



An Update on the Spread of COVID-19 in Pakistan

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ABSTRACT:

In Pakistan, the outbreak of Covid-19 was announced by the Ministry of Health on February 26, 2020 and a single covid-19 case in the city of Karachi was confirmed. The number of cases started to multiply rapidly in Pakistan, although a strict lockdown was observed from 15th March 2020 until May, 2020. The most prevalent number of cases were in Punjab, decreasing to Sindh, KPK, Balochistan, Gilgit Baltistan, Islamabad, Azad Jamu, and Kashmir in fewer numbers. Pakistan had more chances of threats as its border is near to China, but on the contrary to the statistics proposed by WHO, the number of cases started to reduce in Pakistan from August 2020. This may be due to the hot climatic conditions of the country. According to CDC and WHO, 16th August, 2020, in Pakistan, out of 288041 confirmed cases, 6162 deaths occurred and 265624 cases have been recovered, which is a positive indication towards the recovery of other patients too. WHO has praised the strategies adopted by Pakistan to cope with this novel disease. However, it is also necessary to keep on maintaining the SOPs suggested by WHO in advance if the infection reappears.

Keywords: COVID-19, Ministry of health, Pakistan, WHO, SOPs

INTRODUCTION

Emergence and Spread

The outbreak of covid-19 emerged from the city of Wuhan, China, in December 2019, and it was rapidly spread to the whole world (Zhu et al., 2019). It was treated as a case of

pneumonia with uncertain etiology. At the initial stage, it was investigated in respiratory cases and diagnosed by PRC (People's Republic of China) Centre for Disease Control (CDC) as pneumonia, and named as Novel Coronavirus Pneumonia (NCP) (Ren et al., 2020). Coronavirus is an infectious disease, and its main target area is

human respiratory system. Chinese scientists named this virus as 2019-nCoV. It was named as severe acute respiratory syndrome coronavirus- (SARS-Cov-2) by the International Committee on Taxonomy of Virus. Hence, it was named by the World Health Organization (WHO) as Pneumonia Coronavirus illness 19 (COVID-19) (WHO, 2020). This covid-19 was announced as a 6th strength of crisis services (SPHEC) on January 30, 2020 by World Health Organization (WHO). At initial, it was not the case of a severe outbreak as compared to past coronavirus outbreaks like Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) (Zhou et al., 2020). Covid-19 was the third coronavirus outbreak, which effected 209 nations around the globe. Americans (38%) were on top of the list in positive cases followed by South-East Asians (32%), Europe (21%), East Mediterranean (6%), Africa (1%), Western Pacific (1%), and others. (WHO, 2020).

Covid-19 Spread in Pakistan

In Pakistan, the outbreak of Covid-19 was announced by the Ministry of Health on February 26, 2020. At that time, it was confirmed a single covid-19 case in the city of Karachi. After that, a series of cases had been confirmed in Karachi and Federal Islamabad (Ali, 2020). In less than 15 days, the count was more than twenty confirmed cases, and a considerable number belonged to Sindh province. It was announced that all the positive cases had resulted from the people those travelled from Iran,

Saudi Arabia, and China to Pakistan. Pakistan understood the danger of pandemic alarmingly by neighborhood transmission on 13 March 2020, when the first nearby transmission case was accounted from Sindh, in a patient who was 52 years of age with no universal v o y a g i n g h i s t o r y (<https://www.geo.tv/latest/274482-pakistan-confirms-frst>).

Pakistan began taking exceptional choices from the announcing of clench hand nearby transmission instance of COVID-19. National Security Panel (NSC) chose social separating in the nation, and Instructive establishments were reported to be shut all through the nation just as fixing of fringes with Iran and Afghanistan on 13 Walk 2020. National Security submitted a formulated National Activity Plan for COVID-19 as a strategy record for guaranteeing that every core value for episode readiness, control, and relief w a s f o l l o w e d (<https://www.nih.org.pk/novel-coronavirus-2019-ncov/>). According to the headings of NSC, significant preventive measures were taken to guarantee insignificant national dismalness and mortality. Readiness was controlled by accessible and required wellbeing assets, observation systems, reaction potential and by scaling up of the calculated instrument. Isolate focuses were set up in Taftan at Pak-Iran fringe to distinguish and isolate the Pakistani nationals coming back from Iran, which has been demonstrating exponential development of the sickness (<https://www.geo.tv/latest/273964-Pakistan-alert>). Screening offices were

built up at air terminals likewise alongside the instrument of following contacts of tainted cases. Up to 18 April, 2020, there are 163 isolate focuses in Pakistan that have been built up with a bed limit of 23557 and 25 diagnostics communities. The testing limit was under 500/day during early Walk 2020, which has been elevated to 6500/day (Sultan and Khan, 2013).

