

ORIGINAL ARTICLE

Strategies adopted by Government of Pakistan to cope with the pandemic and comparative cases of COVID-19 in all provinces of Pakistan

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ABSTRACT

The aim of our study is mainly to describe the comparative cases of COVID-19 in all provinces of Pakistan and the adopted government strategies to cope with the pandemic of COVID-19 whose epicenter was Wuhan city of China in December 2019. The base for our study is mainly dependent on previously published papers, Available data for public on media including print, electronic and social media, Pakistan government official website and official website of WHO, CDC and NIH, Ministry of National Health Regulation websites, Services and Coordination. Total cases of COVID-19 reported in Pakistan from February 26, 2020 to July 13, 2020 are 251625 with total death of 5266 (2.1%) while the number of the recovered patients are 161917. Sindh province have high number of cases (105533) as compared to other provinces. Punjab have 87043 cases, Khyber Pakhtunkhwa have 30486 cases, and Baluchistan have 11185 cases while Gilgit-Baltistan, Azad Jammu and Kashmir and Islamabad have 1671, 1599 and 14108 cases of COVID-19 respectively. Our study concluded that Pakistani government strategies to cope with the pandemic of COVID-19 are acceptable but it need to be improved although in Pakistan the resources are limited and economy is in substantial as compared to other countries on border.

Keywords: COVID-19; Epicenter; Pandemic; Government strategies

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INTRODUCTION

In 2002-2003 the initial case of corona virus associated disease was reported, affecting 29 countries on 4 continents i.e. Europe, Asia, North and South America. More than 8000 cases have been reported, with 9.5 percent of the deaths [1]. Earlier research has shown that corona virus are found both in humans and animals. Although it has been a catastrophe, that there is still no effective vaccine available to combat such diseases. As a result, adequate preventive measures were proposed against the corona virus pandemic, such as checking and surveillances alterations in eating practices etc.[2, 3]. The current credible challenge to the globe is in form of Corona virus disease-2019 which is simply called as COVID-19

[4]. The COVID-19 epidemic was considered as pneumonia with new causative agent that occurred in the Chinese city of Wuhan, in late December 2019 that take the whole country with high ratio [5]. Chinese CDC studied respiratory samples and professed that pneumonia was caused by a coronavirus of the new strain that named the disease as Novel Coronavirus Pneumonia (NCP[6]. Respiratory system of the human is the main target of the corona [7]. 2019-nCoV name was given to the novel virus by Chinese scientist [8]. Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) name was given later by International Committee on Taxonomy of Virus (ICTV) to the new virus[9]. Coronavirus disease-19 (COVID-19) name was given to this novel virus on 11th February 2020 by WHO [10].

Coronaviridae family is large causing numerous diseases in human ranging from common cold to other severe problems like Middle East Respiratory Syndrome, Severe Acute Respiratory Syndrome etc.[3]. The current viral strain [11] novel for researchers that had not been described previously [4]. COVID-19 was first recognized in Wuhan City of China in December 2019 that spread later in more than 213 countries including Pakistan [12]. COVID 19 epidemic was acknowledged as 6th public health of emergency Services on 30 January, 2020 by WHO [13] and on March 11, 2020 the COVID-19 outbreak was acknowledged as pandemic by WHO[14]. The countries bordering Pakistan are most pretentious where COVID-19 erupted for the first time. Italy has the highest death toll on COVID-19 in west while Iran has the utmost death toll next to Italy in the north [15]. In Pakistan, COVID-19 first case was confirmed by the Ministry of Health on 26 February, 2020 in Karachi while 2nd case of COVID-19 was confirmed by Pakistani Ministry of Health in Islamabad on same day [16, 17]. Pakistan and China have a very good relationship with the increasing level of travel and business. Travelers can be a major reason of the spread of COVID-19 in Pakistan making it at risk. Pakistan and Iran has worthy relations with each other, and the people of both nations has deeply holy relationship. Each year 0.7 million Muslims from Pakistan visit Iran for religious activity. Most people from Pakistan, Yemen, Bahrain, Qatar, Afghanistan and other countries travel at the beginning of spring Season for religious purpose. India and Afghanistan do not have virtuous diplomatic relations with Pakistan that is why there is little chance of COVID-19 spread to these kingdoms. [1]. These are major risk factors for COVID-19 in Pakistan. Pakistan's geographical location, as well as the steady increase in positive cases of COVID-19 require extraordinary standards of operation, aviation and organization. On February 12, the National Department of Health, Regulation & Coordination Pakistan launched a "National Action Plan for Preparedness and Response to Corona Virus Disease (COVID-19) in Pakistan", aimed at controlling the spread of the virus and strengthening national and community emergency response to guarantee appropriate response, effective and potential reaction to happenings due to Covid-19 containing local and national emergencies that could have a substantial influence on the lives of citizen of Pakistan [18]. Up till now, various measures have been taken by the Pakistani government against the Pandemic of COVID-19. In our study, we emphasized the various strategies adopted by Pakistani government against COVID-19 like designation of various hospitals, private and government testing and treatment centers, awareness of public and local community reaction to the COVID-19 pandemic. In This study we also compare the cases of COVID-19 in all provinces of Pakistan.

