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Virus Go Viral: Coronavirus Disease 2019 (Covid-19) Outbreak in Pakistan; Actions and Problems

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Abstract

The World Health Organization (WHO) has categorized the coronavirus pandemic as a global public health crisis of universal concern.¹ On 11 February 2020, the infection was given its name by the WHO as 'severe acute respiratory tract coronavirus-2' (SARS-CoV-2; likewise alluded to as 2019-nCoV), and the disease it causes as 'COVID-19'.¹

On 26 February, Pakistan affirmed its initial two cases of coronavirus. Both cases were being taken consideration as indicated by clinical standard protocols and both of them are stably affirmed by government special assistant of health.

The first patient (index case) was a student at the college in Karachi (Sindh region) while the subsequent patient was from the federal territory of the country. The two patients had late travel history from Iran.² Within seven days of the initial two cases, Pakistan affirmed three additional cases, including a case in Islamabad and Rawalpindi (Punjab Province).³ The fifth case was likewise given an account of 2 March, from, Islamabad, a 45-year woman from Gilgit, with movement history from Iran.⁴ On 6 March, the first patient in Karachi had completely recuperated and later released from the hospital in the wake of testing negative.⁵

Following day, nine new cases detailed in Karachi with Sindh having the most noteworthy number of 13 cases. These new cases have a travel history from Syria and London. Three additional cases affirmed the following day remembering the first case for Balochistan Province.⁶

Keywords: Pandemic; Coronavirus; Outbreak.

Introduction

On 11 March, 76 suspected cases were accounted for in a few regions of the Punjab area. The health care department officials informed that 55 patients were cleared in the wake of testing negative. Two additional cases affirmed in Gilgit with movement accounts from Iran.⁷

On 13 March, the Sindh health department distinguishes a 52-year-old patient as positive, which denoted the first case of local disease transmission as the patient had gone from Islamabad.⁸ The count had shot up to 237 on 17

March.⁹ On 18 March, the initial two deaths because of the virus were additionally affirmed. The two cases were reported from Khyber Pakhtunkhwa.¹⁰ The cases multiplied by the greater part on 19 March. Balochistan government announce a health crisis and force a prohibition on an open vehicle.¹¹ On 20 March, the first demise was accounted for in Sindh, a 77-year-old man who was a cancer survivor with comorbidities.¹²

On 22, March the number of death increments to 6. The casualty at DHQ medical clinic in Gilgit was a medical specialist who had gotten the virus while screening the pioneers coming back from

Iran. Same day Gilgit went under lockdown for an uncertain period.¹³ On 23 March, Sindh Education Minister tried positive for the infection and self-isolated for 14 days.¹⁴

On 24, March, Sindh, Balochistan, and Punjab went for lockdown till 7 and 6 April.¹⁵ On 25, March, a few limitations were forced inside the nation. The number of positive cases crossed 1000.¹⁶ On 27, March, Pakistan revealed a record number of new cases distinguished in a solitary day with 211.¹⁷ Additional 118 cases were accounted for on 28 March.¹⁸ On 31, March, 82 absolute recuperations were reported just as 26 deaths in the country. 174 new cases were tested positive meaning that the complete number of positive cases has expanded to 2039.¹⁹

Preventive Measures and Response

After the presentation of the COVID-19 pandemic, the Pakistan government took a few measures to adapt to this zoonotic disease. The national bearer PIA chose to suspend the flight activity among Pakistan and China till January 30 because of the episode. The Pakistan Civil Aviation Authority (CAA) presented screening measures at four significant air terminals: Islamabad, Karachi, Lahore, and Peshawar for each individual showing up from China. The screening had likewise begun for domestic travels at Karachi air terminal on 21 March.²⁰ On 13 March, Pakistan halted every universal trip aside from those at Islamabad, Karachi, and Lahore.²¹ It was settled that on 13 March, all schools will be shut till 5 April. lectures and classes will be held on the web.²²

Pakistan shut its outskirts to travels from Afghanistan from 2 to 21 March. Iran border was additionally shut during this time and later revived.²³

On 21 March, every single global flight was suspended for about fourteen days viable from 21 March till 4 April. On, the soldiers across the country and military clinical assets to battle the continuous flare-up.²⁴ On 26 March, Pakistan chose to look for \$ 3.7 billion extra financings from three multilateral reported arrangements of youth power named "Corona Relief Tigers" to help the government in battling against pandemic on 27 March.²⁵

The Pakistan National Institute of Health (NIH) has played a crucial role in conceiving and circulating protocols regarding covid-19 prevention, transmission, treatment and creating public awareness equipment. NIH developed National Action Plan for covid-19 which is 137

pages' document covering every aspect of covid-19 including development of surveillance program. Furthermore, Ministry of National Health Services regulations and coordination develop a website where lists of designated hospitals, designated laboratories and daily updates regarding new cases and rest of the demographics available.²⁶

Isolation wards have been made all over Pakistan to combat the coronavirus cases.³⁵ hospitals in all territories are assigned as pandemic hospitals.²⁶ Covid-19 testing facilities have been announced by the government in all provinces. Only those laboratories are designated as collection centers for covid-19 which are in compliance with WHO standards²⁶ NIH's mobile testing lab is deployed at Taftan to gather tests from quarantine centers at the Iran border.²⁶

Numerous particular quarantine centers are set up in Pakistan. There is an advanced center built up in Islamabad with 300 beds. In Baluchistan that borders, Iran, an isolated place for 200 individuals, has been arranged however that require facilities. Because of ascending in the number of affirmed COVID-19 cases, a quarantine center of 1000 beds is worked at the immense premises of the MIH instruction complex in Wazirabad.^{27,28,29} Further various isolation centers are set up in Multan, Dara Ghazi Khan, Muzaffargarh, Rawalpindi, Bahawalpur and different urban communities of areas. The greatest center has been set up at Multan where 6000 individuals can be kept at a time.³⁰ Isolation wards and isolate territories are likewise dispensed in tertiary care hospitals as COVID - 19 designated centers.³¹

In government hospitals telemedicine starts, every single elective system is delayed, outdoor facilities are suspended and patients are approached to speak with specialists on telemedicine for minor ailments. Every one of these courses of action is done to keep the beds and clinical staff accessible for COVID-19 cases.³²

Who Recommendations we have Applied in Our Country for Public

Wash your hands regularly.

