

COVID-19 DATA TRACKER

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Abstract - Humans are observing a very hard time fighting with invisible enemy; the novel COVID-19 coronavirus. Coronavirus disease is an irresistible infection caused by the respiratory disease Coronavirus 2 (SARS-CoV-2). It started from Wuhan city of China in December 2019 now fastly spreading all over the world. Till today more than 54.4 million cases were found in more than 217 countries and regions. Till today there is no vaccine against coronavirus disease but many countries are working on vaccine. Prevention and social distancing can be the only cure for this disease. A study was carried out on Coronavirus to observe the number of cases, deaths and recovery cases worldwide within a specific time period of nine months. Based on the above data, this research paper will help to predict the future spread of this infectious disease in human society. COVID-2019 is the virus, which have killed so many people in the world. It was first appeared in China and then spread to the whole world and majority countries were affected by this virus. All world countries economies were damaged and oil prices were decreased and make the planet unfavorable. Absolutely four months have been passed but still the attack of the virus is continued and all government of the world have imposed the locked down policy in their countries and every one economic sectors have banned for work. Seeing to its importance the present study was arranged and its major objective was that to critically review the corona virus in the world. Total 15 articles were downloaded from the net and skim 10 time and analyzed things of corona control within the world. The result indicates that China has announced the emergency in the world very lately because it was appeared in December and DR.Li has also delivered the message through Wechat while on the direction of China WHO announced the emergency on 20, Jan, 2020. Due to late announcement majority people from Wuhan were traveled to other countries of the planet by air. So the other countries of the world have no knowledge about the situation while China has started fighting against corona virus and China has also the past experience of the SARS, so China has controlled things within two month and therefore the trend reached to 46 on 16 April the new cases while the planet others countries were in ABC situation. The people that came from Wuhan during emergency were checked and located negative and that they were allowed to their countries but latter on emergency were also raised in other countries of the world while death number were over surpassed from China. The first country in number of cases was America which was followed by Spain, France, Germany, UK and Iran. In these countries the amount of death was huge. The America total confirmed cases number was 674829 and therefore the death number was 34475 while the new cases number was 26826. Similarly the Spain confirmed cases number was 182816 and death number was 19130 and the new cases number was 2157. The confirmed cases in Italy was 168941 and the death number was 22170 while the new

cases number was 3786, in France the total confirmed cases number was 165027 and the death number was 17920 and therefore the refore the number of latest cases was 17164. Germany total confirmed cases number was 136569 but the death number by corona was 3943 and the new cases number was 1816 while UK total confirmed cases number was 103093 and the death number was 13729 and the new cases number was 4617. Similarly the total confirmed cases in Iran were 77995 and the death number was 4869 and the new cases number was 1606. The main reasons were that they all lately imposed the lockdown in their countries and the quarantine situation was not properly implemented by government. The number of cases there was more while the facilities were but the need. Trump has claimed to WHO and also gave threat for cutting the fund to WHO while General secretary told that it's not the time of the tussle to cut the funds while it will damage the whole program of the COVID-2019 of the world. Dr.Fauci also claimed to Trump and told that they need started the lockdown program one week late and since of this the virus spread into the entire community of united started. In the beginning South Korea followed to china and therefore the number of cases was quite the opposite countries of the planet but they need controlled very easily due to locked down and more medical facilities availability within the country, South Korea applied the methodology of China but the opposite countries haven't applied the methodology of China. The main thing may be a social distance, isolation, occupy home, wash hand with soap and wearing of mask and availability of medical facilities within the country while America, Spain, France, Germany, UK and Iran have not applied the quarantine in time and because of this the number of confirmed cases were increased while medical facilities were also not properly available and since of this the death number was found quite the opposite countries of the planet. The study recommended that to help one another in the time of trouble and do not criticize one another; Always follow the country quarantine tightly and honest staff should be deployed on duty; Good medical facilities should be arranged for the pandemic; Locked down should be applied in time; More fund should be arranged for Pandemic; Ventilators should be stored quite the demand within the countries; WHO has huge fund so it should arranged more ventilators in future; Proper laboratories and proper doctors should be arranged for brand spanking new discoveries of Vaccine; Mostly specialise in sustainable development within the world; Never allow those industries within the world which create problems for future generation; Not focus only on economy development but also care of the human health because without healthiness of the person the event of the country is impossible.

