

The Emergence of Plague: Covid 19 - A Pandemic Situation

Research Article

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Abstract

Over an extensive environmental area enormous outbreaks of an infectious disease are termed as pandemics and can result in widespread morbidity and mortality. Pandemics can lead to social, economic and political obstruction. The outburst of this novel disease which upturned from the City of Wuhan December in China 2019, rapidly spread to six continents, gradually becoming a global threat and was soon announced on 11th March 2020 by the World Health Organization (WHO). The aim of this review article was to analyze the pandemic situation of Covid-19 in Pakistan understanding the impacts, challenges, experiences that Pakistan as a country came across ever since the Covid-19 emerged in Pakistan.

Keywords: Pandemic; Coronavirus; Infection; Pakistan; Transmission; Covid-19.

Introduction

At the end of December 2019 COVID-19 (Corona-virus Disease) a pandemic outburst was reported as a first case of pneumonia infection with undisclosed cause in city of Hubei province Wuhan in China. Sooner later on 26th February 2020 Karachi being the popular most city of Pakistan announced its first case of corona-virus disease. It was said that this disease is caused by a RNA virus single-stranded named as SARS-COV-2. This was a new virus not been identified previously among earthlings appeared in the city of Wuhan among individuals having severe pneumonia infection and was said to be interlinked with the local seafood and live animal market. The corona virus disease was believed to transmit via droplets resulting in causing, coughing and sneezing from one individual to another. Therefore the avoidance of its transmission is probably by staying away from effected people. By far, 975,092 confirmed cases of Covid-19 in Pakistan were been documented till July, 2021.

Background

The transmission and the spread model of COVID -19 Pandemic is so rapid and difficult to detect that it cannot be underestimated or avoided. This virus can affect anyone including infants, chil-

dren, adults, pregnant women, nursing mothers, and the elderly irrespective of age and gender. Flu-like symptoms, colds, fever, and respiratory problems are the characteristc features of COVID-19. Till date the established cause of the Coronavirus remains unknown and unidentified, but it is assumed to spread by animals and has the potential of transmitting from one species to another, including humans [1]. Several countries have enforced policies to impose lockdown to break the chain of spreading the COVID-19 virus, however the death rate continues to increase overtime as it spreads rapidly in a network of human contact being highly contagious [2].

Minister of Health in Pakistan on 26th of February 2020 announced the first two cases of COVID-19 in Karachi and capital city Islamabad. In South Asia, next to India, Pakistan was the second worst-hit country [3]. COVID 19 outbreak was declared as sixth public health of emergency Services (SPHEC) on January 30, 2020 by the World Health Organization (WHO) [4].

Emerging And Current Scenario Of Covid-19 In Pakistan

At the end of December 2019, COVID-19 outburst was first time witnessed in the capital City of China. The outspread was rapid

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first in China and then worldwide in 209 countries of Pakistan, America, Europe, Australia and Asia. More than fifty thousand people lost their lives and one million plus people have so far been affected throughout the world, while this figure still increases rapidly. For the control of COVID-19 different strategies have been adopted worldwide. Pakistan has taken meticulous measures even with limited resources like designing specific hospitals, labs for testing, facilities for quarantine, campaign for awareness and steps to monitor and limit the transmission of virus. [5]

Pakistan with fragile health system currently reinforced its provision against COVID-19 through implementation of national emergency and policy formulation, establishing compulsory thermal screenings at all entrance point, and scrutiny and contact tracing through data collection [6]. The capacity of testing and diagnosis has been reinforced by bringing in Polymerase Chain Reaction (PCR) kits for Covid19 diagnostics [7]. Following WHO guidelines for suspicious cases at several cities and hospitals resources were organized to set up facilities for quarantine, [8] and scrutiny units have been setup to track contacts of victimized cases.

According to Department of Health of Pakistan, a total of 981,392 (2,545) positive cases that were confirmed in the country with 2,336 critically ill and 22,689 deaths by far till July, 2020. Punjab province reported the highest number of cases 349,111 accompanied by Sindh 351,006, Khyber Pakhtunkhwa (139,960), Balochistan (28,588), Gilgit Baltistan (7,163), and Jammu & Azad Kashmir have 21,481 confirmed cases.

