreads easily by contact with people, and since the maximum persons in this age group are working hence this clearly explains the reason of their high infection rate.

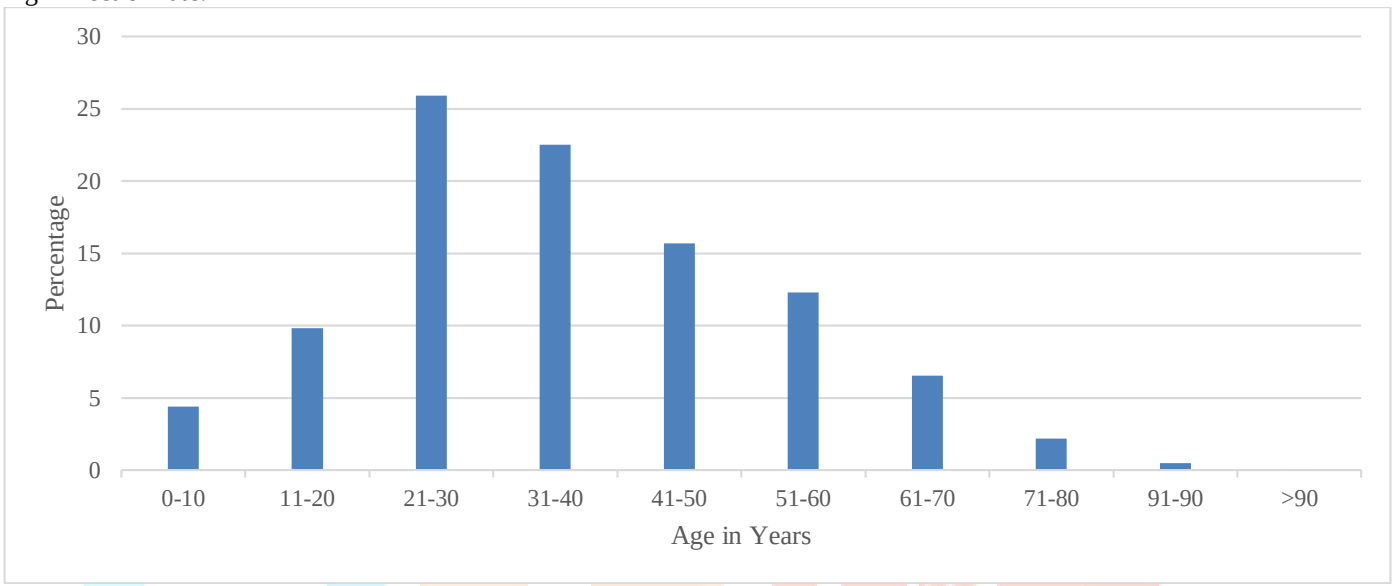


Figure 7: Age Distribution of Patients in India

5.2 Gender Distribution of Patients in India

The statistics of gender distribution the highly contagious COVID-19 virus is not very much different from the rest of the world. 64.54% (1,857,758) patients among the total patients of COVID-19 are males. About 35.54% (1,020,025) patients are females while 0.02% (487) are not specified (National Centre of Disease control,2020) [20]. This clearly shows that the infection rate of virus in males is much more than those in females. Different studies suggest many potential reasons for this more rate of infection in males than females from biology to bad habits. Research and studies show's that females have stronger immune system than males because of genetics. Also, some studies suggest that males have high concentration of Angiotensin-converting enzyme 2(ACE-2) which enables the virus to infect healthy cells of the body. Also, in most cultures, the male community is more likely engaged in outdoor work which exposes them more to the virus becoming a cause of their infection. Additionally, males have higher levels of smoking and drinking as compared to females, the data suggest that this may have also contributed to their high infection rate.