Key Words: Covid-19, SARS-Cov-2, Social distancing.

1. INTRODUCTION

Mankind has observed various pandemics throughout the history where some of them were disastrous. We are observing very tough time to fight with an invisible enemy the novel corona virus. So far, the infectious disease corona virus, which has killed millions of people all over the country and is contently taking people under its arrest. A coronaviruses family of virus that causes illness of respiratory disease it started from the city Wuhan now fastly growing over the World. Covering face, Washing hands, isolating hygiene, and maintaing social distancing may be a way to prevent this communicable disease, but it is not enough. According to the WHO, there are neither vaccination nor antiviral medications for COVID-19. Coronaviruses is the part of the Coronaviridae family in the Nidovirales order. Corona represents crown-like spikes on the outer surface of the virus; thus, it was named coronavirus. As of 5th November 2020, there are 50.9M Coronavirus cases, with 1.26M deaths while 33.3M has been recovered. In the total Coronavirus patients died, very interestingly the highest number belongs to USA i.e 239K. deaths. The death toll is followed by India(127K), Iran (1,433) and Spain (1,044). The basic symptoms which is commonly observed in humans for covid-19 is high fever, exhaustion, brevity of breath, and failure of smell and flavor, cough, soar throat. But with the time there will be progress in severe respiratory disease (ARDS), septic syncope blood clots and multiple organ failure. The starting Side effects of coronavirus disease can be Seen in 5 days, however it can be increase in or after 7 to 14 days. The main reason for increase in covid-19 is mainly due to the small water droplets generated contact of nearby people with others the individual .Sputum and saliva spread many infections.

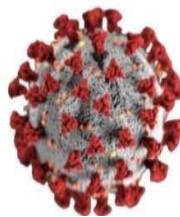
1.1 Epidemiology of COVID-19

It Started from Wuhan, Hubei, China in December 2019 .china reported their first case in 1 december 2019 and then there is huge increase in cases. on 31st december WHO China country Office reported many cases of Nimonia of unknown Etiology. On 1st January 2020, wuhan sea food market were closed by govt. The Market were found suspicious for playing role in spread of Coronavirus disease. one 9th January 2020 the first death was report Wuhan, China. On 13th january the first case was report beyond the china's international boundary and this case was report in Thailand country. On 30th January 2020, India reported its first covid cases. WHO declared corona virus as public health emergency of international concern. On 15th February 2020 WHO name this virus as COVID-19. On 11th March the virus spread all over the world and WHO declared it global pandemic.

1.2 TREATMENT

Similar to MERS-CoV and SARS-CoV, there is still no specific antiviral treatment for COVID-19 .Isolation and supportive care including oxygen therapy, fluid management, and antibiotics treatment for secondary bacterial infections is recommended. Some COVID-19 patients were given rapidly to ARDS and septic shock, which was eventually lead to multiple organ failure. Therefore, the trouble on initial management of COVID-19 must be addressed to the first recognition of the suspect and contain the disease spread by immediate isolation and infection control measures .Currently, no vaccination is available, but even if one was available, uptake might be suboptimal. A study of intention to vaccinate during the pandemic in the United States was around 50% at the start of the pandemic in May 2009 but had decreased to 16% by January 2010.

A graphical representation of the ultrastructural morphology of coronavirus (SARS-CoV-2). Source: Centers for Disease Control and Prevention—Public Health Image Library. Credit: Alissa Eckert, MS, Dan Higgins, MAM (Public Domain).



1.3 PRECAUTIONS

1.3.1 RESTRICTION ON TRAVELLING

It is quite obvious that by proscribing folks from move in or out of a selected region, the transmission can be reduced.

