

## Pakistan's Readiness against Epidemics and Pandemics: An Appraisal

Sardar Niaz Ali<sup>1</sup>

### Abstract:

Since the Covid-19 outbreak in the world, the masses of every country are striving for their safety globally. No country is out of its reach, fear and terror. Socially, economically and medically the epidemic has affected every aspect of human life. As it hits Pakistan, it changes the outlook of overall life. Taking into account the brief history of pandemics that have occurred in the history of mankind, the paper studies the preparatory steps taken over time universally. The paper encompasses a study into the Pakistan's fight against HIV/AIDS and the steps taken by the government to counter it. Later the study specifically focuses on the advent of COVID-19 in Pakistan, its effects and the outlined strategy of government of Pakistan to fight it. It also highlights various grey areas observed so far in the fight against the pandemic ranging from social, political, religious, economic and technical aspects. In the end few suggestions have been offered to mitigate the threat and strengthen the response against the pandemic.

**Key Words:** Pakistan, readiness, epidemic, pandemic, HIV/AIDS, COVID-19, Coronavirus.

### INTRODUCTION

The outbreak of coronavirus during December 2019 in China was not a new phenomenon. Human history has repeatedly witnessed epidemics and pandemics in the recorded history which consumed millions of lives. If we analyse the human history, infectious diseases have killed more human beings than wars. It would not be wrong to call them mass killers. Malaria which existed over thousands of years still takes the lives of half a million people every year. During 6th Century, plague killed enormous amount of people which constituted about 50 percent of the global population. Similarly, Black Death killed about 200 Million folks during 14<sup>th</sup> Century and Smallpox killed 300 million in the last century. The deaths caused by 1918 influenza pandemic were estimated to be 50 to 100 million people which surpassed the death toll occurred aimed WW-I, being fought at the same time (Walsh, 2020). The spread of Covid-19 is just a reminder that these diseases will continue to re-appear in future as well. In fact, these diseases have increased manifold over the past century and is quite evident from the spread of SARS, HIV / AIDS and coronavirus. The prevailing situation in the world at large due to Covid-19 exposes our vulnerability and offers an opportunity to adapt timely measures against their future recurrence. Covid-19 has also demonstrated that such pandemics can bring a stand still our interconnected global economic and financial structures which results in unemployment and disruption to trade and businesses for underdeveloped, developing and developed countries alike (Mahar, 2020).

The first case of coronavirus in Pakistan was detected on 25<sup>th</sup> of February 2020. To limit the spread of coronavirus, all educational institutes were shut down on 13<sup>th</sup> March 2020 followed by a gradual lockdown in the complete country from mid to end March 2020. However, for developing countries

---

<sup>1</sup> Holds MS degree in International Relations from International Islamic University, Islamabad, Pakistan. Email: sunrise41429@gmail.com

like Pakistan, the response in tackling such pandemics is affected by weaknesses in governance, public health, and economic stability (Kamran, 2020). Along with its human cost, the current crisis has severely affected the fragile economy of Pakistan. Social distancing policies which are essential to control the virus spread have made Pakistan most vulnerable with regards to income and sustenance. By mid July 2020, the number of cases has crossed 2,66,094 with 2,08,030 recoveries and 5639 deaths. The number of infections is still rising and taxing the existing health care infrastructure which has its inherent weaknesses. This paper will focus on analysis of Pakistan's existing health care system amidst COVID-19 in order to find out its capability to respond against HIV/COVID-19 like pandemics, identify shortfalls and suggest a way forward for its improvement.

### **OVERVIEW OF THE HEALTHCARE SYSTEM IN PAKISTAN**

Pakistan's healthcare system is dynamic, and it incorporates public, private, donor agencies and contributions from philanthropic organisations. Administration of health in Pakistan is phased in different sections namely prevention, promotion, curative and rehabilitation services. Private sector has been the major contributor to health sector by outreaching to 70% of the population and comprises a varied cluster of qualified health officials to outdated faith therapists. Main stay of Pakistan's health system is the primary health service which spans from Lady Health Workers (LHWs), Lady Health Visitors (LHVs) and Community Midwives (CMWs). They have been instrumental in health services and as fundamental in present environment as well. These are trained and regulated by district level institutions and provide the health service at the doorstep. Provision of the health services to the community have been devolved to the Provincial governments since 18<sup>th</sup> Amendment has been incorporated in the Pakistan's constitution. The complete health system has been categorized into three layers of primary, secondary and tertiary levels.