Covid 19 Outbreak

The world has changed due to the pandemic within sixteen months. COVID-19 policies implemented by the authorities are nudged by shock along with realization, Almost every country has realized that the countries' majority of income has been a lost priority, and to up-boost the country's economy, the health, its social sector should be the areas of maximum priority. Although Pakistan may not experience favorable conditions right now however a secure economy and easily manageable formulation for ban on borders and implementation of stringent policies will pull Pakistan out of this global health catastrophe that has claimed and engulfed thousands of lives. However, within the available resources, the country has sufficiently raised the level of preparedness but still, Pakistan needs to speed up testing facilities across the country on war-footings keeping the huge population of Pakistan in mind. COVID-19 will have lasting health and economic effects beyond morbidity and mortality caused directly by the virus itself. [9]

Initial Myths And Misconceptions Related To Covid-19

As soon as WHO declared COVID-19 infection as pandemic, chaos was spread worldwide. Initially People had the fear regarding the virus to be deadly and highly dangerous due to inaccessible availability of vaccine or specific treatment [10, 11] similar misinformation was spread by media reports creating hype regarding the death toll which further fueled the situation. (WHO) including different agencies related to health have incorporated necessary measures to disseminate the particulars and rule out the delusions of COVID-19 and its remedies. The misconceptions that spread the air were that the virus survival is not more than nine days on a surface and can easily be disinfected by antiseptics [12]. One of the misconceptions regarding the spread of the virus was that pets or other animals could be an origin of its transmission, or it could have spread through the Hunan Seafood Wholesale Market. But there is no proof to accept that any animal or pet is origin of spread of disease. The Centre for Disease Control (CDC) states no proof has been found regarding animals and pets spreading the corona virus [13]. Another misconception that gain much fame was that people of all age groups can be suffered by COVID-19. But older people were more susceptible towards the disease. Although ones who had severe medical conditions (such as hypertension, diabetes mellitus, cardiovascular diseases, asthma and other co-morbidities) were more prone towards the virus having high mortality rate. [14]

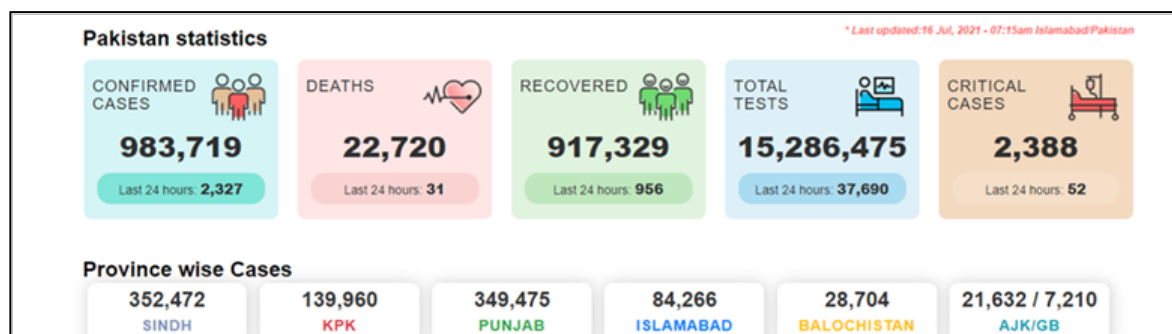
Second Wave Of Covid 19 In Pakistan

The Government of Pakistan declared its subsequent second wave of COVID-19 on 28th October 2020 infecting around 750 cases in a single day. Active cases rapidly reached to 11,000 and around 93 hospitalized patients were put on ventilators [15]. The second wave's increased number of cases compelled the authorities to impose the decision of closing of learning institutes, and commencing of online education, and to postponed all types of exams and assessments scheduled [16] excluding exams of entrance, recruitment and admission under strict compliance to SOPs. [17] Daily update in the development of the pandemic situation throughout Pakistan highlighted a rapid rise of confirmed cases that included active, recovered, and deaths tolls related to Covid -19.

Third Wave Of Covid 19

More than a year and half into the pandemic, Pakistan is fighting

Figure 2. Detailed statistics of Pakistan showing confirmed cases, no of deaths, recovered patients number, total tests done and number of critical cases.



the third wave that is sweeping across its main urban centers. The hospitalization statistics increased manifold compared to the first and the second wave. However, after a relentless increase, the statistics are now beginning to register a slight respite. The seven-day moving average of the positive percentage now stands at 9.8%. The sustained decrease is contingent on collective Standard Operating Procedure (SOP) compliance, among other factors. While we now understand some of these other factors well, many still remain elusive.