1.3.2 Social Distancing

So, maintaining social distance throughout these times will certainly facilitate scale back the transmission from the infected to the others.

1.3.3 Additional Testing

This is to quickly establish and isolate the infected from the non-infected. Providing Covid-19 features a long period of time (symptoms begin showing when 5-7 days), an individual doesn't even notice that he/she is infected and, within the in the meantime could unfold the infection too. To be ready to try this, in depth testing is needed. Doctors and medical employees ought to be given safety instrumentality. Laboratories ought to procure testing kits. Hospitals ought to have ICUs and quarantine units in giant numbers

2. OBJECTIVE OF THE PROJECT

1. To study the current situation of pandemic caused by coronavirus.
2. It is used to spread the awareness of covid-19 to connect essential covid-19 health issues related services to people of India
3. To predict the active cases and death rate recovery rate caused by coronavirus
4. It also help people to identify the symptoms and alert them about best safety precaution.
5. Chat boot introduce so that people can get the information about coronavirus.

3. SCOPE OF THE PROJECT

1. Introduction of chat bot will help the people to know more about coronavirus.
2. People can get suggestion from the doctors according to their need.
3. People can get the latest news about the coronavirus disease.

4. RELVENT STUDIES

The other three research articles were selected based on the fact that they hold some information will be useful to fulfill goals of this research project. The selected articles are shown below in Table 1 with the brief discussion about each one of them.

Table 1: List of Relevant Articles

Articles	Author	Research Topic
A1	Mirko Stojiljkovic	Logistic Regression in python
A2	Jatin Chaudhary	Data Modelling & Analysis using Data Science
A3	Saurabh Pal	Application of Machine learning

5. METHODOLOGY

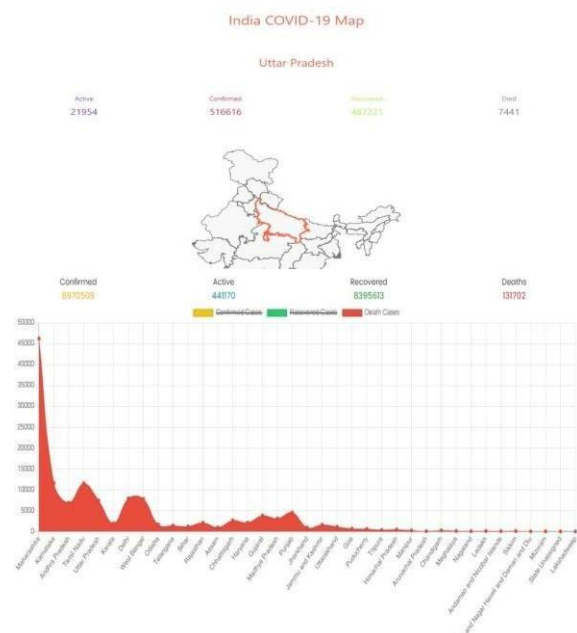
This research explains the methodology that was used in carrying out the research work. Crucial issues that were discussed in this chapter includes, research design, target population, sample size, data collection and techniques, questionnaires, data analysis techniques and ethical considerations.

5.1 RESEARCH DESIGN

Research design refers to plan, and structure of investigation done to get relevant answers to research questions. This study involved a case study on Covid-19 in India. Case study refers to a set and presentation of knowledge suffering from Covid-19. The study applied a descriptive research design. Descriptive research design may be a systematic, empirical inquiry into which the researcher doesn't have direct control of independent variables as their manifestation has already occurred or because they're reflecting the state of happenings and qualify the obtained findings through the utilization of quantitative chemical analysis. Descriptive research cares with how, what's or what exists is said to some preceding event that has influenced or affected a gift condition or event. The researcher preferred descriptive research design because the variables under study have already occurred. Also this design predict the symptom of Covid-19 in human under the advisory of WHO. Descriptive survey gathers data on a one-shot basis and it's very huge data of Covid-19 affected and this research also collect the info of recovered and deaths by Covid-19.