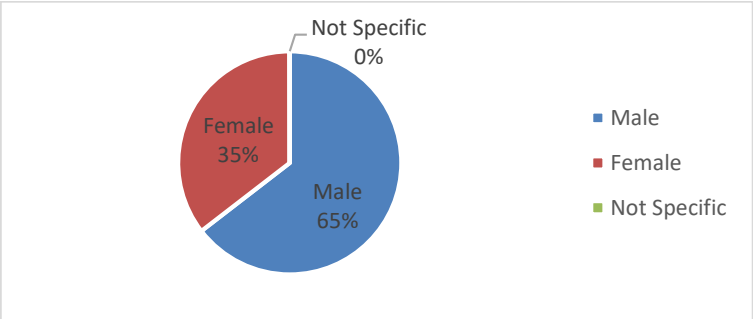


Figure 8: Gender Distribution of Patients in India

5.3 Age Distribution of Patients in Jind City

The age distribution of covid19 patients in Jind city is not very different from the data of the whole country. The age group that is maximum infected by the virus is age group 21-30. Since this age group is a working age group more actively engaged in outdoor works, they run the risk of exposure of virus to them more as compared to the other age groups. There were zero cases of covid19 in age group 0-10 in the months of May and June, while in the months of July, august and September there were active cases of the disease. For age group 11-20 active patients if the disease were found in the month of June while for the age group 21-30 it started in the month of May. In age group 31-40 there were active cases of corona starting in the month of June and for people of age group 41-50 active cases started coming up in May. Similarly, for age group 51-60 active cases started coming up in May.

For age group 61-70 covid19 cases came up in June while they came up in July for age group 71-80. In the city of Jind it started affecting people of age group 81-90 in July and people of age >90 in September (Civil Hospital Jind, 2020) [19]. The data and statistics clearly show's a sharp rise in the no of active cases of covid19 in the month of October as more persons started working outdoors again.

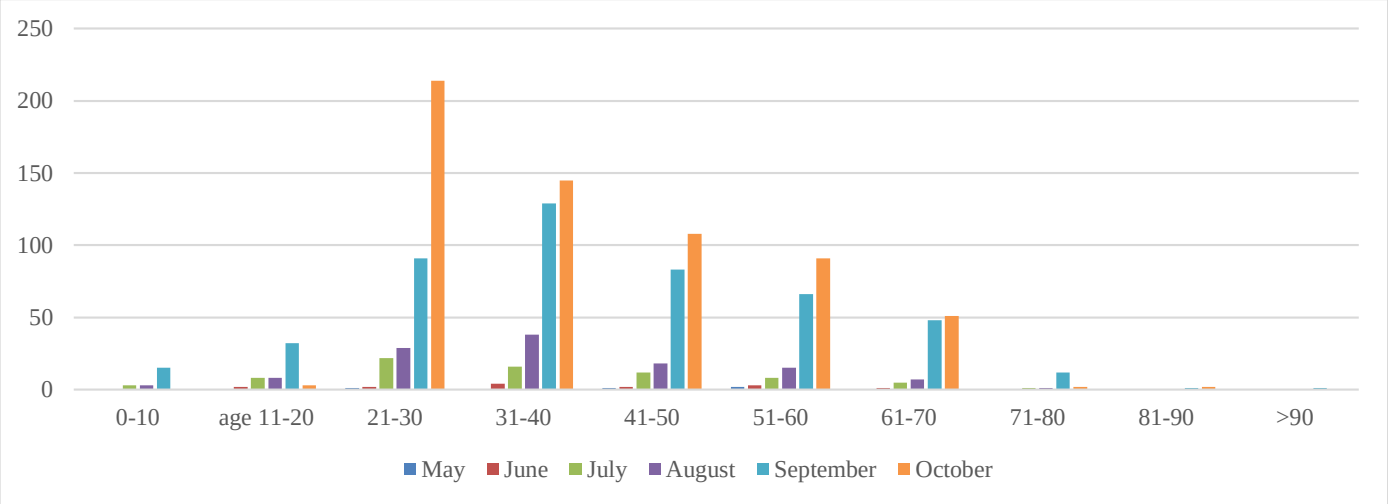


Figure 9: Age Distribution of Patients in Jind City

5.4 Gender Distribution of Patients in Jind City

The distribution of COVID-19 cases among the males and females of Jind city is very similar to the above stated. Males are shown to be more affected by the virus as compared to the females. A very similar pattern has been noted over the months. In may the no of patients were between 0-50 for both males as well as females. In the month of June more males were infected as compared to almost zero cases of females. However, in July the no of both male and female patients was in between 0-50 but still more males were found to be more infected of the virus. In august the no of male patients was in between 50-100 while female patients were between 0-50. In September the number of male patients was 350-400 while the number of female patients was 150-200. Following a similar pattern in October the male patients were between 400-450 while the female was 150-200 (Civil Hospital Jind, 2020) [19].