Immunizations And Vaccinations

The national vaccination drive is also underway. With no local production, Pakistan has vaccinated 4,323,805 citizens. These COVID-19 vaccines develop an immune response to SARS-Cov-2 virus providing protection against the disease. The developed immunity that comes through vaccines means there is a low risk of developing the illness and there will be less severity in the symptoms of the disease. This immunity acquired helps an individual to fight against if exposed to the virus. Being vaccinated helps to keep the people around you safe, because if you are protected from getting infected yourself, the probability to infect someone else from the virus is less. First line of defense against this deadly virus was particularly important for healthcare providers, elderly people and those with serious co-morbidities. The COVAX Facility provided Pakistan its first consignment of AstraZeneca by Oxford (SII-AZ AZD1222) vaccine for corona virus in May 2021. The shipment of 1,238,400 dosage of vaccines, followed 1,236,000 more in a few days, helped the authorities in its momentous journey to eradicate the virus bringing it to an end. Approximately 3.3 million plus vaccinations have been monitored to health practitioners and general public. The 2.47 million doses of COVID-19 vaccine Oxford-AstraZeneca were utilized to vaccinate about 1.24 million people at high-risk against the virus. Previously, vaccination was open to citizens above the age of 40 by registration at a given government number. Currently citizens above the age of 50, 18, 60 are permitted to stroll into the nearby vaccination place for vaccination. Home vaccination services were offered by some districts for elderly and disabled individuals. Vaccines like Chinese Sinopharm, Sinovac, CanSino-Bio and Russian Sputnik have so far been inoculated in Pakistan with some Moderna vaccine recently. Pakistan has given at least 21,660,650 COVID vaccines so far. Presupposing each individual needs 2 doses, that's said to be sufficient to vaccinate about 4.9% of the population of the country.

Impact On Psychological Well-Being By Covid-19

COVID-19 imposed serious threats to physical health triggering negative impacts on the mental health, social and psychological wellbeing of the population [18]. The state of people in which they realize their own ability to cope with life stressors refers to

the Psychological and mental health of the population. [19] Many factors play a vital role in it, like uncertainty of the illness, social distancing, self-isolation, and quarantine facilities. Apart from the obvious morbidity and mortality this pandemic brought psychological distress and adverse mental consequences to the population, who were in a constant state of lockdown and quarantine for the entire half year in 2020 last year. The prolonged lockdown and curfew measures in Pakistan have affected the lives of common people giving rise to a lot of psychological problems. Hence, the assessment of the psychological impact among the general population was crucial in guiding policies and interventions to maintain their psychological well-being. Again during these times when the third and fourth waves of COVID-19 emerge and in many cities necessity to impose strict lockdowns and bans on the movement of its people seems to be the call for the moment, those relying on daily wage informal work and living below the poverty line are yet again more likely to suffer as soon as the government plans for more shutdowns. Fear of having COVID-19 and its transmission to other family members was significantly associated with poor wellbeing. [20]

Socio-Economic Impact Of Corona Virus Outbreak

Pakistani Government eased the lockdown measures from 15th June, 2021 to compensate the business loss and economic depression in the country due to the pandemic. The public places, offices, shops, travelling services were opened to anticipate the business activities and transportation of the people. Constant movements of individuals within or outside the city could contribute in taking COVID-19 pandemic to higher levels. As previously easing the lockdown measures increased the outspread of the disease and it is further expected to increase four times quite this value in next months too. Therefore for this relaxation in lockdown given within the month of May and June a service campaign for the public needs to be launched by the Government. Hence the people should be aware of the fast growing pandemic at all times. The frontline health care providers, University faculties, educationalists, and media personnel should play a vital role to create and spread awareness among people of the seriousness of Covid-19 and convince them to take every possible measure essential for his or her own security. And if required for the future risk management of the country against the pandemic the country should be prepared to impose a strict and firm lockdown in the month of July and August as the news regarding the fourth delta wave emerges.

Pakistan Facilitation Against Covid-19

A lot of measures like execution of awareness for hygiene, quarantining and isolation of the patients, ban on important entrance points, on borders for international routes, closing of amuse-

Figure 1. Vaccination Statistics of partially and fully vaccinated individuals with total doses administered in Pakistan.



ment parks, cinemas, schools, colleges, universities, centers for business, delaying of international and national flights, launching of clinical trials, and surveillance of epidemiology, for the purpose of preventing the population from disease.[21] Number of healthcare practitioners (HCPs) are battling since day one on the frontline against the pandemic which automatically brings them at more risk.[22] Combine efforts such as appropriate distribution measures for prevention, maintenance of national economic development throughout the country require calculated steps and strategies, medical resources and formulation of production activities. Countries can only be successful in fighting against the further spread of the disease by adopting careful strategies for infectious disease management and control and eventually by strengthening of medical and healthcare managementsystems [23]. The main approach for the global response for combatting coronavirus was based on lockdowns and social distancing [24]. Many healthcare practitioners and workers have played a key role during these times staying on duty in coronavirus wards, isolations centers and emergency departments, serving both infected and non-infected emergency patients. Physicians have faced several known challenges towards health and wellbeing locally since the emergence of the coronavirus [25].