5.2 TOOLS OR MATERIALS USED

In this research we use the tools for arranging the Covid-19 data in our web application is Javascript, JQuery, Bootstrap, Flask, ML. Data which is collected from our research of Covid-19 affected people is displayed in a digitally map of country. We use these tools to correctly display the data and we using ml for correctly predict the Covid-19 cases. We also display the data by using graphs.



6. LITRATURE REVIEW

Covid-19 is reviewed here. during this study covid-19 analyze and the way quick its spreading within the country. Our analysis we tend to track the cases of covid-19 and foretold the symptoms of person is being affected or not.

INTRODUCTION OF COVID-19

Corona viruses square measure an outsized family of viruses which can cause sickness in animals or humans. In humans, many coronaviruses square measure illustrious to cause metabolism infections starting from the respiratory illness to a lot of severe diseases like geographical region metabolism Syndrome (MERS) and Severe Acute metabolism Syndrome (SARS). The foremost recently discovered coronavirus causes coronavirus unwellness COVID-19.

The pandemic particularly corona virus is apace out breaking from its primary supply i.e. from the town of Wuhan, placed in china to the complete world. This unwellness could be a serious out break to the remainder of the countries, leading to damaging impact to the build. This text offer broad spectrum of read for the pandemic unwellness. Foremost within the month of December 2019, several patients of some etiology of respiratory disease that all had a history of visit to food whole sale market in Wuhan, China were come upon.

The virus inflicting COVID-19 has been named by international committee on taxonomy of viruses as Severe Acute metabolism Syndrome Corona Virus two (SARS-COV-2) in month of February eleven, 2020. The virus inflicting this pandemic unwellness is termed as COVID-19 by the globehealth organization on eleventh February 2020, . Recently, Corona virus has become a crucial condition of international concern of public health, WHO expressed its danger to the acute highest level. This virus has damaging effects over numerous human organs like lungs, will disrupt viscus perform by moving the guts, might cause nephritic downside by moving the kidneys, internal organ pathology, and conjointly have an effect on venereal organs of the build.

Going through the literature the patients, WHO all were tested positive for COVID-19, ultimately lead towards acute metabolism distress syndrome (ARDS) in sixty seven.3% of cases, acute excretory organ injury in twenty eight.9% of cases, noncontinuous internal organ perform in twenty eight.9% of cases and viscus injury in twenty three.1% of cases and on the twenty eighth day rate was sixty one.5%, , the method of naming the novel coronavirus (2019-nCoV) that emerged in Wuhan, China, in December 2019, has created some controversies.

In this review, the WHO convention of concerning the unwellness condition as novel coronavirus unwellness (COVID-19) has been followed. The virus are going to be cited as SARS-related CoV-2, or SARS-CoV-28. COVID-19 has been tagged as a public health emergency of international concern (PHEIC), and also the epidemic curves square measure still on the increase.

Origin and unfold of COVID-19:-

In December 2019, adults in Wuhan, capital town of Hubei province and a serious transportation hub of China started presenting to native hospitals with severe respiratory disease of unknown cause. Several of the initial cases had a standard exposure to the Huanan wholesale food market that conjointly listed live animals. The closed-circuit television (put into place when the {sars|severe acute metabolism syndrome|SARS|respiratory disease|respiratory illness|respiratory disorder} outbreak) was activated and respiratory samples of patients were sent to reference labs for etiologic investigations.

On December thirty first 2019, China notified the happening to the globe Health Organization and on first Jan the Huanan ocean grocery store was closed. On seventh Jan the virus was known as a coronavirus that had >95% similarity with the bat coronavirus and > seventieth similarity with the respiratory disorder CoV. Environmental samples

from the Huanan ocean grocery store conjointly tested positive, signifying that the virus originated from there. the amount of cases started increasing exponentially, a number of that failed to have exposure to the live animal market, implicational the very fact that human-to-human transmission was occurring.

The first fatal case was reported on eleventh Jan 2020. the large migration of Chinese throughout the Chinese year fuelled the epidemic. Cases in different provinces of China, different countries (Thailand, Japan and South Korea in fast succession) were reported in people that were getting back from Wuhan. Transmission to tending staff caring for patients was represented on twentieth Jan, 2020. By twenty third Jan, the eleven million population of Wuhan was placed underneath lock down with restrictions of entry and exit from theregion.