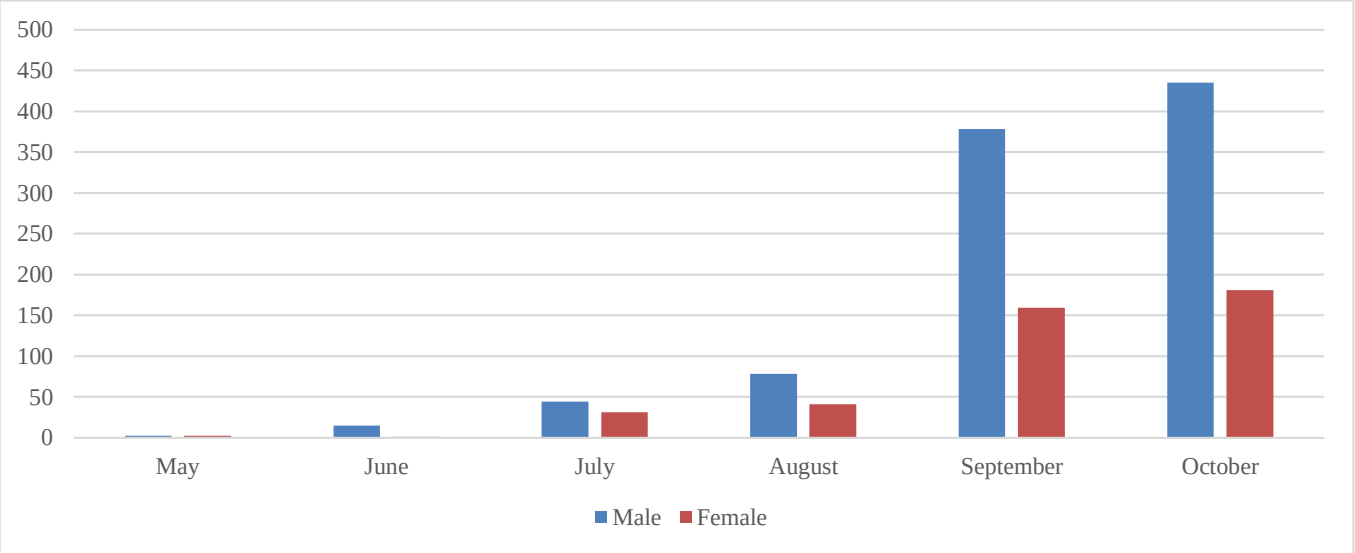


Figure 10: Gender Distribution of Patients in Jind City

VI. IMPACT

As UN stated – "The COVID-19 pandemic is far more than a health crisis. It is affecting societies and economies at their core." The COVID-19 pandemic has led to dramatic loss in every segment of life besides physical health. The economical and social disruption caused by the pandemic has harmed the poor and vulnerable the most but it has also pushed millions of people below poverty line. According to WHO, current number of undernourished people estimated at nearly 690 million could increase by up to 132 million by the end of the year (WHO, 2020) [21].

The outbreak of the disease is a major destabilizing threat to the global economy. According to a report by the International Labour Organization, the pandemic has not only disrupted the supply (production of goods and services) but also demand (consumption and investment). The chief of International Monetary Fund quoted, "World is faced with extraordinary uncertainty about the depth and duration of this crisis, and it was the worst economic fallout since the Great Depression". The disruption of the supply chains of the products has caused losses in both national and international markets. The earlier estimates of job data indicate that COVID-19 may have increased urban unemployment rate to 30.9%. Global unemployment has increased to 23.4%. Over 50 million people have lost their jobs in the first two weeks of lockdown. As stated by the World Bank, 'The baseline forecast envisions a 5.2 percent contraction in global GDP in 2020, using market exchange rate weights—the deepest global recession in decades, despite the exceptional efforts of governments to counter the downturn with fiscal and monetary policy support' (The World bank,2020) [22]. One estimate from Dr. Panos Kouvelis, director of "The Boeing Center" at Washington University in St. Louis gave $300+ billion impacts on the world's supply chain that could last up to two years (Anumakonda Jagadeesh,2020) [23]. In the first month of lockdown in India data suggests that nearly 53% of businesses suffered shutdown (FICCI Survey,2020) [24]. According to survey by Center For Monitoring Indian Economy, the unemployment rate of India increased from 8.75% in March 2020 to 23.52% in April 2020. The rural unemployment rate increased from 8.44% in March 2020 to 22.89% in April 2020 while the urban unemployment rate saw a rise from 9.41% in March 2020 to 24.95% in April 2020. Informal economical workers are at a major risk because majority of them lack social protection and access to quality health care and have lost access of productive assets. For majority of them, no income means no food for them and their family or less nutritious food causing an increase in the rate of undernourished people.

