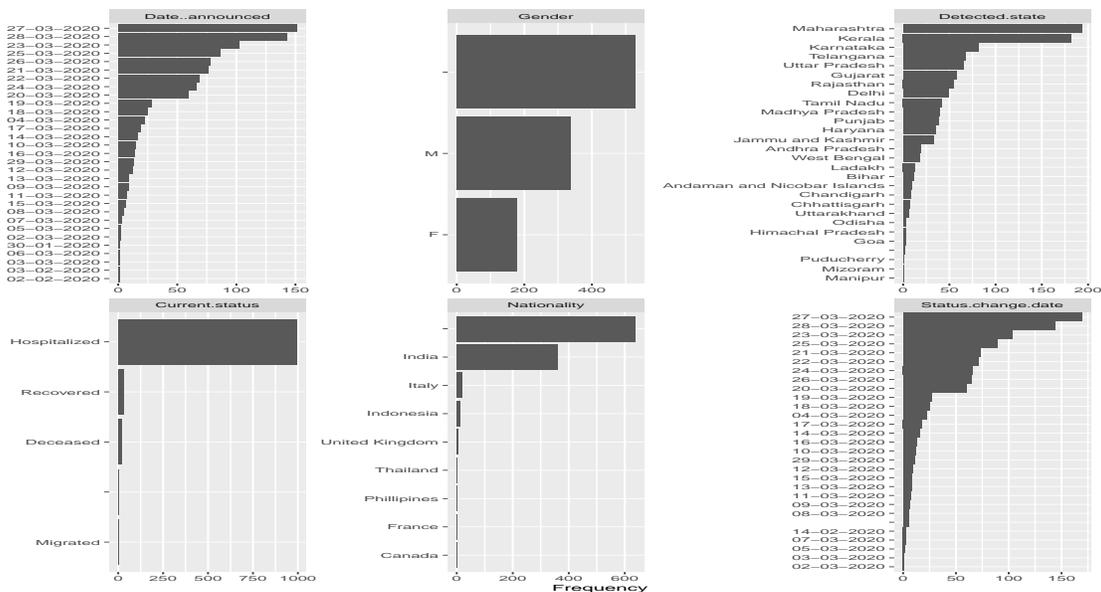# COVID-19

April 1, 2020

Figure 1: Frequency plots

The raw data available on the website www.covid19india.org is mostly qualitative in nature. A brief exploration of the same produced the above barplots. In the first plot of the panel above (1) and the last plot of the panel below, we see the number of confirmed cases announced and the number of cases that changed in status (either from confirmed to recovered, confirmed to deceased). The first plot shows that between 24th and 27th March, we mostly find the maximum number of cases confirmed. This is espected as in the last week there was a surge in the number of identified positive cases. However, it is interesting to note that between11th and 18th March there was a slight decrease in the number of positive cases, as compared to the first week of March. On days like 4th, 9th and 10th of March there had been more confirmed cases that came to light.

Due to a alrge number of attributes being not reported, we have a number of missing values for gender, and nationality of the patients. In the second plot of the top panel the frequencies of not reported gender is very high. However from the available data we