The Foundation stone of the Healthcare services in Pakistan is Primary Healthcare system. Under this system the patients are administered preventive and curative services. It comprises of following. Primary Healthcare system is embodied to administer patients with healing and precautionary Healthcare Services and constitutes Basic Health Units (Union Council level to serve 25000 people) and Rural Health Centres. Basic Health Units (BHUs) services can be from preventive to curative and further referral services (Hassan, Mahmood & Bukhsh, 2017). Its enormous contributions have been witnessed in Maternal and child health (MCH). BHUs serve as clinical, logistical and as a source of managerial support to Lady Health Workers (LHWs). The second step administrators of Health at the Primary Level are the Rural Health Centres (RHCs). Targeted population for the RHCs is 1,00,000 people. It provides diagnostics and promotive services in addition to preventive, curative and referral services. It also acts as the logistical hub for BHUs. At some instances it can serve with the clinical services as well.

Secondary Healthcare services are operational at district level. Technical, therapeutic and diagnostic services are offered at this level. Referral services, specialist opinions and hospitalization are available at this stage. Tehsil Head Quarters (THQs) serve a population ranging between 500,000 to 10,00,000. Hospitals at this stage mostly comprise of 40-60 beds. Basic emergency services like Obstetrics, Gynaecology and Trauma are available. Patients referred from BHUs, RHUs and LHWs are administered advise / treatment. District Headquarters (DHQs) are present at district level. It has the capacity to administer population from 1 to 3 million (Hassan, Mahmood &

Bukhsh, 2017). It serves population with preventive, curative, diagnostics, referral and promotive services. The Patients who are referred from BHUs, RHCs and THQs are also attended here.

Tertiary Healthcare hospitals are most advanced in the entire construct of the health care. It offers state of the art health care to the patients. Most of the research is also conducted here and most appropriate health advise / treatment is administered here. These also have the advisory role to the executive in case or requirement (Hassan, Mahmood & Bukhsh,, 2017). All patients referred from primary and secondary health professionals are administered here.

### **Healthcare Regulatory Authorities in Pakistan**

Although Pakistan is a developing country with nascent health structure but over the period it has evolved. During action various healthcare bodies have been formulated which work for the development of the entire sectors. Noteworthy authorities include Ministry of National Health Services, Regulation and Coordination; established in 2012 with the aim of developing, monitoring and coordinating entire healthcare service in the country. It helps provinces in formulation of policies, provision of medical services and enforcement at the national level. It is the supreme health organization in the country and functions directly under the supervision of National Cabinet. Due to devolution of powers under 18<sup>th</sup> amendment in the constitution most of the powers are delegated to provinces but its role has not diminished to the recent times.

Pakistan Medical and Dental Council (PMDC) acts as a regulatory authority mandated to register all medical professional within Pakistan. It is the custodian of the merit and quality of the Health practitioners in the country. It is responsible for ascertaining the standards for the doctors in medicine and dentistry through exams. It also supervises the higher qualifications in the field of medicine and dentistry (Siddiqui, 2018). Licencing of the doctors to practice is also main function of this institution. It works in close coordination with Higher Education Commission (HEC) for setting the standards for medical colleges in the country.

Pakistan Council of Homeopathy is a corporate formed in the light of Unani Ayurvedic and Homeopathic Practitioners Act, 1965. It is mandated to regulate the practitioners of Ayurvedic and Homeopathic medicine. It also has an advisory role in the respective field (Hassan, Mahmood & Bukhsh, 2017). Pakistan Nursing Council (PNC) is a governing body instituted under the Pakistan Nursing Council Act (1952, 1973) which functions to register Nurses, Midwives, Lady Health Workers and Nursing auxiliaries. It sets their qualification standards for the award of the licences and monitor their subsequent practice in Pakistan (Bibi, Khan, & Noreen, 2020).

### **Healthcare Systems in Contemporary World**

Healthcare systems in the world are varying in nature. They have been instituted keeping in view the system of governance, level of education in the state, financial stature, technical know-how and aspiration of the populations. Broad overview of healthcare systems prevalent in USA, UK and China will be given in order to draw pertinent inference for the home country.