MATERIAL AND METHODS

Our study is based on previously published papers, Available data for public on media including print, electronic and social media, Pakistan government official website and official website of WHO, CDC and NIH, Ministry of National Health Regulation websites, Services and Coordination from February 26, 2020 to July 13, 2020. SPSS 21.0 software was used for data analysis.

RESULTS AND DISCUSSION

According to our study total cases of COVID-19 reported in Pakistan from February 26, 2020 to July 13, 2020 are 251625 with total death of 5266 (2.1%) while the number of the recovered patients are 161917. (Table 1) Total death due to COVID-19 in Pakistan is 2.1% (n = 5266), total recoveries 64.34% (n = 161917) and active cases reported 33.55% (n = 84442) up till now (Table 1). 1585170 tests have been conducted by health authorities in suspected patients till 13th July, 2020 [19]. (Table 1)

According to the province wise comparative cases of COVID-19, our study conclude that Sindh province have high number of cases (105533) as compared to other provinces. Punjab have 87043 cases, Khyber Pakhtunkhwa have 30486 cases, and Baluchistan have 11185 cases while Gilgit-Baltistan, Azad Jammu and Kashmir and Islamabad have 1671, 1599 and 14108 cases of COVID-19 respectively. In Sindh province out of total 105533 cases, 41780 are active cases, 1795 death and 61958 patient have been recovered. In Punjab province the total cases are 87043, out of which 27007 cases are active, 2013 are dead while 58023 patients are recovered. In Khyber Pakhtunkhwa out of total 30486 cases, 8229 cases are active, 1099 are dead and 21158 cases are recovered. In Baluchistan province out of total 11185

cases, 3461 are active cases, 126 death and 7598 patient have been recovered. In Gilgit Baltistan province the total cases are 1671, out of which 316 cases are active, 36 are dead while 1319 patients are recovered. In Azad Jammu and Kashmir out of total 1599 cases, 577 cases are active, 44 are dead and 978 cases are recovered. In Islamabad out of total 14108 cases, 3072 are active cases, 153 death and 10883 patient have been recovered. (Table 2). Highest death rate (3.26%) due to COVID-19 was recorded in Khyber Pakhtunkhwa while lowest death rate (1.08%) was recorded in Islamabad. Highest recovered patients (78.93%) due to COVID-19 was observed in Gilgit Baltistan while recovery rate (58.70%) was recorded in Sindh province. The death rate observed in other provinces were observed as; Punjab (2.31%), Sindh (1.70%), Baluchistan (1.12%), GilgitBaltistan (2.15%) and Azad Jammu and Kashmir (2.75%) while the recovery rate in other provinces were observed as; Khyber Pakhtunkhwa (68.50%), Islamabad (77.14%), Punjab (66.66%), Baluchistan (67.93%)and Azad Jammu and Kashmir (61.16%).(Figure 1 to Figure 7).

Table 1: Total COVID-19 cases in Pakistan

Region/country	Total confirmed cases	Active cases	recovered	death
Pakistan	251625	84442	161917	5266
%age	100%	33.55%	64.34%	2.1%

Table 2: Province wise cases of COVID-19 in Pakistan

Region/ Province	Total confirmed cases	Active cases	Recovered	Death
Islamabad	14108	3072	10883	153
Sindh	105533	41780	61958	1795
Punjab	87043	87007	58023	2013
Khyber Pakhtunkhwa	30886	8229	21158	1009
Baluchistan	11185	3461	7598	126
GilgitBaltistan	1671	316	1319	36
Azad Jammu and Kashmir	1599	577	978	44
Total	251625	84442	161917	5266

