

Covid-19 Spread Analysis, Prediction, Visualization and Comparison

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ABSTRACT

The corona virus spreading all over the world as we know. Due to this our government take a big decision regarding this virus how to control this virus, so it can't spread in human body that's why government announce lockdown and isolation who have disease or who not also. So, we did prediction to prepare medical setup and for future planning so on that purpose it will arrange full faculty for patience. the model is created for the proposed scenario related to corona virus. it is like tree structure in this some patients are [1] [2] [3] [4] quarantined, and few people like who have traveling form some place to another they also first quarantined for 14days then they will go their places. as we know the many people are not infected through this virus because of government that it announces lockdown due to this people are not go anywhere and make crowd so lockdown and quarantines is the very big role play in to control this disease.

1. INTRODUCTION

The whole world under this new disease corona virus. the first time this virus come on the December 2019 onwards but everyone not take a seriously to this disease. because this virus infects to those people who have low immunity, old parents, and who have medicals problems already specially who have lungs problem it infects more to that person. The symptoms of corona virus is cold, cough, breathing problem. Mostly person who have infected to corona virus the recover with this disease in the 14to16 days.

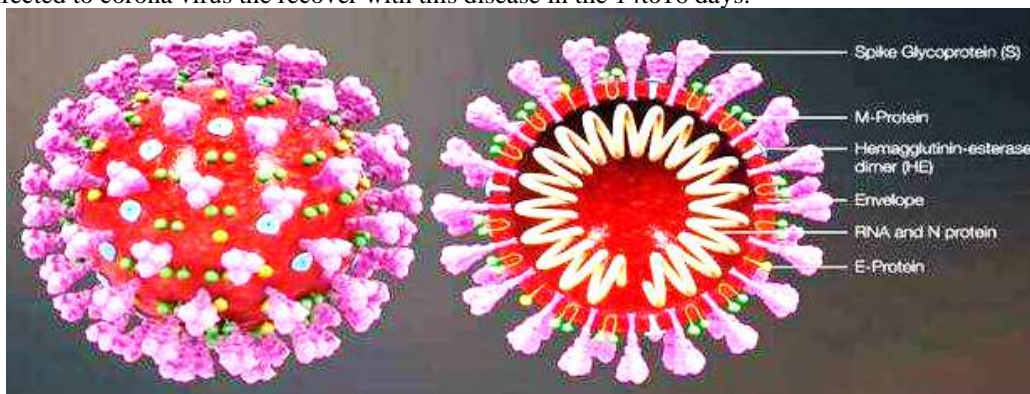


Figure 1 CORONA VIRUS

To protect from this disease [5] [6] [7] [8] so the prevention we want to follow, the preventions are wash your hands, use sanitizer, don't do shake hands with others and maintain social distance with the people. Related to this virus we get all data in the site of world health organization (WHO). Since there is no covid-19 vaccine available in anywhere. That why this disease spreading more frequently all over the world. Due to this who providing all over the world medical facility.

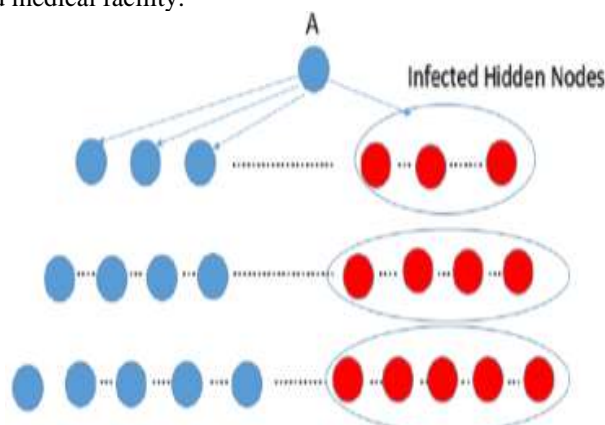


Figure 2Proposed model for spreading of COVID19

In India the first case come on 30 January 2020, and this virus come from china. exact after two months this virus spread all over the world. at present total cases are in India 8,723,270 and deaths are 128,559 but as we compare the cases with all other counties India have low cases.

2. PROPOSED MODEL

Here we can take assumption because this is a new disease so we assume that who have this diseases corona virus who come positive [9] [6] [10] and then they come into the contact of other people. This corona virus disease is infectious diseases and that's it spreading all over the world if the positive corona patient go out of country and come in contact with the people then this disease infect that people also. Let's take assumption after lockdown and testing start in all over the world the infected person not come in the contact of any people but many people break the lock down and it will not show any symptoms and not quarantined also. then it behaves like infected person. There are two types of nodes in this active nodes and hidden nodes. Active nodes are those who have infected this disease and they have all symptoms of this disease. but people break the chain of lock down and It come under the contact of infected person but they don't know and that person has no symptoms of this disease but infected so that node will be we call hidden node. [11] [9] Because if we have no symptoms so how we can know we can come under this disease due to this this virus spread all over the world whose body immune not good in that it will this symptom.

2.1 Preventions

- Wash your hands regular with soap and use sanitizer also to gill the germs.
- Maintain social distance with other people
- Avoid to shake hands with others
- Cover your mouth and nose with mask
- Stay home stay safe
- Don't do smoke because it infects on lungs due to that u have increase the chances of corona virus in your body.
- Stay away from crowded area.
- Don't do travelling so much if no emergency will come.