The health care system of United Kingdom commonly known as NHS (National Health Service) is considered one of the most advanced and refined in the contemporary world. The NHS is government-sponsored and comprises numerous healthcare systems. It is spanned over the entire kingdom. NHS comprises for England, Scotland, Wales and Northern Ireland. All nationals are

entitled to free of the cost treatment under this service. However, citizens are at liberty to choose any private health insurance instead of NHS (Roger Henderson, 2019). The NHS aims at providing the state-of-the-art medical facilities to its citizens with the minimum time delay and wanting procedures. It strives hard to provide material and personnel for the hospitals in order to provide best possible healthcare to its citizens. UK is renowned worldwide in provisioning of quality healthcare with the ease of access. Notwithstanding such a sumptuous healthcare system UK writhed to battle coronavirus. The four-pronged plan to contain, delay, research, and mitigate was supported by all UK countries. The COVID-19 badly shattered the entire system and it was overwhelmed within weeks. As of 22 July 2020, more than 45312 people have succumbed to COVID-19 and still infection is spreading.

United States of America is technologically most advanced country in healthcare services. Healthcare in USA is spanned over various departments / institutions. Most of the healthcare sector is operated by private owners (Pieh-Holder, Goldschmidt & Young, 2012). Almost 60 % of hospitals in USA are managed by private sector with no profit basis, 20 % is government owned and 20 % are profit organizations. Healthcare is administered in a mix of private and public health insurance coverage. Universal healthcare system does not exist in USA (Roemer, 1976). It is unique hybrid healthcare system operated by single or multi-payer insurance fund. Being a hybrid system, it has been badly devastated by the COVID-19. Over 3.9 million cases with 1,39,964 fatalities so far. The grave issues of non-availability of ventilators, Personal Protective Equipment and additional number of beds in hospitals have denuded the fragile healthcare system in USA (Fast Facts on U.S. Hospitals, 2020).

Chinese healthcare system is quite unique. China is a country of almost 1.4 billion people and health care spending in China has increased rapidly due to unprecedented economic growth over the last two decades. Healthcare in China spans both at public and private sectors insurance programmes (Huang, Liang, Chu, Rutherford, & Geng,). Most of insurance covers the basic health complications. Critical ailments are not covered under this health insurance process. Chinese executive is planning to reduce the health spending by increasing the insurance to minimum of 70 percent. The best possible health services in China are provided to urban population residing in mega metropolises under the private healthcare institutions. These are managed by the private owners in partnerships and administer health services to the insurance holders. These are substantially expensive than the public service hospitals. Public Hospitals are managed by the Government and are present throughout the length and breadth of the country. The level of the treatment and facilities in the hospital varies with its location and status. Best public hospitals are available in mega cities and public hospitals in countryside are of basic nature. Being reasonably affordable public hospitals are the obvious choice of the masses. Traditional Chinese medicine are also available to masses as per their choice. Despite having the elaborate healthcare systems in the Country, COVID-19 traumatised the entire system. But the resilience and prompt response saved China from a great human catastrophe. Despite being epicentre of the pandemic, China has come out very well. It is the only country in the world which managed the Pandemic in a best possible manner. As of 22 July 2020, 4653 people have died of COVID-19 in China and 86,152 have been infected so far.

### **Inadequacies in Existing Healthcare Systems of Pakistan**

Pakistan's Healthcare system is overwhelmed with plethora of problems. These problems are of varying nature from structural, managerial, economic and social domains. Weak public sector give rise to enormous private sector healthcare providers who have attained most powerful position in the sector. Cost effect of the health services has gigantic differences in Public and Private sector. Majority of the population is unable to access the good quality healthcare services and the situation is worsened with the non-availability of the health insurance service in the country. Major impediments faced by the health sector in Pakistan are discussed in ensuing paragraphs.

Firstly, Pakistan is faced with the poor governance of health systems. Public policy for healthcare remains marred due to lack of political will and vested interests of the policy makers. Policies are made behind doors without the active participation of the community. Health officials having experience in the relevant sector are rarely consulted during the process. There is a gulf of trust deficit between the Federal and Provincial governments and health institutions. Lack of coordination on trust leads to poor implementation of policies at grass root level. Most of the programmes are politically motivated and initiated as specific community, hence, barely result into positive outcome (Javed & Ilyas, 2018). Research facilities are barely existing and find it hard to sustain themselves without active support from the international donors and non-governmental organizations.

