

Pakistan's Role in COVID-19 Pandemic

Javed Akram¹, Sultan Ayoub Meo²

KEYWORDS: SARS-CoV-2, COVID-19, Ehsaas emergency program, PROTECT.

How to Cite This:

Akram J, Meo SA. Pakistan's role in COVID-19 pandemic. *Biomedica*. 2020; 36 (COVID19-S2): 1-4.

The novel "Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2)" causing Coronavirus disease-2019 (COVID-19) emerged in December 2019, and swiftly spread worldwide.¹ The COVID-19 pandemic has posed a great risk to global health system and economy.² As of May 14, 2020, it has involved 216 countries and territories and has infected 4248389 people with a mortality rate of 294046 (6.92%).³

The COVID-19 has variable biological and epidemiological features and is highly contagious. It infected a large group of people in a shorter period compared to "Severe Acute Respiratory Syndrome Coronavirus-1 (SARS-CoV-1) and Middle East Respiratory Syndrome (MERS-CoV). However, the mortality rate of MERS-CoV was higher than SARS-CoV and COVID-19".¹

Pakistan is home to approximately 212.21 million people.⁴ On May 14, 2020, there are total 35788 COVID-19 confirmed cases with mortality rate of 770 (2.15%).⁵ The maximum number of cases has been reported from the province of Punjab 13561 (37.89%), Sindh, 13341 (37.27%), Khyber Pakhtunkhwa 5252 (14.67%), Balochistan 2239 (6.25%), Islamabad 822 (2.29%), Gilgit-Baltistan 482 (1.34%) and AJK 91 (0.25%). However, in the entire country, 8695 (24.29%) people are recovered from the disease.⁵

The number of cases from various regions of Pakistan indicates a smaller risk associated with the COVID-19 pandemic event. The government of Pakistan took early preventive measures against COVID-19. Pakistan implemented policies of lockdown, stay-at-home, social distancing, and quality hospital care to the people. From the beginning, the government understood the severity of the COVID-19 pandemics and took immediate serious actions. The government has cancelled all international flights and has also attempted to minimize large gatherings from March 17, 2020 onward. These early preventive measures minimized the pandemic peak and number of cases from the country. The state officials handled the coronavirus pandemic by taking vigilant preventive measures on time to ensure the safety of citizens.⁶ The government launched various community programs to support the poor people during the lockdown, quarantine period due to COVID-19.

COVID-19 and Ehsaas Emergency Program

In COVID-19 crisis and lockdown, considering the situation of poor, jobless people and blue-collar workers, on April 1, 2020, Pakistan started "Ehsaas Emergency Program" under the leadership of a world-renowned physician and scientist Prof. Dr Sania Nishter. The Emergency Cash application, a registration web-portal was developed to check the eligibility. Through this program, the government provided "small assets" to poor people so that they can earn a living and can come out of the dearth during this COVID-19 pandemic. The program covers 12 million families; 12,000/PKR per family, with a total budget of 144 billion rupees. The state

-
1. Javed Akram
Vice Chancellor, University of Health Sciences, Lahore – Pakistan.
 2. Sultan Ayoub Meo
Professor and Consultant in Clinical Physiology, Department of Physiology, College of Medicine, King Saud University, Riyadh-Kingdom of Saudi Arabia.

Correspondence to: Prof. Javed Akram
Vice Chancellor, University of Health Sciences, Lahore – Pakistan.
Email: vc@uhs.edu.pk

is already providing free testing and treatment to their citizens. There were combined efforts from multiple government entities to test and treat in coping with pandemics.⁶

Pakistan Efforts and World Health Organization

In the first week of February 2020, while there were no reported cases of COVID-19 patients, the government of Pakistan was taking precautionary measures, in case this highly contagious virus may infect the state, in line with the International Health Regulations. As a responsible nation, Pakistan's health authorities actively worked with the World Health Organization (WHO) guidelines for establishing and strengthening preparedness for COVID-19 pandemic. Pakistan fully acknowledged the WHO guidelines, which includes how to screen sick people, test, treat and control infection in health centers, maintain the right supplies and communicate with the public. Moreover, specific tools have been implemented such as the capacity assessment tool for health facilities.⁷