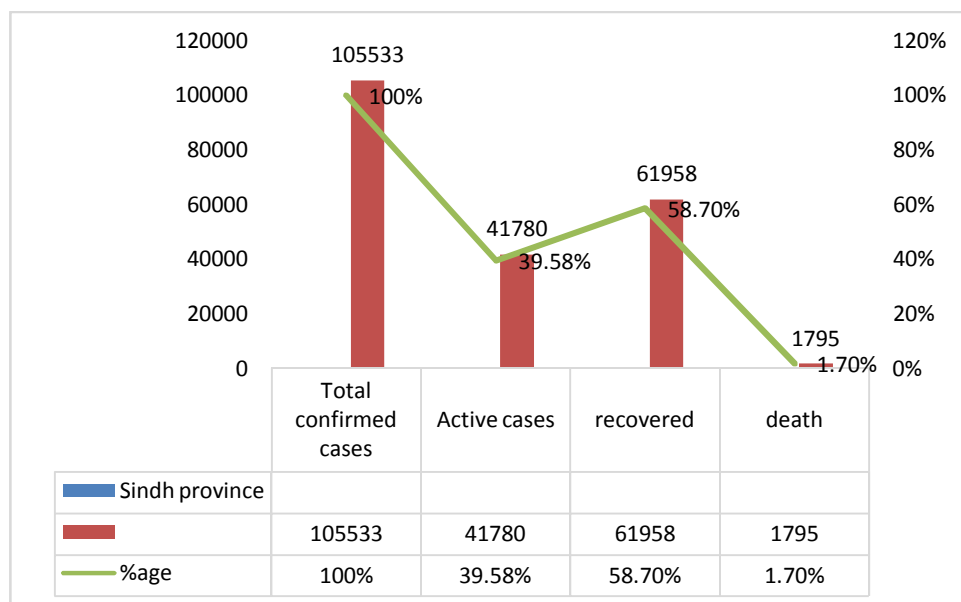


Figure 1: Total cases of COVID-19 in Sindh Province

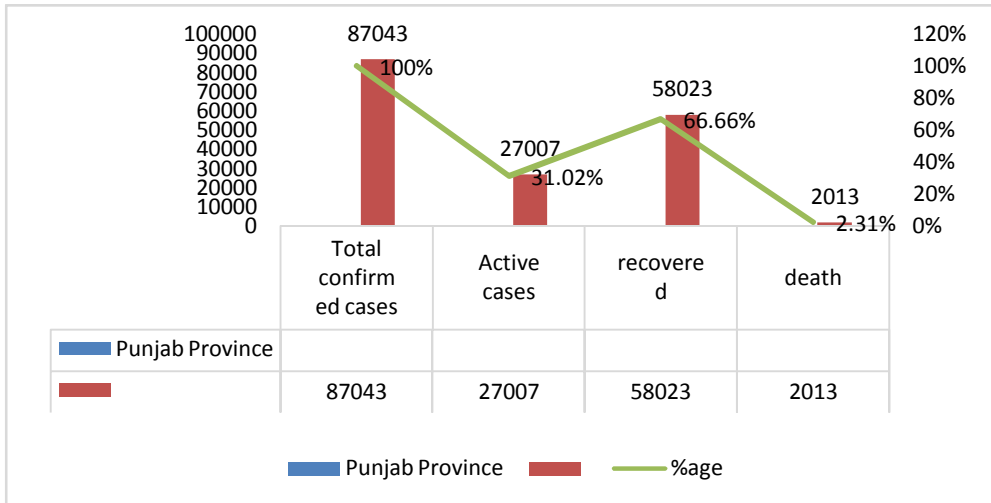


Figure 2: Total cases of COVID-19 in Punjab Province

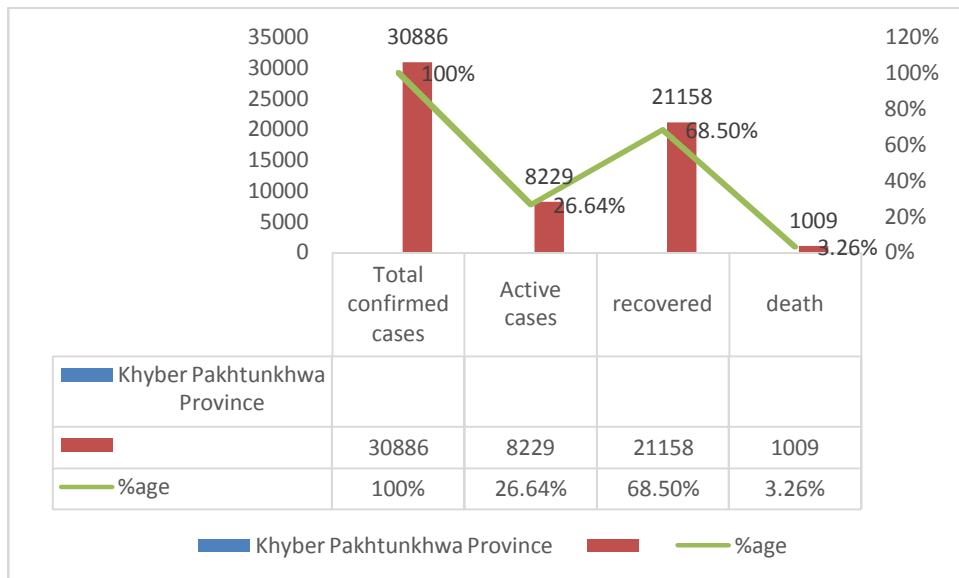


Figure 3: Total cases of COVID-19 in Khyber Pakhtunkhwa Province

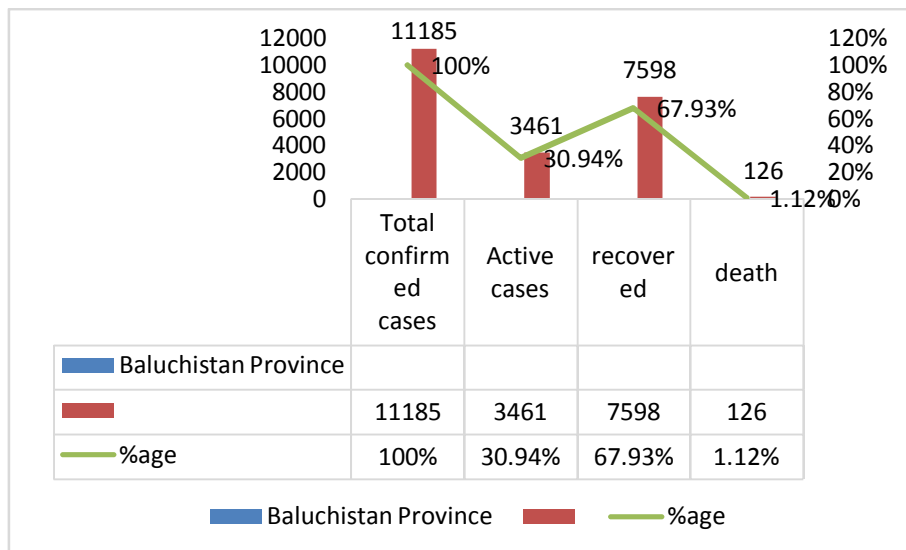


Figure 4: Total cases of COVID-19 in Baluchistan Province

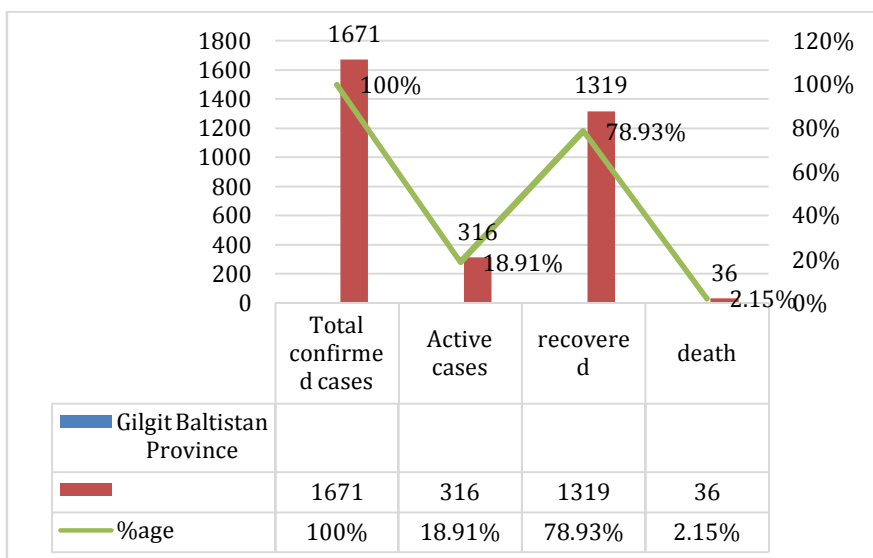


Figure 5: Total cases of COVID-19 in GilgitBaltistan Province

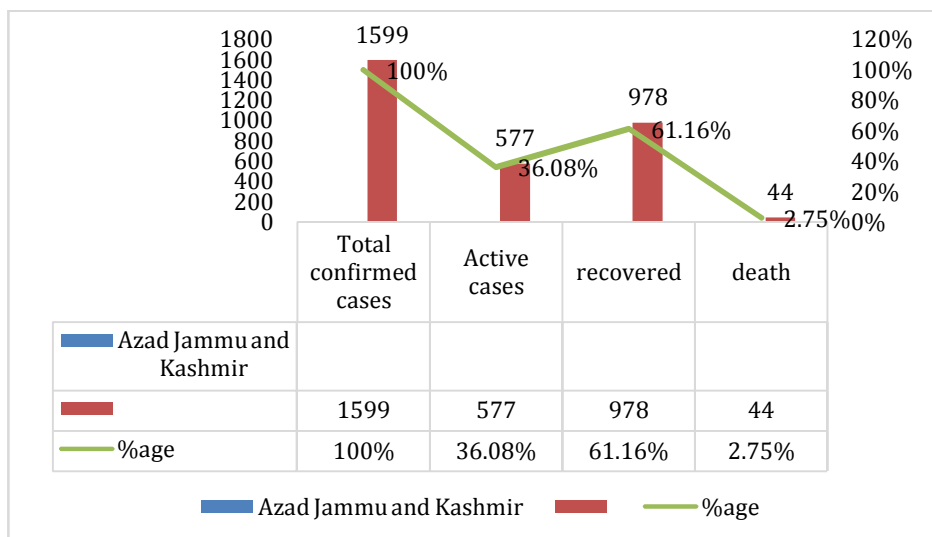


Figure 6: Total cases of COVID-19 in Azad Jammu and Kashmir

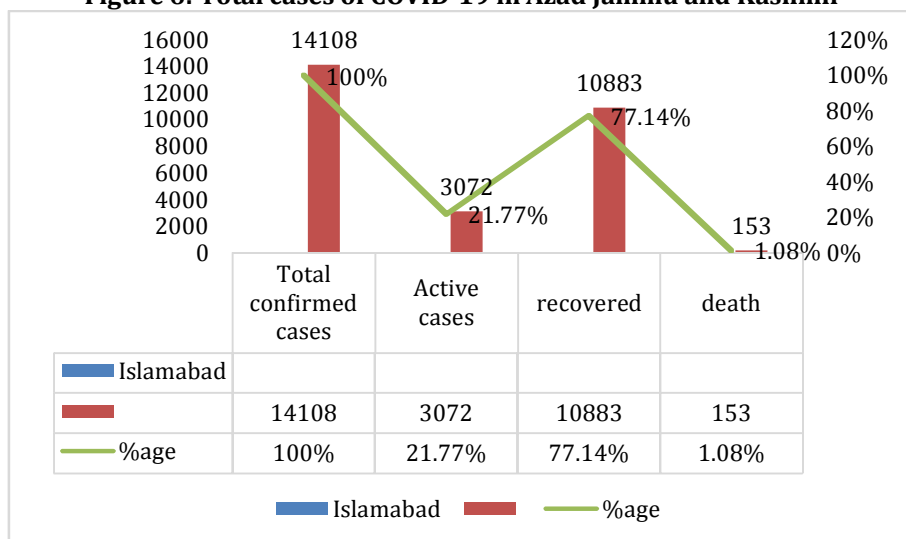


Figure 7: Total cases of COVID-19 in Islamabad

GOVERNMENT STRATEGIES TO COPE WITH THE PANDEMIC

Pakistani government strategies to cope with the pandemic of COVID-19 are acceptable but it need to be improved although in Pakistan the resources are limited and economy is insubstantial as compared to other countries on border. In spite of financial problems government of Pakistan take tremendous steps to cope with the pandemic of COVID-19. Following steps were taken by Government of Pakistan.

1. Timely release of information and the role of the citizens

To deal with this growing pandemic, it is important to fully understand the condition and activate the general public to do whatever is necessary for them. Pakistani authorities have released timely data in an open, transparent and responsible manner to provide people with quality, clear and relevant information so that they fully understand government policies, strategies and measures to address the disease. Ensuring that “the public is fully informed” is key to building strong social cohesion. On the other hand, with a strong sense of social obligation and reliance on government, people are taking part in a national struggle against the virus: a “human war” supported by a united democracy. Over-reliance on people is a key part of 'winning the war'.