Soon this lock down was extended to different cities of Hubei province. Cases of COVID-19 in countries outside China were reported in those with no history of visit China suggesting that native human-to-human transmission was occurring in these countries. Airports in several countries together with Bharat place in screening mechanisms to sight symptomatic folks getting back from China and placed them in isolation and testing them for COVID-19. before long it had been apparent that the infection might be transmitted from symptomless folks and conjointly before onset of symptoms.

Therefore, countries together with Bharat WHO exhausted their voters from Wuhan through special flights or had travellers getting back from China, placed all folks symptomatic or otherwise in isolation for fourteen days and tested them for the virus. Cases continuing to extend exponentially and modeling studies reported a plague doubling time of one.8 days. really on the twelfth of February, China modified its definition of confirmed cases to incorporate patients with negative/unfinished molecular tests however with clinical, radiologic and epidemiological options of COVID-19 resulting in a rise in cases by fifteen,000 in a very single day.

It is necessary to note that whereas the quantity recentl st cases has reduced in China of late, they have increased exponentially in numerous countries along side South Korea, Italy and Moslem Republic of Persia. of those infected, 2 hundredth unit in crucial condition, twenty fifth have recovered, and 3310 (3013 in China and 297 in numerous countries) have died. till second of March 2020 entirely 3 cases of corona virus were according in Asian nation. once than there was associate stunning erupt in infectious agent cases by fifth of March 2020. infectious agent cases begin news chiefly at intervals the region of latest town, Agra, Jaipur, due to contact of Italian someone persons.

Prevention:-

SARS-CoV-2 spreads via metabolic process droplets and physical contact. it's essential to apply preventive measures to stop transmission. commonplace precautions accommodates hand hygiene, use of non-public protecting instrumentality (PPE) and metabolic process and cough etiquettes. Hand hygiene ought to be finished alcohol-based hand rubs (ABHRs) containing 60-80 per cent fermentation alcohol. Hand laundry following the proper steps with soap and water ought to answer.

Cloth towels ought to be avoided for drying hands and disposable tissue papers ought to be most well-liked. PPE consists of the medical masks or particulate respirators, face shields or spectacles, gowns, gloves and shoe covers. For drop and contact-based transmission, medical masks or procedure masks with head straps ought to answer. this could be worn before getting into the patient space and will be started solely when going identical. it's obligatory for persons within the community settings United Nations agency square measure symptomatic, the patients United Nations agency square measure in home care setups and suspected cases of COVID-19 with delicate metabolic process symptoms and attention employees (due to their elevated risk of exposure) got to wear medical masks the least bit times followed by hand hygiene and

proper disposal⁶¹. Particulate respirators (NIOSH-certified N95, EU commonplace FFP2 or equivalent) ought to be utilized by HCWs concerned in aerosol-generating procedures (AGPs). Face shields/goggles square measure to be utilized by all HCWs whereas acting AGPs.

Long-sleeved, sterile, waterproof robes, fabricated from non-absorbable materials square measure to be worn. once robes don't seem to be obtainable, waterproof aprons ought to be used. Powder-free, latex gloves ought to be worn whereas handling infected patient's material.

7. CONCLUSIONS

In this study, some ML models were used to decompose and track the worldwide adjustment of COVID-19. We gone through the information and found that the number of deaths continued to increase from mid-March 2020. The results were obtained from WHO and were taken from the information as of March 29, 2020. Due to people's frivolous behavior, the disease spread later, even as infected peoples can multiply the figure of cases. In addition, the arrangements for clinics across the country have been greatly improved.

In the future, it should be ensure to make computerized calculations to supply information within a typical range and naturally predict the amount of cases daily and each week. According to these principles, the government and emergency clinics can also keep a clear responsibility and provide flexible clinical help/services for new patients.

8. ACKNOWLEDGEMENT

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