Day by day growth

In Pakistan, the infection movement information is observed and distributed by the National Establishment of Wellbeing (NIH) through the live dashboard (<http://covid.gov.pk/stats/pakistan>). Just 21 cases were accounted for on 12th March 2020 when Pakistan announced the strategy of Lockdown to diminish the danger of disease spread. The coming days were very compromising as the patient number was continually expanding in all districts of Pakistan. On 20 March 2020, the quantity of positive cases has

crossed the figure of 500, and within the next two days, the number of cases reached to 1000 on 22 March 2020. At this stage, the illness movement indicated a sharp ascent on a regular routine, and Pakistan Government demonstrated the danger of having around 50,000 patients till 25 April, 2020 according to a report submitted to the Incomparable Court of Pakistan on 5 April, 2020 (Hashim, 2020). On 11 April, 2020, the confirmed positive cases were accounted to be 5038. The most noteworthy day by day increment among the initial fifty days of infection movement was seen on 6 April, 15 April, 16 April and 17 April, 2020 with every day new cases 577, 543, 488, and 465 respectively. Forward-thinking, a sum of 40,151, affirmed instances of covid-19 had been accounted for in Pakistan by the world wellbeing association with 873 passing's (WHO, 2020). To date pandemic statistics of covid-19 of different provinces/territories is summarized in Table 1.

	Confirmed cases	Active cases	Deaths	Recoveries
AJK	112	34	1	77
Balochistan	2,692	2,202	36	454
GB	540	168	4	368
Islamabad	997	877	7	113
KPK	6,061	3,960	318	1,783
Punjab	15,346	10,168	260	4,918
Sindh	16,377	11,891	277	4,209

According to the above data from the National Institute of Health Pakistan, the Sindh province appears with the highest number of confirmed cases i.e. 16,377, whereas Azad Jamu Kashmir reports the lowest number i.e. 112 confirmed cases with only 1 death till date. The highest mortality rate is reported in the KPK region i.e. 318 cases. AJK, GB, and Islamabad seem to be combating well enough against mortality compared to the other provinces and display the highest recovery rates. The graph below shows the daily prevalence data of Covid-19 in Pakistan as of Apr 21, 2020 to May 17, 2020 (Fig. 1).

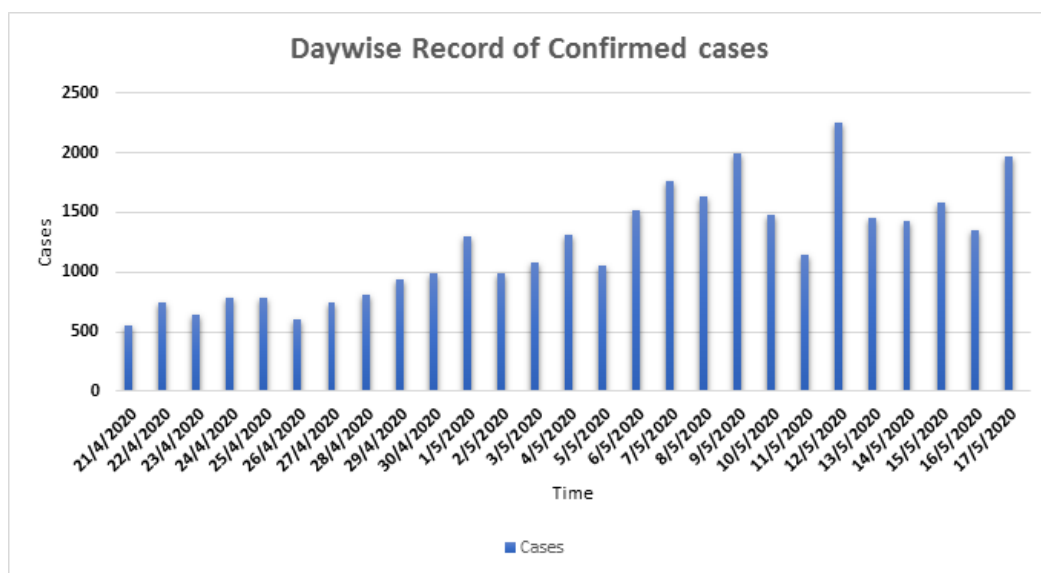


Fig. 1: Daywise data of confirmed Covid-19 cases in Pakistan

It can be seen that the new number of positive cases had increased on a daily basis, and it predicts an alarmingly dangerous situation in the future if precautionary measures are not kept as serious as it should be. The significant number of cases which has been increased since the outbreak, needs a well planned national level policy and action strategy to control this growth of newly affected cases.