2. Social isolation and traffic control

To stop the transmission of the virus during a period where vaccine is not available, self-isolation is the most efficient mean. Pakistani authorities used the concept of smart lock down in areas with most cases to stop the spread of the virus. Different forms of social segregation as well as the monitoring and humanitarian approach to social management have exacerbated the spread of the virus and have become a major issue across the country. Pakistanshut trade with all border countries because of COVID-19 and suspend the domestic and international flights. [20]

3. Establishment of large number of Corona testing Laboratories

Sample of patients who are suspected to be infected with the novel corona virus are taken to specialized Corona testing laboratories that have been set up on a large scale in the country since the pandemic of COVID-19. Their body temperature, medical history, history of travelling and their link with an infected person are discussed, then a CT scan is performed if necessary, which is one of the initial diagnoses of COVID-19. Since the pandemic of COVID-19 Pakistani government established 107 COVID-19 testing laboratories in both public and private sector with a total of 46730 testing capacity.[19]

3. Establishment of large number of COVID-19 quarantine centers

The government has established a total of 139 quarantine centers for COVID-19 patients in whole country with a total of 23557 bed capacity. The provincial distribution of the quarantine centers are as follow;Sindh (2), GilgitBaltistan (63) Khyber Pakhtunkhwa (52), Islamabad (2), Punjab (6), Baluchistan (10) and Azad Jammu and Kashmir have 4 quarantine centers [19].

4. Easy and free access to corona virus tests

If the corona virus is suspected in a patient then government officials take their sample and send it to the nearest authorized laboratory for free testing. The government also play an important role in maintaining the cost of corona virus testing in private sector laboratories. [21]

5. Construction of hospitals in record time

Pakistan built a 250-bed temporary hospital in just 40 days. This was the first time that Pakistan has built hospitals so quickly.[22]

6. Increase the capacity of existing hospitals

Along with the building of temporary hospitals, Pakistan has already allotted existing hospitals for corona virus patients. Currently there are 215 hospitals setup for medical facilities in all Pakistan. Province wise medical hospital distribution is as follow; Sindh (4), GilgitBaltistan (21) Khyber Pakhtunkhwa (110), Islamabad (1), Punjab (50), Baluchistan (14) and Azad Jammu and Kashmir (15) with a total capacity of 2942 beds for COVID-19 patients.[19]

7. Management to find every case

Pakistani medical authorities tried to find more than 251625 cases by tracing and trailing contacts in the country. Emergency centers across Pakistan played a role in this, and authorities tracked down where the cases were spreading, and governors called in field teams immediately.[18]

8. Online availability of doctors for other patients

During PandemicPakistani government provide online availability of doctors to other patient due to which they eliminate the need for them to visit the hospital. Which greatly reduced the spread of the virus.[18]

9. Online education across the country

Pakistani government provide the student with online education system to prevent the spread of the novel corona virus. Although it was not easy but government play an important role to make it possible.

10. Launch Sehat Tahaffuz" helpline

On 6th February, 2020 Sehat Tahaffuz" helpline 1166 was launched to provide information related to health and other related health services to COVID-19 patients [23].

11. Prime Minister's COVID-19 Relief Fund-2020 and corona relief tiger force

To care the needy people during the COVID-19 pandemic the government of Pakistan has structured the Prime Minister's COVID-19 Relief Fund-2020 and corona relief tiger force [24]. Tiger Force supply the food to the deserving people and help people to aware about corona pandemic [23].

12. Ehsaas program

Ehsaas program has been publicized for the helpless people by current COVID-19 pandemic [23].

CONCLUSIONS AND RECOMMENDATIONS

Our study concluded that Pakistani government strategies to cope with the pandemic of COVID-19 are acceptable but it need to be improved although in Pakistan the resources are limited and economy is insubstantial as compared to other countries on border. This all become possible due to on time action and policies of the government. The countless challenges to Pakistan are current economy problems, resources, political problems and religious nature. Even though, WHO has cautioned the world to be at high risk for COVID-19, the discovery of effective vaccine is the need of the day, economical status need to be managed, health strategies should be improved and effective preventive measure should be adopted to cope with the pandemic of COVID-19.

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