Secondly, lack of health equity in Pakistan is a source of major concern. Health facilities for poor and rich are enormously different. The population which is living below poverty line is estimated to be 30 percent. They are absolutely dependant on the public health facilities which are barely satisfactory. Private facilities are often out of the economic reach of poor population. Healthcare is a nightmare for the poor masses in Pakistan. The people living in countryside are fully dependant on the BHUs and RHCs which are ill equipped, rarely staffed and poorly managed. Executive oversight is almost non-existent. Entire sector is polluted with corruption and mismanagement.

Thirdly, lack of access to the Healthcare services mars the overall performance of the sector. Healthcare facilities are mostly located at the settled area with relatively better infrastructure. Areas with the poor communication infrastructure are badly affected by the lack of these facilities. Poor people rarely manage to access these facilities. In addition to these, lack of basic amenities of life force these facilities to remain under-staffed and poorly equipped. Monitoring and management both become cumbersome. Due to poor performance of BHUs and RHCs people are compelled to access tertiary level hospitals i.e THQs and DHQs which get overstretched. The quality of treatment is further marred by lack of staff, medicine, facilities, beds, laboratories and allied facilities.

Fourthly, lack of uniform health policies badly hampers the entire sector. The policy makers formulate the policies in the haste and without the due input from the community and service providers (Haq, Hafeez, Zafar & Ghaffar, 2017,). The equipment purchased is often of low quality due to kickbacks and the corruption. The available equipment remains unused due to lack of trained staff. No insight is given the social, cultural, economic and technical aspects while formulating the policies instead they are focused on the treatment of disease only. One size fits all approach damages the performance of the entire sector. The upright health programs are managed by the Federal Government, however, primary Healthcare facilities who are not involved in the planning process. This results in several disagreements at the execution level. Policy reforms are not possible

due to lack of a uniform system for compiling, evaluating and analysing data at district level. This leads to a disconnect between the policy formulation and ground requirement.

### **Recent Health Issues in Pakistan – Case Studies AIDS/ HIV & COVID-19**

**AIDS / HIV & Adapted Strategy.** HIV / AIDS has consumed considerable lives during last quarter of 20<sup>th</sup> Century along with economic ramifications. The prevalence of HIV and associated deaths due to the infectious disease have been growing alarmingly in Pakistan. The concern grew larger when 900 children in Ratodero, Sindh were tested positive for HIV during 2019. As per official figures, more than 180,000 people were living with HIV and this number might be well below the actual figure. Due to complex sexual behaviour in Pakistan coupled with limited availability of HIV data and an increase in sexually transmitted diseases (STDs), HIV may spread to married couples and society at large thus resulting in a generalized epidemic (Dávila, Polanco & Segura, 2018).

### **Adapted Response against HIV/ AIDS**

**Public Sector Response.** Pakistan established its National AIDS Control Programme (NACP) during 1987 which was initially designed for diagnosis of HIV related suspected cases. However, its scope was enlarged to encompass HIV prevention and control. These efforts were furthered when World Bank assisted Pakistan in establishing Enhanced HIV and AIDS Control Programme (EHACP) during 2001. At present, this program is being implemented by NACP and its Provincial AIDS Control Programmes (PACPs). The major functions of EHACP include interventions for target groups, HIV preclusion for general public, preventing disease transmission through blood, capacity building and programme management. Pakistan is tracking HIV through Second Generation Surveillance System (SGS) which has been established with the support from Canada. National programme has been able to increase HIV prevention interventions for high-risk groups and susceptible public. Public-private partnerships have been given an important role in service delivery through incorporation of over three hundred NGOs in national / provincial AIDS programmes. At present, there are more than fifteen monitoring centres in entire country. Massive awareness campaign through print and electronic media and Ministries like Education, Narcotics, Health, Finance and Religious affairs. National Blood Transfusion Safety Ordinance has been formulated for prevention of HIV transmission through blood transfusion (Dar et al., 2017).