see lmost twice the number of male positive cases as compared to females. In terms of mationality, No wonder majority of the positive cases were of Indian nationality. There were individuals from other nationality as well who returned to the country and have been identified as COVID-19 positive cases. Majority of them were from Italy, Indonesia, and United Kingdom. Also if we look at the number of patients hospitalized, and deceased, the proportion of deceased cases is not very high. But so is the number of cases that have recovered. The third plot in the top panel shows the Indian states in decreasing order of number of COVID-19 positive cases. As already seen in figure **??** Maharashtra and Kerala top the list with the other states depicted in the order.
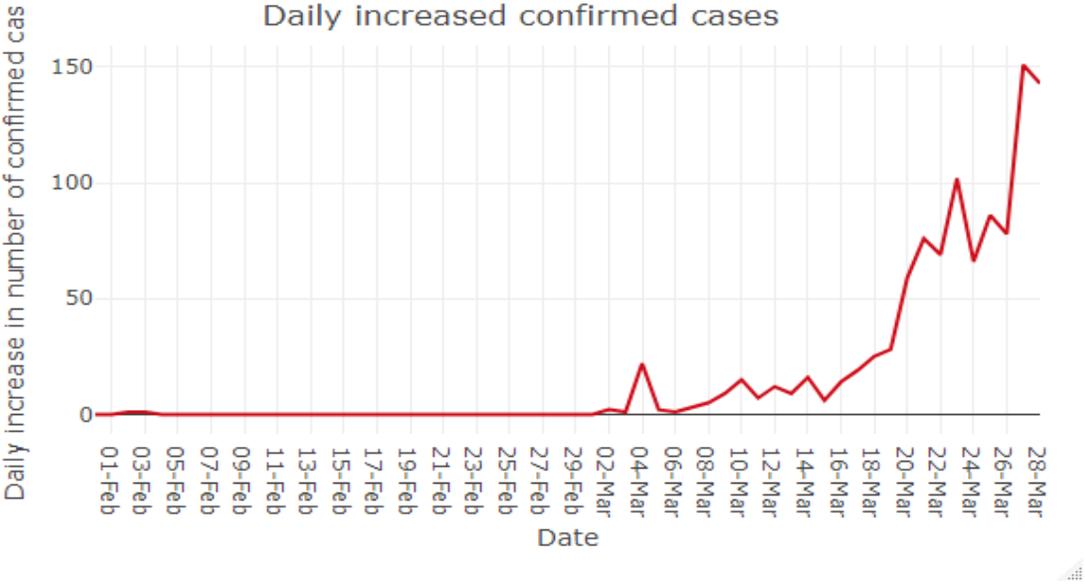

Figure 2: Daily increase in the number of confirmed cases.

From the daily data on number of confirmed, recovered and deceased cases we have constructed data on the daily increase in the number of confirmed, recovered and deceased cases. Figure 2 shows there is an increasing trend in number of confirmed COVID-19 cases. But a few days in between like on 19th, 22nd and 24th March there was a decrease in the number of positive COVID-19 cases. Figure 3 shows the increase in the number of recovered cases and deceased cases daily between 2nd February and 28th March 2020. There is an overall increasing trend, due to the increased number of confirmed cases.
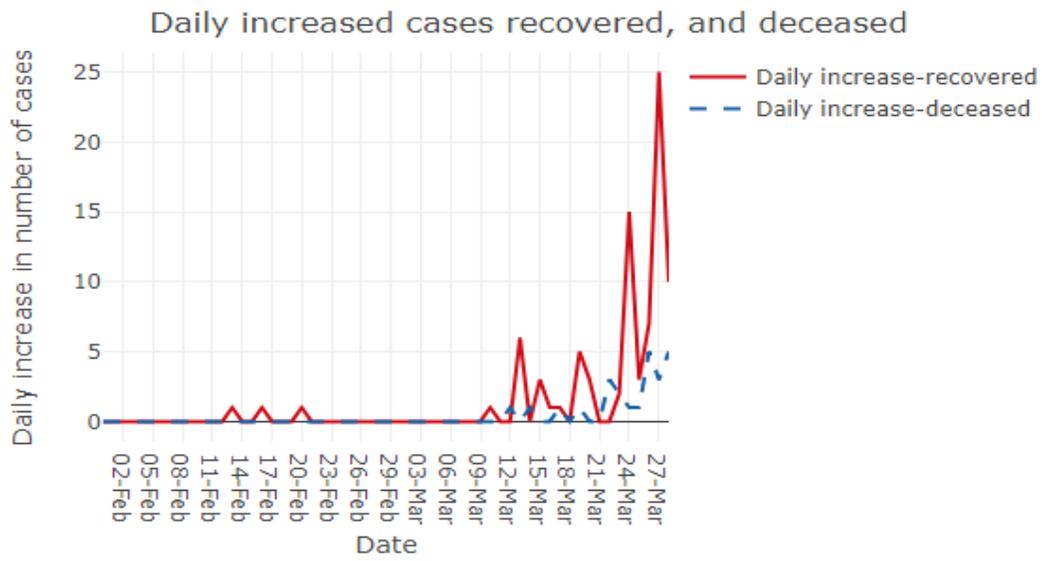
Figure 3: Daily increase in the number of recovered and deceased cases.