

COVID-19 in Pakistan

Ghazala Rubi, Irfan Malik, Zainab Javaid

ABSTRACT

Coronavirus disease-2019 (COVID-19) outbreak was first declared as emergency on January 30th 2020 by World Health Organization (WHO). The Government of Pakistan presented a National action plan, which aimed to inhibit the spread of this Corona virus and to reinforce the effective reaction due to this COVID-19 epidemic. Lahore General Hospital (LGH) is the first public sector hospital that started COVID-19 real-time reverse transcription polymerase chain reaction (rRT-PCR) testing to serve community. COVID-19 has affected the mental health of public in general and health professional in particular. We need to support health professionals to do their jobs, be safe and stay alive. Future research should explore the fears and coping strategies of health professionals during pandemics.

KEYWORDS: COVID-19, World Health Organization (WHO), rRT-PCR, Health professionals.

How to Cite This:

Rubi G, Malik I, Javaid Z. COVID-19 in Pakistan. Biomedica. 2020; 36 (COVID19-S2): 33-4.

Coronavirus disease-2019 (COVID-19) outbreak was first declared as public health emergency on January 30th, 2020 by World Health Organization (WHO). Including Pakistan, COVID-19 affected more than 209 countries of the world.¹ The border countries of Pakistan are highly affected by this COVID-19 pandemic including China and Iran. Every year large numbers of Pakistani visited Iran for their religious activities. Like Italy, Iran in north had highest number of mortalities due to COVID-19. Though Pakistan closed its Iran border on February 23rd, 2020 after this pandemic, yet many pilgrims succeeded to come back to Pakistan via Afghanistan or by other routes.²

On February 26th, 2020, the first two cases of

COVID-19 were confirmed by the government of Pakistan. One case was confirmed from Karachi and one from Islamabad, both these cases were pilgrims, came back from Iran. The geographical position of Pakistan, with this constant rise in the COVID-19 cases, desired high level of some action plan by the Federal government along with Civil Aviation Authority and due to these action plan government quarantined the pilgrims in Taftan city, Baluchistan and closed monitoring along with screening of travelling passengers was done on airports. The government presented a National action plan, which aimed to inhibit the spread of this Corona virus and to reinforce the effective reaction due to this COVID-19 epidemic.^{3,4}

On March 9th, 2020, nine cases were reported in Karachi, making total of 16 COVID-19 positive cases in Pakistan and Sindh was having highest number of cases of total 16 cases. On 13th March first local transmission of COVID-19 was documented in Pakistan along with total number of 28 cases were confirmed on the same day. On March 15th 2020, first case was confirmed in Punjab who travelled from United Kingdom.⁵ On March, 18th 2020, total 302 cases were confirmed as positive COVID-19 in Pakistan, sideways with first two deaths due to

-
1. Dr. Irfan Malik.
Associate Professor of Pulmonology
Lahore General Hospital, Lahore-Pakistan.
 2. Ms. Zainab Javaid
Internee of COVID-19 PCR Lab
Lahore General Hospital, Lahore-Pakistan.

Correspondence to:
Dr. Ghazala Rubi
Director Research Lab,
Post Graduate Medical Institute
Lahore General Hospital, Lahore-Pakistan.
Email ID: rubighazala@yahoo.com.

COVID-19 were documented in Khyber Pakhtunkhwa (KPK) on the same day.²

World has 4.66 million people affected with COVID-19 until now with 1.71 million recovered cases and 312,000 confirmed deaths so far. In Pakistan as of 17th May, total COVID-19 positive cases are 40151, with 14584 cases in Punjab, 15590 in Sindh, 5847 in KPK, 2544 cases in Baluchistan, 947 in Islamabad, 527 in Gilgit, Baltistan and 112 in Azad Jammu and Kashmir on dashboard of COVID-19 by government of Pakistan with case fatality rate is about 0.8% until now, which is far less than China and Italy.²

Lahore General Hospital (LGH) is the first public sector hospital that initiated COVID-19 real-time reverse transcription polymerase chain reaction (rRT-PCR) testing. The Central Research Lab of Postgraduate Medical Institute (PGMI)/ LGH/ Ameer-ud-Din Medical College Lahore changed the provision and established RT-PCR facility for COVID-19 testing. RT-PCR using the nasopharyngeal swab is the main stay of diagnosis. RT-PCR positivity can persist for several days even after resolution of symptoms. While antibody responses become positive several days after the onset of symptoms. Antibody based immunoassays have limited role in the diagnosis of early asymptomatic disease. Such assays may be useful for surveillance purposes. Their role in selecting the individuals that may benefit from vaccination that could be deployed into essential employment roles are being investigated.

During COVID-19, the health professionals are anxious, overworked and financially unstable while planning, creating and caring for others and their families. Many of them are working alone in same areas for so long as they don't have replacement. More than 100 doctors and medical workers in Pakistan have so far been infected with the novel Coronavirus while interacting with patients and

few of them have lost their lives. Strong governmental policies must be laid down to cater for an acute shortage of Personal Protective Equipment (PPE), other protective gears and medical facilities available for doctors. Above all, the government is relaxing restrictions of lock down that may all lead to a surge in Coronavirus cases in Pakistan. I fear that our entire public healthcare system will be overwhelmed.

CONFLICT OF INTEREST

None to declare.

FINANCIAL DISCLOSURE

None to disclose.

REFERENCES

1. Waris A, Atta UK, Ali M, Asmat A, Baset A. COVID-19 outbreak: current scenario of Pakistan. *New Microbes New Infect.* 2020; 35 (2): 100681.
2. Raza S, Rasheed MA, Rashid MK. Transmission potential and severity of COVID-19 in Pakistan. *Preprints.* 2020; 2020040004. Available online at: <https://www.preprints.org/manuscript/202004.0004/v1>. [Last accessed on 1stApril, 2020]. [Epub ahead of print].
3. National action plan for preparedness & response to Coronavirus disease (COVID-19) Pakistan. Available online at: www.nih.org.pk > COVID-19-NAP-V2-13-March-2020. [Last accessed on 5thApril, 2020].
4. Khan S, Khan M, Maqsood K, Hussain T, Noor-Ul-Huda, Zeeshan M. Is Pakistan prepared for the COVID-19 epidemic? A questionnaire-based survey. *J Med Virol.* 2020;10.1002/jmv.25814. [Epub ahead of print].
5. Sethi B, Sethi A, Ali S, Aamir HS. Impact of Coronavirus disease (COVID-19) pandemic on health professionals. *Pak J Med Sci.* 2020; 36 (COVID19-S4).S12-S7.

The author is a Geneticist and Molecular Biologist [M.Sc., M. Phil., (Mol. Biology,) A.I.B.M.S; (UK), PhD (Human Genetics & Molecular-Biology)]. She is currently working as Director of Central Research Laboratory at Post Graduate Medical Institute Lahore. She holds the responsibility of section of PCR Diagnostics (HCV RNA PCR & HBV DNA PCR), research development for different basic clinical sciences sections, looking into minor & major mutations leading to different diseases and establishment of new innovative Research Lab in first public sector institute also gets added in her achievement list. She is working on more than 25 Research projects and has a vast experience of more than 20 years in her field.