**Private Sector Response.** Private sector organizations response in fight against HIV / AIDS is instrumental in Pakistan due to their freedom of action and financial leverage. Access to the population is the hallmark of the effort. National and Provincial Aids Control Programmes are collaborating with NGOs and private sector by establishing partnerships. These public-private partnership (PPP) with different NGOs and EU / DFID funded TAMEER project are aimed at providing HIV related services to high-risk groups throughout the country (Hussain et al., 2018). They are also playing an important role in spreading awareness regarding HIV / AIDS among the adult population.

### **COVID-19 & Adapted Strategy**

Corona virus usually spread through animals. They can evolve and be present in insects too but precisely, the main source of corona virus is the animals. At the start of the century, the appearance of two corona viruses has been observed. Namely: SARS 2002 and MERS 2012. At the end of

December, the officials dealing with the department of health in China reported an unknown problem to World Health Organization WHO (Nafeess & Khan, 2020). As per to the information it was considered a new virus that caused pneumonia-like illness and was diffusing in and nearby Wuhan. Initially it was thought that the virus spread in a seafood market in December but with time on January 24th the person diagnosed with virus had absolutely no connection with seafood. At the beginning, scientists were not able to detect its cause nor could they identify the specific animal which became the cause of virus. Although this took place in Wuhan, China it began to aggressively spread globally, now that in USA more than 1.4 million confirmed cases have been taken in account. The symptoms of this disease have ranged from mild to aggressive. According to WHO the symptoms can be felt in first three days and people with such mild symptoms are not meant to be hospitalized but people who come out to be positive after 14 days may need serious treatment under hospital's observation.

Pakistan has its borders connected with China and Iran and other migratory and trade operations are held between China, Iran and Pakistan. The travellers through air, sea routes have caused a drastic and recent elevation in prevalence of disease. The border between Pakistan and China at Khunjerab Pass has been closed now days. A suspension of travel and trade activities has been observed with Iran. While the Taftan and Chaman borders with Afghanistan are being monitored under strong checking and supervision. The risk of spreading of virus too is very high in imported goods to Pakistan. This risk requires enormous resources and structural policies to gain control over the situation.

### **Pakistan's Action Plan to Counter COVID-19**

Government of Pakistan formulated a comprehensive plan to counter the COVID-19 pandemic. Cardinals of the plan include to gain control over respiratory pathogens related pandemics in future to ensure that continuous growth and improvement programs are run throughout the country (Nafeess & Khan, 2020). Trying to decrease the pressure of disease on the economy. To establish a National Preparedness and Response to COVID-19 Program under the Global Health Epidemic Agenda. Provide a framework to policy makers on federal, regional and provincial level to ensure the measures being taken on all the levels. Including local and regional community activities in mind the lockdown situation shall be managed according to prevent the risks laid by the outbreak. To embrace all sort of industrial and domestic economy investment programs shall be made by calling out an emergency preparedness program at this time.

### **Challenges to Fight COVID-19 in Pakistan**

With the first case reported in Pakistan, the government got cautious and took phased steps to counter the threat of pandemic. However, the impact of deadly virus has been unprecedented and the government's efforts began to stumble in the face of looming health emergency and economic halt (Sarwar et al., 2020). Federal government suspected that cases may rise to 1.2 million until end July 2020. As of now confirmed cases are more then 2,66,096. Aftermath of Eid Ul Fitr a sharp rise in infections was observed and the fragile health system of Pakistan was overwhelmed. The precarious situation forced the authorities to reinforce the lockdown in the country. Although the COVID-19 trend has remained much below the expected levels, but it was due to stringent lockdown. Easing of lockdown may see sharp rise in the infections during the Eid Ul Azha. This

situation which will further be complicated with the non-availability of vaccine which is still under study and might take long time to get effective. The situation in Pakistan will be further complicated due to routine diseases like Dengue and Hepatitis C and non-administration of vaccination programme to children (Anjum, Anam, & Rahman, 2020). The major challenges being faced by Pakistan in fight against COVID-19 are discussed in ensuing paragraphs.

**A Fragile Health System.** Epidemics and pandemics expose the underlying shortcomings of health infrastructure of any country in a quick timeframe. These include availability of detection equipment, basic healthcare equipment like ventilators and protective suits, procedures and facilities to quarantine and isolate the affected population are just a few to be enumerated. Pakistan's health spending (2 percent of the GDP) is quite meagre even when compared to other countries of the region. In addition, Pakistan's public health policy seems reactive rather than proactive and responds only when its vulnerability is exposed by a disease or emergency (Khan, 2019). Therefore, the country is not equipped to timely place an effective mechanism after the outbreak of pandemic despite the availability of time to take measures before disease spreads in the entire country. This was evident in the case of COVID-19 which took about 2 months to reach in Pakistan after the first incident was reported in China.