A COVID-19 Relief Fund was founded by the Pakistan's Government to receive donation for the wellbeing of general public. Government launched social network helplines in seven (07) native languages. All over Pakistan isolation wards were built to prepare for COVID-19 pandemic, Province/Region wise number of designated Hospitals ICT-01, Punjab-06, Sindh-04, Baluchistan-10, KP-07, GB-04 and AJK-03. In quarantine wards the total number of beds from the whole country was 23,557 which were established. Whereas, in Islamabad 350 beds, in Punjab 10,948, Sindh 2,100, Baluchistan 5,897, KP 2,760, GB 972 and in AJK 530 beds facilities were established in isolation ward.[26]

Pakistan Strategies to Overcome the Challenges Faced with Emergence Of Covid 19

The Pakistani authorities have taken remarkable steps to combat the effects of the Covid-19 crisis. This could be related to timely diagnosis, monitoring touch, isolation processes and methods, and instruction outside the health region. Some countries feel that Pakistan holds a specialty of enhancing public fitness handiest from time to time, mainly as a response to episodes in which incapacity is developing. The country therefore, wishes a health gadget which can boom both availability and remedy with a purpose to properly and well timely address foremost outbreaks. Laying the right foundation for starting an economic system is crucial for authorities. One of these pandemic underscores the failure of successive authorities' responses to poverty, fitness care, and social protection including governance. Even as one can't expect what's going to cause the next essential disaster and when, step one can together assist governments to address it higher. However, any approach that opposes the epidemic have to address the old weaknesses [27]. The demanding situations currently ongoing in Pakistan on this crisis are far from over, and it remains to be seen whether or not huge-scale authorities' interventions could be sufficient to lessen human losses and economic hardship. As a developing country, Pakistan will not be able to enter the over-all-fledged region of the US due to the fact the economic consequences can be devastating. To improve the overall monetary,

Pakistan has been imposing smart lockdowns coverage [28]. The country reopened its operations to preserve monetary healing in June and July. The program outlines three procedures to early detection, isolation and affected person care, discount of social and monetary affects through interdisciplinary interactions, and essential unresolved issues concerning clinical sensitivity, occurrence of infection, treatment, acceleration of diagnostic development, remedy and vaccination excessive first-rate and innovation. Those goals can be finished via a ramification of public health measures, such as rapid identification, diagnostic and case control, contact identity and tracking, manage contamination procedures used in fitness care settings, fitness tasks for tourists, public awareness, and threat conversation. [29]

Conclusions

In a nutshell, adequate developments on medical and technical fronts with maximum allotment of preventive measures and resources shall help to take the country out of the COVID-19 pandemic. Delayed actions and mismanagement however have high tendency of speeding up the size and economical loss caused due to pandemic in the upcoming months [30]. The coronavirus disease continues to spread across the world following a trajectory that is difficult to predict the health, humanitarian and socio-economic policies adopted by countries will determine the speed and strength of the recovery [31].

Future Recommendations

Regardless of notable degree of political commitment through the authorities, the continued Covid-19 epidemic situation with regard to transmission of the infectious diseases there lies a vital barrier and flaw inside the emergency and health structure of Pakistan.

1. Co-ordinated responses between Federal and provinces, centralized procurement of personal shielding equipment (PPE) and medical devices like ventilators, respirators and so forth, want instantaneous priority.
2. Media function could be very crucial to be able to unfold awareness and to keep the panic away amongst well-known public concerning the transmission of virus by proper safeguarding of our frontline employees and healthcare workers, and efficient use of facts of technology for contact tracing [32]
3. Collective efforts via our federal and provincial governments, the health area, health regulatory bodies, media agents, and most importantly the public in general needs excessive quantity of awareness so one can emphasize onnot following the SOPs and implementing social distancing.
4. At some point of these testing instances, improving protection at place of business, growing work family stability, imparting employment and monetary benefits, team-building and emotional stability, staffing and sources, place of business safety and protecting services, paintings family stability, protection and governance participation, and crew-building with emotional stability if carried out into our structures can bring durable blessings for patient safety requirements and may eventually improve quality of health.
5. It's far the social responsibility of each Pakistani to prevent the further spread of the virus. Employers and workers should play a vital role to ensure that places of work are as safe as possible to reopen and remain opened. Inside the absence of complete vac-

mination of all the employees, it's miles critical that corporations and employers take the lead in ensuring suitable and adequate infection control measures in offices with the intention to lessen the transmission of the disease and make it certain that a secure and wholesome environment for employees is created.

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