Maintain social distancing.

Avoid touching eyes, nose and mouth.

Practice respiratory hygiene, meaning, cover your mouth and nose with your bent elbow or tissue when you cough or sneeze.

If you have fever, cough, and difficulty in breathing, seek medical care early.

Maintain at least 3 feet (1 meter) distance far from anyone who is coughing and sneezing.³³

Discussion

The coronavirus pandemic has led to a lot of changes in the world as death toll is increasing and borders are being closed down, Pakistan needs to take a few notes from other countries before this situation gets out of hand.

About 205 countries and regions around the globe have been affected by the Coronavirus with 823,626 confirmed cases and 40,598 deaths at the time of writing.³⁴ While a few other countries like South Korea and China seem to have restrained the virus in contrast to other parts of the world where the digit is expanding dramatically.³⁵ Different territories have different fatality rates and these rates are said to be 4% worldwide, however, the fatality rates are 1.4% in Pakistan.³⁶ even if the whole earth halts immediately, new cases will keep appearing exponentially for about another 5 to 14 days.

Predicting the number of infections and deaths is quite a strenuous work in Pakistan based on the limited amount of data available. However, we can estimate from the data of other regions and countries. Assuming that population density has some sort of relation with the rate of increase in cases, is instinctive. If different countries have the same amount of population densities, then the rate of infection for those particular regions is quite similar. But this is only possible after cases reach a certain threshold. Taking into account that Lahore and Karachi have a very high population density, these regions can be seen as an easy playground for coronavirus and can possibly result in very high number of infections in a short amount of time.³⁷

Pakistan will probably have a lower amount of deaths (as % of infected + open cases) as it has one of the youngest populations in the world, if the provided patients are treated properly. However, Pakistan has only 0.6 beds per 1000 people as it has one of the lowest Public Health Expenditure as % of GDP around the globe. Even if the previous all hospital beds are available, the predicted number of patients would exhaust the capacity soon.³⁷

Most coronavirus patients in Pakistan are under 35 years of age. According to the WHO on COVID-19 cases in Pakistan, 34% of the positive cases belong to the 18-35 age group. Whereas, people aged 35 to 50 account for 24% of the total cases in the country, 7% of total cases are aged 5 to 18 while 1% of total

cases are under 5 years of age. As for the elderly, they account for only 24% of the total cases of coronavirus confirmed in the country. 10% of the total cases remains unclear, shows the report.³⁸ Men account for 64 % of the cases, with 36% being women.³⁸ Also, new evidence from Europe and the United States drew the focus towards younger adults falling extremely sick due of COVID-19. According to the CDC in the U.S, 705 of the first 2,500 coronavirus cases in the U.S were aged 20-44 years. Tomas Peuyo has written an incredibly insightful analyses of the current outbreak and presented eye opening conclusions regarding the virus and its spread. The author derived analyses regarding the number of cases from the mathematical model used by Tomas Peuyo. Two methods can be carried out to estimate the number of true cases (actual number of cases) one is through deaths and other is through reported cases (the cases that have been confirmed by authorities) At the time of writing this article 2291 cases have been confirmed in Pakistan and by applying this model we can predict that without intervention, infected cases can reach tens of thousands within a month after an outbreak so its not just the intervention that will help but it has to be timely one two.³⁸

There are several problems on the way for Pakistan to tackle and defeat COVID-19 outbreak, despite these decisions and actions made. These problem include:

In Pakistan, there is a culture of living in large extended families which leads to over-crowded conditions. Due to this there is more risk of COVID-19 infection.

Lack of adequate infrastructure and per capita hospital beds nationwide.⁴⁰

Inadequate PPE such as facial masks, disinfectants, and ventilators.

Quarantining cities is difficult due to the wide distribution of virus throughout the country.

Pakistan is among the top 5 most populated countries in the world and has several cities with a very high population density

The average social circle and daily interactions in a day are much higher compared to the West.

Domestic tourism is very high.

The only way Pakistan can fight COVID-19 is to have everyone including politicians, health workers to ordinary Pakistanis to work together to overcome this outbreak.

Conclusion

The number of covid-19 patients continues to increase. In order to curb this exponential growth many preventive and responsive measure have been taken, which include, restriction on flights, special task forces dedicated to covid-19, building isolation wards all over Pakistan and selective lockdown strategy. These measures have helped Pakistan to keep in check the spread of the virus and the deaths caused. The fatality rate in Pakistan remains to be 1.4% whereas it is 4% worldwide. Furthermore, vaccination for the virus is also underway, with the government initiatives focusing on health workers and the population over 65. Many governmental and private vaccination centers have been set up around Pakistan. However, there are many problems that are thwarting Pakistan to take full control of the situation. Having one of the lowest health expenditures as a percent of the GDP is one of the key issues. This has given rise to issues like lack of infrastructure, inadequate PPEs, and having a mere 0.6 beds per 1000 patients. Moreover, vaccine has not yet gained peoples' confidence, as a result, people are hesitant to get vaccinated. The government needs to take action so that these people can be educated effectively. If these issues are not catered too immediately, the situation of the pandemic in Pakistan can soon turn into a nightmare.

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