**Lack of Social Protection and Access to Healthcare Services.** The access to health care services is unequal and is depends mostly on financial conditions of individuals. Poor people have always been reluctant in obtaining health care services due to lack of trust in public infrastructure and heavy cost of private services. Contrary to this, wealthy circles enjoy complete social protection in terms of health care, job / business and access to education. This lack of social protection to poor population and especially those in rural areas is likely to exacerbate the situation throughout the emergency (Farrukh, Tariq & Shah, 2017). In Islamic Republic of Pakistan, social protection expenditure is simply below 2 percent of gross domestic product, way below the worldwide average of 11 percent. In the wake of food shortages, the Pakistani public distribution system, the Utility Stores Corporation, will crumble due to non-availability of much needed funds and meagre staff.

**Domestic Resistance and Apathy.** Pakistan's response to coronavirus was hindered due to numerous social, cultural and political factors like religious opinions, political coalitions, economic apprehensions and distrust in the public institutions. The government was unable to restrict congregational prayers on Eid, Fridays as well as Taraweeh during Ramadan due to possible backlash from the religious circles. The better option could be taking religious stakeholders onboard in decision making process and influencing public opinion and shaping their behaviour.

**Lack of Cooperation among Public Institutions.** Another factor which hindered an effective response of government was the mis-coordination between the centre and provincial governments due to lack of consensus (Javid, Ali & Javed, 2020). Coordination among governance infrastructure is essential in generating a timely and effective response which has been lacking in Pakistan's case. While federal government needs to tighten surveillance at borders and airports, it is the responsibility of provinces to provide crucial health services to respective population. Rift between the centre and federating units further complicated the already fragile situation in the country. This also contributed to distress among the international donors to help Pakistan in the crisis.



**Lack of Grass Root Level Institutions.** Local governments can play an important role in reducing transmission of infections in populous countries like Pakistan through localized networks. Due to absence of local bodies, the provision of health care and relief was delayed to the communities (Javid, Ali & Javed, 2020). Moreover, the local institutions in Pakistan are gravely understaffed and poorly financed.

**Political Point Scoring.** This pandemic demands our coherent, integrated national level response; however, we can simply see political parties try to induce political advantage out of the crisis. Pakistan Tehrik-e-Insaf introduced lockdown against public interest whereas Pakistan People's party was saying lockdown is against public interest (Iqbal et al., 2020). This mere political point scoring conjointly divided society and created confusion among masses.

**Economic Loss.** The economic fallout of Covid-19 is also of great significance for Pakistan. A decline in country's GDP was predicted even before the spread of virus. Earlier, the growth rate of GDP was estimated to be 3.5 %, however, it was revised to 3 % for the year 2020 later. The Asian Development Bank conjointly lowered its projected rate of growth to a 2.6 % from associate calculable 2.9 %, while the World Bank lowered it to 1.1 percent. As per official estimates, an initial loss of US \$ 15 billion was associated. An additional economic loss of up to \$5 billion was forecasted however official figures expected layoffs between 12.3 to 18.5 (Malik et al., 2020).

**Structure of National Command and Operations Centre (NCOC).** The NCOC is the application arm of the National Coordination Committee under the oversight of Prime Minister. NCOC comprises of representatives from varied segments, government departments (civil and military) and its role is to observe COVID-19 pandemic in country and implementation of choices. However, there's terribly minimum presence of health officials in NCOC that have direct concern to policy making and its implementation to fight the COVID-19.

**Diminishing Capacity of Public Hospitals.** Pakistan has poor hospitals to public ratio. On the contrary the well-developed world with the much better ration has found it hard to cope with the situation. Management of COVID-19 with meagre resources would be a nightmare for the executive circles.

**Deficiency of Protective Equipment.** Pakistan isn't self-sufficient as for as PPE is concerned. On the other hand, onset of COVID-19 at international level, demand/ supply of PPE has altered significantly. Pakistan being a poor country has very limited resources to procure the PPE on massive scale to offer protection to its health workers fighting COVID-19. Domestic production of the equipment can ease out the situation to some extent.