Border closures, travel restrictions, confinement measurements and ban on international flights have completely disrupted the travel industry. The travel industry is the one of the worst effected sectors in the pandemic (WHO, 2020) [21]. In India revenues generated by travel and tourism contributes 9.2% of GDP has suffered a major setback. Early data suggests that the first 21-day lockdown in India bought down the aviation revenue by USD 1.56 billion. The oil prices have fall low to $22 per barrel, the lowest in 18 years in March 2020 (Monika Chaudhary, P. R. Sodani and Shankar Das, 2020) [25]. The travel and trade restrictions have also disrupted the domestic and international food supply chains reducing access to healthy, safe and diverse diets. The farmers have lost access to market for buying inputs and selling their produce and agricultural workers from harvesting the crop has caused a major halt to the food supply chain. With the loss of jobs of farmers, food security of millions of families is under threat.

Millions of agricultural workers- both waged and self-employed are under the threat of losing of their jobs and are at high risk of poverty, malnutrition and poor health. The disruption of food supply chain during the lockdown has also increased food wastage causing a major harm to small farmers. The shutdown of hotels, restaurants and other food services has harmed the dairy sales and other staff working in those services. In India tea exports fell 33% in March 2020 as compared to March 2019 (Money Control,2020) [26]. Reports and data suggest that the harvesting of crops has also suffered due to the unavailability of the migrant workers. Migrant workers were particularly vulnerable during the lockdown because of the risks faced by them in their transport, working and living conditions and struggle to access support measures by the government for them. In India with the nationwide lockdown being imposed and factories and workplaces being shut the migrant workers started facing loss of money and food and uncertainty about their jobs in the future. Due to the lack of means of transportation many of them started walking back to their home towns increasing the risk of exposing them and their families to the virus. In May 2020 Indian government permitted The Indian railways to launch special Shramik Trains for the migrant workers to travel back to their cities. In the report given by the Indian railways 80%of the migrant workers from Bihar and Uttar Pradesh were train travelers. In September 2020 as stated by the Labor and employment minister in parliament 10 million migrant workers had attempted to return home due to COVID-19 and its subsequent lockdown. However, the very next day he stated that the government has no data for the migrant workers who died or become unemployed due to the pandemic. However, several unofficial surveys have been conducted by independent organizations regarding the deaths of migrant workers. According to the data by CNN-News18, 971 migrant workers deaths were reported in September 2020 as not directly caused by the virus. The cause of their death as stated was starvation, road and rail accidents, and exhaustions, suicides and police brutalities (News18,2020) [27]. According to data collected by Save Life Foundation an NGO 198 migrant workers were killed in road accidents as of June 2020. Some data suggests that 80 workers died while travelling back in Shramik Special Trains within one month of their launch.

Besides affecting physical health and global economy, the pandemic has severely affected the mental health of people. According to survey by WHO, the COVID-19 pandemic has halted mental health services in 93% of the countries worldwide. WHO has previously highlighted the chronic underfunding of mental health by countries. The need for increasing funding for mental health has increased during the pandemic. Deaths, isolation, loss of income and jobs, less food security and fear are triggering mental health conditions and worsening the existing ones. Many people have increased their use of alcohol and drugs triggering other health conditions. Insomnia and anxiety have also increased during the lockdown. People with pre-existing mental and neurological conditions are at more risk of getting a COVID-19 infection. However even before the pandemic several countries invest less than 2% in their mental health services, these have suffered a major setback in the ongoing pandemic situation (WHO, 2020) [28].

However, the ongoing pandemic has affected every small factor of lives, it has both positive and negative effect on environment. Due to the restrictions in movement and a significant slowdown in social conditions, air quality has improved significantly in many parts of the world. Studies suggest that there has been a significant lowering of water and air pollution. According to studies in May 2020 it has been expected that the carbon emissions during the lockdown fell by 17% in early April and could lead to an annual drop of 7% in carbon emission which would have been the major fall since World War II (Denise Chow,2020) [29]. In India due to the significant rise in air quality and drop in pollution levels, the Himalayas were clearly seen

from the city of Jalandhar in Punjab for the first time in decades. However, the increased use of PPEs like hand gloves and face masks and their improper disposal and increase of harmful hospital waste and their haphazard disposal has caused a severe negative impact on environment. Due to pandemic, quarantine policies in many countries have increased demand of online shopping services which has increased the household waste from shipping materials. Due to the lack of proper waste disposal management by the government this has caused an increase in the air, water and soil pollution (Tanjena Rume, S.M. Didar-Ul Islam, 2020) [30]. Many counties like USA, UK and other major European nations like France, Italy etc. have stopped their waste recycling during the lockdown to stop the transmission of the virus which has caused a significant increase in landfilling.

