Journal of Medical Research and Health Sciences
Received 5 Aug 2020 | Accepted 7 Sep 2020 | Published Online 11 Sep 2020

DOI: https://doi.org/10.15520/jmrhs.v3i9.247
JMRHS 3 (9), 1090–1094 (2020)

ISSN (O) 2589-9031 | (P) 2589-9023

MINI REVIEW ARTICLE

Coronavirus Disease in Pakistan: Response and Challenges from Prevention to Care

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Abstract

Immensely contagious Coronavirus disease was imported in Pakistan and became health emergency concern in no time. Pakistan, being a resource limited nation has encountered worst transmission dynamics and received public, social, economic challenges. Pakistani officials responded sufficiently to outbreak. However, community transmission became an emergent threat and proportion of mortalities became exponential. Hence, Pakistan was scantily prepared to respond to an overhanging hazardous outbreak. This study comment on response of Pakistani government to Coronavirus disease, sheds light on challenges faced during the Covid-19 pandemic and concluded by highlighting concept of preparedness and providing some recommendations.

Keywords: Coronavirus, Pakistan, Pandemic

1 | INTRODUCTION

The Coronavirus disease 2019 (COVID-19) is caused by Severe Acute Respiratory Syndrome Coronavirus (SARS-COV-2). COVID 19 was first reported in Wuhan, China in December 2019 and was declared pandemic by WHO (World health organization) on January 30, 2020. (1) (2) In Pakistan the first two cases of corona virus were reported in Zairians from Iran on 26 February, 2020. (3) Like other countries, Pakistan also observed a surge in the number of cases and at the time of writing of this review on 13 Aug, 2020 this virus has affected 286,674 people and has caused 6,139 deaths in Pakistan, with Sindh reporting highest number of confirmed cases and deaths reported **see Figure 1**. (4)

We used publicly accessible information available on the websites of government of Pakistan (COVID-19 Dashboard), WHO, reports from newspapers and research articles. This study summarizes efforts of Pakistani officials against COVID-19 prevention, highlights the challenges faced in preventing its spread and curing the disease. This article also shed light on the concept of preparedness to cope with

Supplementary information The online version of this article (https://doi.org/10.15520/jmrhs.v3i9.247) contains supplementary material, which is available to authorized users.

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such outbreaks.

	Confirmed Cases	Active Cases	Deaths	Recoveries
AJK	2,164	134	59	1,971
Balochistan	12,044	1,448	138	10,458
GB	2,402	342	58	2,002
Islamabad	15,323	2,130	173	13,020
KPK	34,947	1,464	1,235	32,248
Punjab	94,865	6,297	2,179	86,389
Sindh	124,929	4,660	2,297	117,972

FIGURE 1: COVID-19cases in Pakistan shows the statistical data of COVID-19 cases in differentregions of Pakistan.

* AJK = Azad Jammu Kashmir * GB = Gilgit Baltistan * KPK= Khyber Pakhtunkhwa

Response

Pakistan is a developing country with grave financial crisis and a weak health infrastructure. Keeping in mind of all the challenges country facing and could face the government stood up to fight against COVID-19 by strategic policy formulation and the execution. Government officials formulated The National Action Plan which was designed to overcome the emerging threats of this fatal disease. [5] As the initial cases were reported in travellers from Iran, the government started its plan execution by closing the all the entry points of the country. Thermal screening ensued at all flying fields for early detection and contact tracing. [6] As the number of cases started growing in spite of initial measures of screening and contact tracings, Pakistani government took a bold and difficult decision to order strict lockdown in across the country in order to tackle increased COVID-19 cases burden. This lockdown included closure of all educational institutions, offices, hotels and malls. Public gatherings including congressional prayers were also prohibited. The western borders were sealed and all international flights adjourned provisionally. (7) (8) Outpatient department (OPD) at hospitals were temporarily closed to restrict unnecessary movements. Public was advised to follow proper measures of hand hygiene and sanitation. COVID-19 relief fund of three billion rupees was allotted by the Sindh government to establish isolation units, quarantine facilities in the province. Several quarantine centres and isolations units are operating across the country **see figure 2 and 3**. (4) (9) In order to enhance the effectiveness of diagnostic services Polymerase Chain Reaction (PCR) machines for detecting SARS-COV-2 virus were imported. [10] Ministry of National Health Services Regulation and Coordination launched “We Care”, a country-wide campaign for frontline medical practitioners. ‘We Care” provide personal protective equipment (PPE) and instruct the medical workers to upskill the use of PPE in order to create an infection free enviroment. [11]

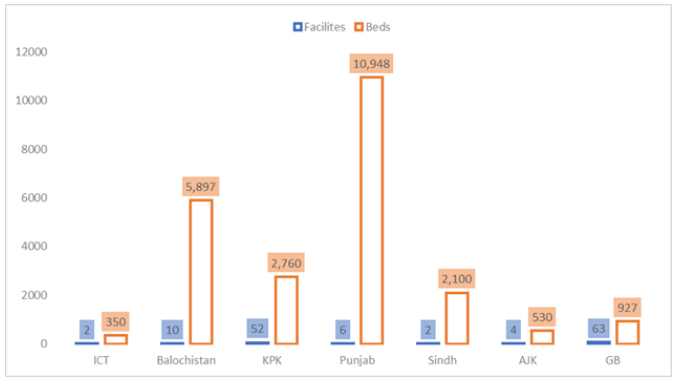

FIGURE 2: Quarantine Facilities in differentregions of Pakistan.

*ICT= Islamabad capital territory * KPK= Khyber Pakhtunkhwa * AJK = Azad Jammu Kashmir *GB = Gilgit Baltistan.