**Public Awareness.** Pakistani public have strong social connect. Like everyone want to present on funeral less due to religious reasons and more due to political, social and cultural ties (Khan et al., 2020). Similarly, social and religious gatherings including marriages ceremonies, home visiting for child births and religious festivities have not been curbed especially in rural areas despite restrictions by the government.

**Religious Dogmas.** Religious factions in the society are adamant to declare COVID-19 as a conspiracy. They are not ready to accept it as a disease and insist on performing community religious services like Jumma and Taraveeh Prayers. Religious gatherings like Tableeghi

Congregation at Raiwind have been associated with the spread of the COVID-19 in Pakistan. On other hand massive influx of Zaireen from Iran aggravated the precarious situation. Religious scholars are side-lined and are not adhered to by the common masses (Shah, 2020).

## WAY FORWARD

**Extension of NCOC by including Health Experts.** Specialized medical/ health experts/ scientists from renowned universities/ hospitals should be included in NCOC to further enhance its scope. These medical/ health experts/ scientists should be tasked to organize/ conduct research for treatment of COVID-19, give candid input on control measures of pandemic and assist in policy making.

**Coordinated Response.** A uniform policy should be formulated in response to COVID-19 by taking all stakeholder on board and then it's across the board implementation be ensured. Any practical issues or concerns by federal/ provincial governments be discussed mutually for viable solution instead of imitating debate on Media.

**Assistance from China.** China has successfully overcome COVID-19 pandemic despite all odds. We should request our friendly country to share her experiences, technical knowledge, action plan/ strategy with us and then important lessons be concluded for ourselves after its thorough analysis by experts.

**Public Awareness.** Awareness Campaign on print, electronic and social media be designed in effective manner for general populace to adhere to safety protocols. Tempo of this campaign should be intense to achieve desired effects. Political/ military leadership, religious scholars, renowned doctors, scientists, national players, actors be made part of this awareness campaign.

**Local Production of Medical Equipment.** This crisis has offered us opportunity to make national level plan to locally produce necessary medical equipment including ventilators, testing kits, personnel protective equipment. Although efforts are at hands and we have got initial success as well, however, we should keep focus on this aspect and adequate financial resources be dedicated for research/ production.

## CONCLUSION

The number of Covid-19 cases will eventually keep rising unless the government assigned rules and strategies that are implemented in letter and spirit in order to get the best reaction possible out of Pakistani citizens against this pandemic and many more to come. With Eid coming up, social distancing is not in the best interest of Pakistanis as of the current moment. This may be part of the reason Pakistan is not prepared but our lack of facilities and poverty also play a role. With the numbers rising day by day, the worry for Pakistan's future is evident. If we look at the current issues our country has with battling diseases, we can surely learn from them for our own betterment and for future references. Public awareness campaigns were launched which related to usage of facemasks, taking care of our hygiene as well as social distancing and isolation in our homes. Although these campaigns may prove affective, faults such as fake news regarding the

pandemic starts to spread and whereas relatively it cannot be completely stopped, Pakistan should be able to take measures as well.

Although teaching hospitals have become isolation wards for people with the disease, media reports have highlighted that they have violated the guidelines for preparedness of COVID-19. Including the unreasonable increase in prices of facemasks, these are just a few faults Pakistan has regarding the current situation, but it is best that we learn from them. Because this virus is our country's first major pandemic, we have a lot to learn, and these difficult times, we must unite. It is indeed recommended that, Pakistani executive circles and its relevant institutions must work out an effective strategy to tackle the ongoing crisis and take long term measures to maintain readiness for any future health emergencies.