IV. RESULTS AND DISCUSSION

Initially WHO picked up a trail of corona virus reported on 31st December, 2019 in Wuhan city. After that virus started to spread in various countries starting with Thailand, Japan, Republic of Korea as so on. India reported first case on 30th January, 2020. Till then no action has been taken by GOI. While other countries have been enforcing lockdown. On 25th March, 2020 GOI imposed nationwide lockdown, at that time over a million cases were reported worldwide with more than 51,000 related deaths. As this virus started to spread in India, GOI started to unlock on 31st May, 2020, at that time India overtook China in COVID-19 cases on 13th May, 2020 as crossed milestone of 100,000 cases. GOI unlocked country in 6 phases till November with increase of over 1.5 lack in November and December statistics shows inverse relation in government unlock steps and COVID-19 cases. While Due to lack of economic activities and low migration; Jind district has a very low rate of increase in corona. Jind district is at 13th position in Haryana with more than 50 case daily. Initially Jind city has a very low rate of increase in COVID-19 cases but by increase of time cases are increasing steeply. In Jind most corona cases is found in 21-30 age group and then 31-40 and most of cases were found in Male. In Jind City first COVID-19 case was found in in village Nidani, Sub-Division Jind, District Jind. According to research Jind district lack in healthcare facilities whether we talk about infrastructure, health care education, approach to hospitals, transportation facilities, non-planning factors, etc. but majorly Jind lack in governance sector. Steps suggested by WHO, GOI and disaster management cell India; are not been followed. No Containment and buffer zones were made, not even once. Facilities like hospitals whether it's a dedicated or non-dedicated COVID-19 centre is far away from resident's reach. In initial phase of lockdown public transportation services were closed, at that time there was no way to reach hospital due to lack of ambulance transport. If government take this very situation critically, only then a city like Jind can survive in cases like this itself due to low economy and backward health facilities. Through vaccine is under trail but under emergency it can be used. In India, virus mostly found in age of 21-30 as compared to children or elderly and found mainly in males, shows that since the virus is higher contagious and spread easily by physical contact and since maximum number are of working age group and males doing maximum outdoor work, justified the statics. Also, without proper vaccine, containing COVID-19 cases is a real challenge. Impact on economy, social life and environment were observed due to virus but more over mental pressure is most critical aspect than health crisis because mental health is the core health of a human.

VII. ACKNOWLEDGMENT

1. Family
2. Cooperative Civil hospital staff

REFERENCES

[1] Strategic Preparedness and Response Plan,2020- WHO report

[2] India News - Times of India (31st Jan,2020). Available at: https://timesofindia.indiatimes.com/india/indias-1st-coronavirus-case-reported-in-kerala/articleshow/73782800.cms (Accessed: 11th November 2020)

[3] Dr.Larry Wu (13th Jult,2020). A Timeline of COVID-19 Symptoms. Available at: https://blog.bcbsnc.com/2020/07/a-timeline-of-covid-19-symptoms/ (Accessed: 11th November 2020)

[4] District Containment Plan,2020 (9th April,2020)- Jind District

[5] Business Standard (31st December, 2020), Available at: https://www.business-standard.com/article/current-affairs/coronavirus-live-updates-india-covid-new-uk-strain-lockdown-new-years-eve-vaccine-120123100063_1.html (Accessed: 31st December, 2020)

[6] Aritra Ghosh, Srijita Nundy, Tapas K. Mallick,2020. How India is dealing with COVID-19 pandemic. Sensors International 1 (2020). https://doi.org/10.1016/j.sintl.2020.100021

[7] Hindustan Times (24th December, 2020). Available at: https://www.hindustantimes.com/world-news/covid-19-timeline-of-a-pandemic-which-disrupted-lives-across-the-world/story-R6bWcTh4YVS3O596p9uLaM.html. (Accessed: 31st December, 2020)