Figure 3 Thought

2.2 Symptoms

Corona virus infect every people in different ways.

Most common Symptoms are

- Fever
- Dry cough
- Tiredness

Less common symptoms are

- Aches and pains
- Sore throat
- Diarrhea
- Headache

Serious Symptoms

- Difficulty in breathing
- Chest pain

3. RESULTS

In this we see that corona virus spread all the over the world. And we can observe that in our India the cases will increase in the India full lockdown done on 25 march 2020. even then also hidden nodes are increasing day by day also. So, we analyze the data all over the world and we can see how much this virus spreading increasingly.



Figure 4 Confirmed cases



Figure 5 Deaths

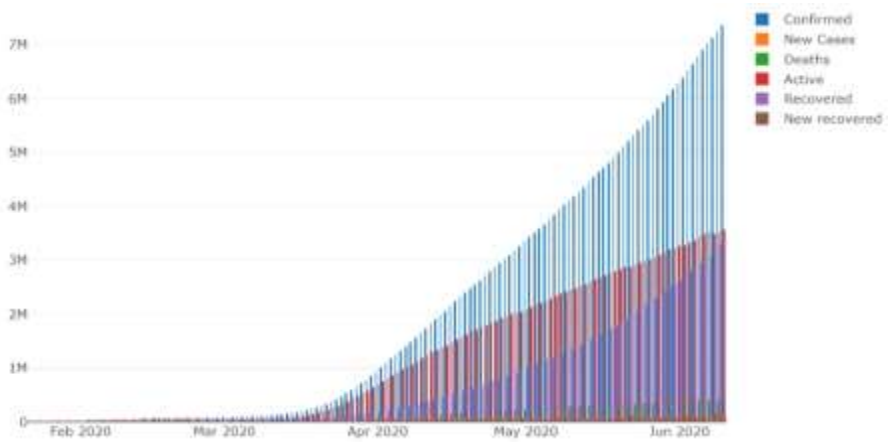


Figure 6 Day wise Bar Plot

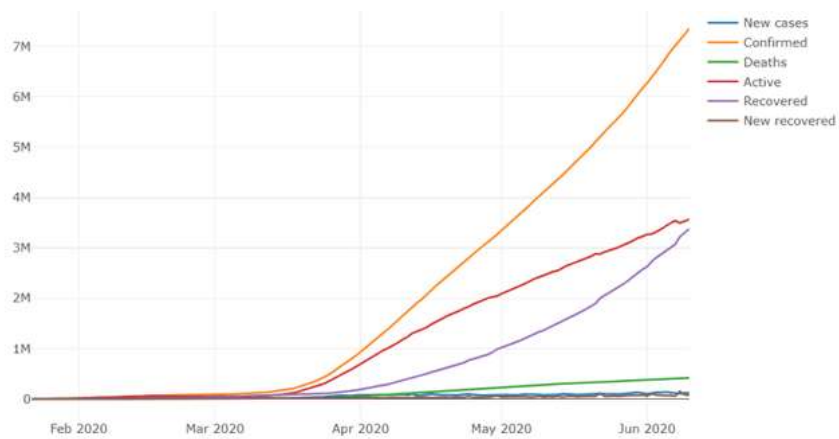


Figure 7 Day wise Line Plot

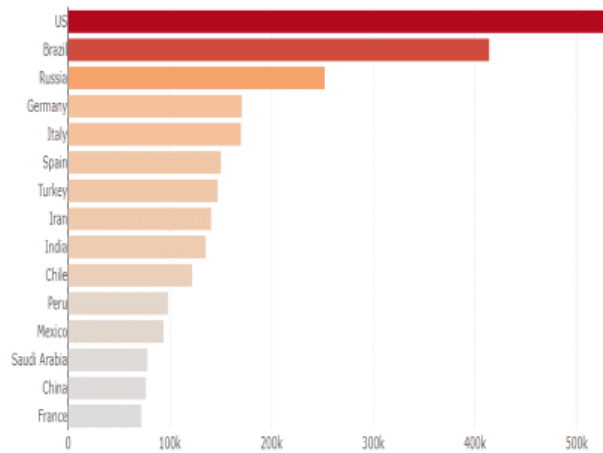


Figure 8 Recovered cases

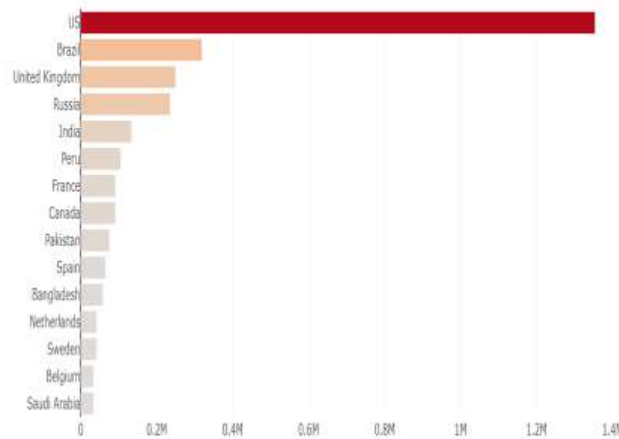


Figure 9 Active Cases

4. CONCLUSION

As per prediction, analysis we calculate how much ratings of cases in active, deaths, recovered, hidden. When the lockdown is that the recovery rate also increases with active case but after unlock of lockdown the active and hidden case again will increase.

5. ACKNOWLEDGEMENT

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