### References:

- Anjum, F. R., Anam, S., & Rahman, S. U. (2020). Novel Coronavirus disease 2019 (COVID-19): New challenges and new responsibilities in developing countries. *Human Vaccines & Immunotherapeutic*, 1-3.
- Bibi, R., Khan, R. A., & Noreen, N. (2020). Future Direction of Nursing Education in Pakistani Context. *Higher Education Research*, 5(1), 5.
- Dar, H. A., Mubashir, A., Adil, M., Farzeen, A., Naseer, H., Ayub, G., ... & Javed, A. (2017). Revisiting the AIDS epidemic in Pakistan: where we stand and what we must aim for. *AIDS Research and Human Retroviruses*, 33(10), 985-92.
- Dávila, M. G., Polanco, V. P., & Segura, L. (2018). Geographical Distribution of HIV/AIDS in Pakistan. *American Journal of Public Health*, 108(10), 1270.
- Farrukh, M. J., Tariq, M. H., & Shah, K. U. (2017). Maternal and Perinatal Health Challenges in Pakistan. *J. Pharm. Pract. Community Med*, 3, 76-7.
- Haq, Z., Hafeez, A., Zafar, S., & Ghaffar, A. (2017). Dynamics of evidence-informed health policy making in Pakistan. *Health policy and planning*, 32(10), 1449-56.
- Hassan, A., Mahmood, K., & Bukhsh, H. A. (2017). Healthcare system of Pakistan. *IJARP*, 1(4), 170-3.
- Huang, C., Liang, H., Chu, C., Rutherford, S., & Geng, Q. (2009). The emerging role of private health care provision in China: a critical analysis of the current health system. *Asia Health Policy Program Working Paper*, (10).
- Hussain, A., Hussain, S., Ali, S. M., Ali, E., Mehmood, A., & Ali, F. (2018). HIV/AIDS-A Growing Epidemic in Pakistan. *Journal of Evolution of Medical and Dental Sciences*, 7(8), 1057-62.
- Iqbal, Z., Aslam, M. Z., Aslam, T., Ashraf, R., Kashif, M., & Nasir, H. (2020). Persuasive power concerning COVID-19 employed by Premier Imran Khan: A socio-political discourse analysis. *Register Journal*, 13(1), 208-30.
- Javed, S. A., & Ilyas, F. (2018). Service quality and satisfaction in healthcare sector of Pakistan—the patients' expectations. *International Journal of Health Care Quality Assurance*.
- Javid, H., Ali, S. M., & Javed, U. (2020). Factional federalism, state capacity, and fiscal constraints: Pakistan's COVID-19 challenges. *South Asia@ LSE*.
- Khan, S., Gilani, U. S., Raza, S. M. M., & Hussain, T. (2020). Evaluation of General Awareness Among Professionals Regarding COVID-19: A Survey Based Study from Pakistan.
- Khan, S. A. (2019). Situation Analysis of Health Care System of Pakistan: Post 18 Amendments. *Health Care Current Reviews*, 7, 244.

- Mahar, Irfan (2020). Impact of Covid-19 on Global Economy Structure. *Modern Diplomacy*.
- Malik, K., Meki, M., Morduch, J., Ogden, T., Quinn, S., & Said, F. (2020). COVID-19 and the Future of Microfinance: Evidence and Insights from Pakistan. *Oxford Review of Economic Policy*, Forthcoming.
- Nafees, M., & Khan, F. (2020). Pakistan's Response to COVID-19 Pandemic and Efficacy of Quarantine and Partial Lockdown: A Review. *Electron J Gen Med*. 2020, 17(6), em240.
- Pieh-Holder, K. L., Goldschmidt, C., & Young, P. (2012). Qualitative needs assessment: healthcare experiences of underserved populations in Montgomery County, Virginia, USA.
- Roemer, M. I. (1976). Health care systems in world perspective. Health Administration Press, M2240 School of Public Health, The University of Michigan, Ann Arbor, Michigan 48109, USA.
- Sarwar, S., Waheed, R., Sarwar, S., & Khan, A. (2020). COVID-19 challenges to Pakistan: Is GIS analysis useful to draw solutions? *Science of The Total Environment*, 139089.
- Shah, S. G. S. (2020). Doctors in Pakistan denounce opening of mosques for congregational prayers during Ramadan amid the COVID-19 pandemic: Correspondence. *International Journal of Surgery*, 79, 40–41.
- Siddiqui, Z. S. (2018). Medical education at crossroads: Recommendations from a national study in Pakistan. *Pakistan journal of medical sciences*, 34(3), 772.
- H, S. (2020, Jul. 14). Response Analysis, Challenges & Strategic Vision for Pakistan Amidst the COVID-19 Crisis. *Baaghi TV*.
- Walsh, B. (2020). COVID-19: The history of pandemics. *BBC Future*.

Date of Publication	August 15, 2021
---------------------	-----------------