Considering the government's efforts, the WHO representative in Pakistan, Mr. Palitha Mahipala appreciated the efforts and said "I have been very impressed by the commitment of the Government of Pakistan to fully mobilize all preparedness measures to tackle this emergency. They have been vigilant and are prepared for all eventualities".⁷

Pakistani Universities Roles in COVID-19 Crisis

Pakistan is home to 213 Higher Education Commission (HEC) chartered universities and degree awarding institutes.⁸ In addition, there are 30 medical universities and 114 medical schools in public and private sectors.⁹ In COVID-19 crisis, the medical universities, mainly the University of Health Sciences (UHS), Lahore, played a significant role as a front liner for providing early testing and treatment services to the community. The university started an awareness campaign on avoiding the spread of COVID-19, and educated the society through images and videos during the live teleconsultation. The UHS launched academic e-learning systems, community services and brought innovation through research. The UHS conducted multiple workshops, and discussion sessions both in print and electronic media to provide information to the community.

The UHS launched a telemedicine service for information on COVID-19 and treatment guiding services. The UHS telemedicine center registered 7300 volunteers, including health professionals, medical students and 5200 physicians who had completed COVID 19 training courses covering all specialties. The telemedicine center received 67340 calls and provided consultations to 14320 patients.

During this COVID-19 pandemic, UHS started online classes, examinations and evaluations, health informatics telemedicine modules. The university in collaboration to industrial sectors, manufactured hand sanitizers, respirators, and Personnel Protective Equipment (PPEs), along with development of SOPs for local problems, local solutions designing and quality evaluation of materials for PPEs, industrial linkages and commercialization at no-profit basis (15000 per day). UHS donated about 375000 kits all over country.

UHS has rapidly mobilized research efforts towards the COVID-19 pandemic. Presently, there is no standardized and definite treatment for COVID-19. UHS in collaboration with Pakistan Society of Internal Medicine (PSIM) is investigating preventative approaches and treatment options for COVID-19 including stem cell therapy and monoclonal antibodies against the virus through hydrodroma. The team is highly motivated to accelerate the discovery and development of a safe and effective antibody treatment to fight against COVID-19.

The UHS established international collaborations with Oxford University, Cardiff University, and University College London, UK. Moreover, UHS in cooperation with other academic and health institutes in Pakistan, started a "Pakistan Randomized and Observational Trial to Evaluate Coronavirus Treatment (PROTECT)". The university with international collaboration started clinical trials on chloroquine, hydroxy chloroquine, and convalescent plasma and published a series of studies on COVID-19 pandemic in reputable international journals.

Pakistani officials including, medical, paramedical staff, Pak Army, Rangers, Police and media, all are working very hard with all possible sources and the state is fighting a war against invisible, elusive enemy COVID-19 pandemic.