Threats to Pakistan and Possible Reasons

The event of a gigantic episode is relied

upon in Pakistan because of an absence of assets and deficient analytic and human services habitats, which will be cataclysmic for Pakistan likewise, Pakistani individuals appeared to be relatively at a higher hazard to the plague of COVID-19 than a large portion of the world, because of close land nearness and a mutual fringe of 272 miles with China and 596 miles with

Iran (https://www.thenews.com.pk/tns/amp/606911-controlling-coronavirus). More cases are conceivable in the coming days for a few reasons; the social insurance framework is

progressively delicate and has no agreeable assets to deal with the condition. The realities showed that the pace of transmission of COVID-19 in Pakistan gives off an impression of being little if we contrast with different nations. It has been proposed that the low pace of contamination might be credited to numerous reasons, for example, humid conditions, sweltering climate, tropical conditions, far-reaching BCG inoculations, and moderately government's prudent steps. At this stage, no examination has been found about coronavirus, and it has been found that there is a considerable connection between coronavirus and environmental conditions, and it can play a vital role in spreading coronavirus in the suspending particles of air. It has published that outright dampness unequivocally influences influenza transmission having drier situations being increasingly positive for the transmission of season's cold virus than out colder situations (Lowen and Steel, 2014). Pakistan has a blistering climate like Saudi Arabia, and due to that environmental changes, it may have possibly lessen spread of the virus in that way. There was a rapid increase in cases after Eid ul-Fitar, a religious festival in Pakistan due to reduction in social distancing practices during the festival. The most prevalent cases were in Punjab, decreasing to Sindh, KPK, Balochistan, Gilgit Baltistan, Islamabad, Azad Jamu, and Kashmir in fewer numbers.

Under such a scenario when the number of cases was increasing rapidly,

It was recommended the correct advances ought to be taken to control the circumstance for example, remaining at homes, lockdown, social distancing, utilizing sanitizers, and face mask when essential. If bend leveling can't be accomplished up to finish of May 2020, it was expected that the quantity of positive case would reach to a number that won't be sensible according to the present limit of National Health System of Pakistan along these lines, therefore a severe execution of preventive and screening must be made through the nation. Contrary to the statistics proposed by WHO, the number of cases started to lower in Pakistan from August, 2020.

Factors that caused the lowering of numbers might be the invulnerable levels as considering the climate of Pakistan, a healthy individual's resistant framework is efficiently more regrettable in winter than summer. One speculation has concentrated on melatonin, which has some safe impacts and is balanced by the photoperiod, which changes regularly. Another theory with more proof is that of nutrient D levels, which depend, to some extent, on bright light presentation. The best proof for the pertinence of this theory is that nutrient D supplementation diminishes the occurrence of intense respiratory disease, as indicated by one research (Coussens, 2017). Pakistani people are having a basic hygienic level and they have been prone to the viral diseases, so it might have caused a resistance against the more evolving viruses.

According to CDC and WHO, 16th August, 2020, in the Pakistan out of 288041 confirmed cases, 6162 deaths had occurred and 265624 cases have been recovered, which is a positive indication towards the recovery of other patients. The WHO has praised the strategies adopted by Pakistan to cope with this novel disease.

CONCLUSION

Covid-19 started from Wuhan, and it has been spread to the whole world, including Pakistan. Full lock down and strict SOPs are required to tackle with this pandemic in Pakistan. However, due to poor Pakistani economy, smart lock down will be applied in near future. The number of emergency clinics and isolate offices being are not satisfactory as required and predicted by WHO. Contrary to the statistics proposed by WHO, the number of cases started to lower in Pakistan from August, 2020. This may be due to the start of more hot days, or due to Pakistani people who are on basic hygienic levels and have been more prone to the viral diseases, resulting in resistance against the more evolving viruses. It is necessary to maintain the SOPs suggested by WHO, CDC USA, and NIH Pakistan.

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