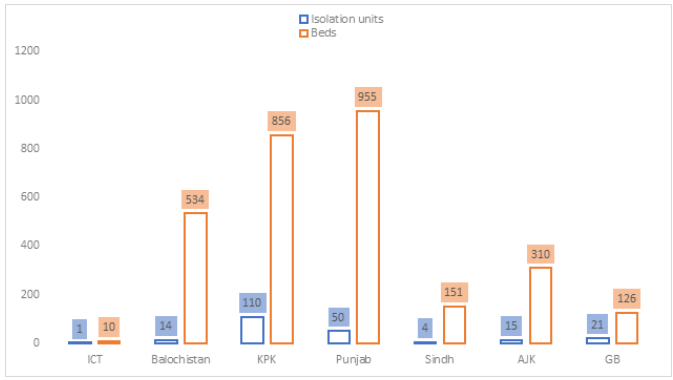

FIGURE 3: Isolationunits across the country

*ICT= Islamabad capital territory * KPK= Khyber Pakhtunkhwa * AJK = Azad Jammu Kashmir *GB = Gilgit Baltistan.

Challenges

Regardless of all highlighted efforts COVID-19 seems to be a tough challenge, worst transmission dynamics of fatal virus resulted in mortality and morbidity burden.

Low Literacy:

The literacy rate of Pakistan is 59%. Low literacy rate contributes to poor health seeking attitude, facetious behaviour of the natives and horrific widespread disease. Myths, rumours and lack of adequate awareness circulating on media resulted in stigmatizing acts of general public.

Inadequate health resources:

Pakistan has one of the lowest health budgets as a proportion of Gross Domestic Product (GDP) in the world, with less than 1% of the GDP. Insufficient resources forced the government to direct travellers back to their towns for home isolation in case they came positive at the border, this led to further community transmission and came up with immensely contagious outbreak. (12) (13)'

Insufficiently trained health staff and humiliating act against health staff:

Health care professionals were incompetently trained and qualified to address the challenges of outbreak. [14] Availability of PPE at appropriate level to health care workers was insufficient across the country. [15] Health care practitioners complained and protested for provision of PPE's across the country. On the orders of higher authority baton charge was carried out to halt the protest and fifty-three doctors were violently taken into the custody of the police in Quetta. Doctors were put down to shame by this act of barbarism and this also encouraged general public to pass stigmatizing comments on doctors despite of their lawful demands. [16] At the time of writing this article, nearly 5,367 medical practitioners have been infected with COVID-19. Moreover, 58 health care providers had their lost lives. Proportion of diseased health practitioners were highest from Sindh **see figure 4**. [17]

Economic Crisis

Pakistan is a developing nation with poor economic status. Therefore, it is more challenging to combat with the contagious disease. (18) In addition to this country has confronted with financial instability, lockdown led to further economic crisis and death from hunger is expected. (19)

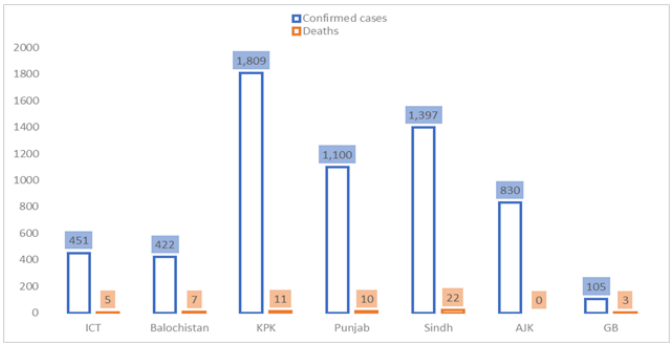

FIGURE 4: Statistics ofCOVID-19 cases among health care workers of Pakistan

*ICT= Islamabad capital territory * KPK= Khyber Pakhtunkhwa * AJK = Azad Jammu Kashmir *GB = Gilgit Baltistan.

2 | CONCLUSION AND RECOMMENDATIONS

Pakistan responded sufficiently to COVID-19 pandemic. However, disease became contagious and community transmission chain of disease became worst. Front line workers became victim of disease too due to scarcity of protection equipment for them. This outbreak drew up the curtains from the deprivations of the Health care sector and inefficient policy formation. Therefore, Pakistani government and authorities managing health care system should take measures to improve the health care system and amend their wrong doings, so to make this system efficient enough to cope with such outbreaks in future. The overarching objective of preparedness is to interrupt the community transmission chain of disease and to reduce the fatality.

Health budget allocation and utilization should be substantial to tackle future health outbreaks and emergencies. Health care workers should be instructed and trained properly to follow hygiene and sanitation protocols. A constructive attitude towards decontamination and sanitation practices may contribute as an influential factor in interrupting transmission chain of SARS-COV-2. It is crucial to protect medical practitioners as they are the ones who

will fight against deadly disease and not become a carrier or source of infection.

Low literacy rate among Pakistani population was a major contributor in dissemination of SARS-COV-2. Myths and rumours are discouraging public to follow risk mitigation policies. Nonserious attitude of general public should be improved to address the challenges of Covid-19 crisis. Health care system should work with community engagement to facilitate implementation of risk prevention measures. Concept of self-care should be promoted, tainting comments and behaviour in regard to COVID-19 should be addressed appropriately. Self-care emphasized on improving personal hygiene, adherence with medical advice instead of believing in rumours should be promoted, this would prove pivotal in suppressing dissemination of virus and would discourage negative attitude of general public towards health care workers. Hence, this outbreak delivers a painful reminder to mobilize resources and to establish an effective health care delivery system.

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How to cite this article: Naqvi S.G.Z., Fatima K., Jamal K., Sheroze M.W. Coronavirus Disease in Pakistan: Response and Challenges from Prevention to Care. Journal of Medical Research and Health Sciences. 2020;1090−1094. https://doi.org/10.15520/jmrhs.v3i9.247