GOVERNMENT OF
PAKISTAN**STATS**

COVID-19

CHATBOT

PRESS RELEASE

GUIDELINES

PREVENTION

FACILITIES

AIR TRAVEL

FAQ

PUBLIC SERVICE MESSAGE

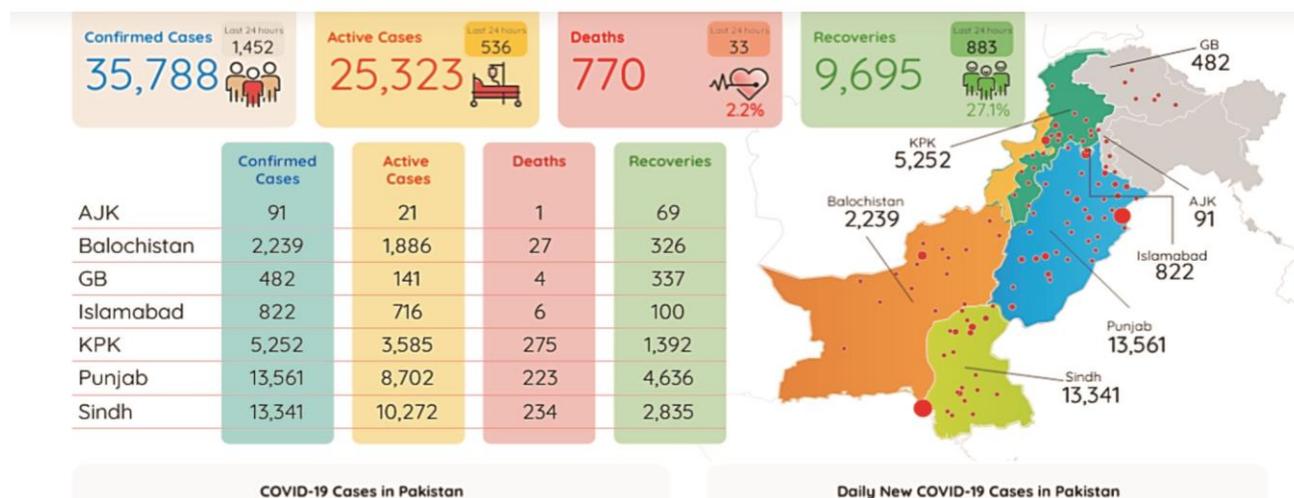


Fig.1: COVID-19 cases and deaths in various regions of the Pakistan. Data retrieved on May 14, 2020⁵

CONFLICT OF INTEREST

None to declare.

FINANCIAL DISCLOSURE

None to disclose.

REFERENCES

1. Meo SA, Alhowikan AM, Al-Khlaiwi T, Meo IM, Halepoto DM, Iqbal M, et al. Novel Coronavirus 2019-nCoV: prevalence, biological and clinical characteristics comparison with SARS-CoV and MERS-CoV. *Eur Rev Med Pharmacol Sci.* 2020; 24: 2012-19.
2. Meo SA, Al-Khlaiwi T, Usmani AM, Meo AS, Klonoff DC, Hoang TD. Biological and epidemiological trends in the prevalence and mortality due to outbreaks of novel Coronavirus COVID-19. *J King Saud Univ Sci.* 2020 Apr 9. [Epub ahead of print].
3. World Health Organization: Coronavirus: Available online at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>. [Last accessed on May 14, 2020].
4. World Bank: Available online at: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=PK>. [Last accessed on May 14, 2020].
5. COVID 19. Available online at: <http://covid.gov.pk/>. [Last accessed on May 14, 2020].
6. Poverty alleviation and social safety division. Available online at: <https://www.pass.gov.pk/Detailf90ce1f7-083a-4d85-b3e8-60f75ba0d788>. [Last accessed on May 14, 2020].
7. World Health Organization. Pakistan. Available online at: <http://www.emro.who.int/pak/pakistan-news/who-supports-government-of-pakistan-in-strengthening-novel-coronavirus-preparedness-response.html>. [Last accessed on May 14, 2020].
8. Recognized universities: Available online at: <https://www.hec.gov.pk/english/universities/pages/recognised.aspx>. [Last accessed on May 9, 2020].
9. PMDC. Available online at: <http://www.pmdc.org.pk/Universities/tabid/166/Default.aspx>. [Last accessed on May 14, 2020].

Prof. Dr. Javed Akram is renowned general physician with more than 40 years of teaching, research and administrative experience. He specializes in infectious diseases, blood pressure, heart diseases, diabetes and hypertension management. He holds MBBS (PU), MRCP (UK), FRCP (London), FRCP (Edinburgh), FRCP (Glasgow), FACC (USA), FACP (USA) and FASIM (USA) qualification. He is also the medical advisor to the Royal College of Physicians, London. He is an author of 06 books and published more than 100 scientific papers in

peer reviewed national/international prestigious bio-medical Journals. In regard of his invaluable services to the profession, community and research, he has been awarded with Tamgha-i-Imtiaz (2011) by the President of Pakistan.

Prof. Dr. Ayub Meo [MBBS, Ph.D. (Physiology), M. Med Ed. (Dundee), FRCP (London) FRCP (Dublin), FRCP (Glasgow), FRCP (Edinburgh)] has a teaching experience of about 24 years. He is an author of 10 books and published more than 150 scientific papers in peer reviewed national/international prestigious bio-medical journals. His area of interest in research is Respiratory Physiology, Diabetes Mellitus and Medical Education. He is also a member of Editorial Board of prestigious International and local peer reviewed scientific journals.