[8] Mohana Basu (31st March, 2020). How Coronavirus Spread in India. Available at: https://theprint.in/health/how-coronavirus-spread-in-india-39-of-the-first-50-patients-came-from-italy-iran-china/379941/. (Accessed: 09th December 2020)

[9] Zee Media Bureau (1st January, 2020). Available at: https://zeenews.india.com/india/unlock-1-0-begins-today-states-issue-fresh-guidelines-2287194.html (Accessed: 09th December 2020)

[10] Deeptiman Tiwary (30th June, 2020). Available at: https://indianexpress.com/article/coronavirus/unlock-2-guidelines-july-coronavirus-6482179/ (Accessed: 09th December 2020)

[11] The Indian Express (30th June, 2020). Available at: https://indianexpress.com/article/india/unlock-3-0-guidelines-rules-whats-allowed-whats-not-6529596/ (Accessed: 09th December 2020)

[12] Deeptiman Tiwary (30th August, 2020). Available at https://indianexpress.com/article/india/india-unlock-4-0-guidelines-6575245/ (Accessed: 09th December 2020)

[13] Dipankar Ghose (1st October, 2020). Available at: https://indianexpress.com/article/india/unlock-5-coronavirus-guidelines-6619158/ (Accessed: 09th December 2020)

[14] The Indian Express (19th November, 2020). Available at: https://indianexpress.com/article/explained/unlock-guidelines-november-state-wise-relaxations-delhi-maharashtra-tamil-nadu-odisha-6911609/ (Accessed: 09th December 2020)
[15] World Health Organization (20th October 2020). Available at: https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19 (Accessed: 09th December 2020)
[16] Hindustan Times (2nd December, 2020). Available at: https://www.hindustantimes.com/india-news/bharat-biotech-s-covaxin-list-of-states-which-have-started-phase-3-trials-of-covid-19-vaccine/story-6vG7xbqUL38D8Luhq8lXaI.html (Accessed: 09th December 2020)
[17] Worldometer (2020). Available at: https://www.worldometers.info/coronavirus/. (Accessed: 31st December, 2020)
[18] COVID India tracker (2020). Available at: https://covidindia.org/. (Accessed: 31st December, 2020)
[19] Civil hospital Jind- Primary data. Data received on 3rd November,2020.
[20] National Centre of Disease control (2020). Available at: https://ncdc.gov.in/dashboard.php. (Accessed: 11th November 2020)
[21] World Health Organization (13th October 2020). Available at: https://www.who.int/news/item/13-10-2020-impact-of-covid-19-on-people's-livelihoods-their-health-and-our-food-systems (Accessed: 09th December 2020)
[22] The World bank (8th June 2020). Available at: https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world (Accessed: 09th December 2020)
[23] (Anumakonda Jagadeesh,2020). Socio-economic impact of the 2019–20 coronavirus outbreak. Available at: https://knowledge.wharton.upenn.edu/article/will-coronavirus-impact-global-economy/ (Accessed: 09th December 2020)
[24] FICCI Survey (March 2020). Impact of Coronavirus on Indian Businesses.
[25] Monika Chaudhary, P. R. Sodani and Shankar Das, 2020. Effect of COVID-19 on Economy in India: Some Reflections for Policy and Programme. Journal of Health Management. DOI: 10.1177/0972063420935541
[26] Money Control (27th May 2020). Available at: https://www.moneycontrol.com/news/photos/business/economy/in-pics-economic-impact-of-coronavirus-pandemic-in-india-as-per-crisil-5321281.html (Accessed: 09th December 2020)
[27] News18 (14th September 2020). Availbale at: https://www.news18.com/news/india/while-centre-has-no-such-data-on-deaths-of-migrant-labourers-job-losses-heres-what-reports-say-2876305.html (Accessed: 09th December 2020)
[28] The World bank (5th October 2020). Available at: https://www.who.int/news/item/05-10-2020-covid-19-disrupting-mental-health-services-in-most-countries-who-survey#:~:text=Bereavement%2C%20isolation%2C%20loss,outcomes%20and%20even%20death (Accessed: 09th December 2020)
[29] Denise Chow (19th May 2020). Available at: https://www.nbcnews.com/science/environment/carbon-emissions-dropped-17-percent-globally-amid-coronavirus-n1210331 (Accessed: 09th December 2020)
[30] Tanjena Rume, S.M. Didar-Ul Islam, 2020. Environmental effects of COVID-19 pandemic and potential strategies of sustainability. Heliyon 6 (2020). https://doi.org/10.1016/j.heliyon.2020.