

Impact of COVID-19 pandemic on health system of Pakistan

Ayesha Ameen¹, Ishrat Rahman², Zain abbas³, Wajiha Maqbool³, Aleena Amin⁴

¹ Office of Research Innovation and commercialization, University of Management and Technology, Lahore, Pakistan

²Department of Basic Dental Sciences, College of Dentistry, Princess Nourah bint Abdulrahman University, P.O. Box 84428, Riyadh 11671, Saudia Arabia

³Department of Life Sciences, School of Science, School of Management Sciences, University of Management and Technology, Lahore, Pakistan

⁴ Department of psychology, Lahore College for Women University.

Corresponding Author: ayesha.ameen@umt.edu.pk

Abstract

The outbreak of COVID-19 has severely affected national and global economies. Current health care emergency alert and dealing with the economic recession is not an easy task for Pakistan. This study is designed to highlight the covid-19 cases, threats, issues, solutions and their implementation. A total of 1.23 million cases were reported in Pakistan during 2021-2022. Of these, highest cases were observed in Sindh followed by Punjab and other provinces of Pakistan. The higher number of cases is due to the lack of facilities including number of hospitals, quarantine centers, ventilators, and health workers as well as the lack of awareness among people. So, in order to control such a pandemic situation, the government of Pakistan need to take some initiatives to promote awareness among people and also has to provide basic medical facilities and food security.

Key words: Health care, Developing countries, Infection, Covid-19, Pandemic

Introduction

In 2019, China faced an outbreak of novel corona virus. This virus was later spread worldwide with high rate and caused severe symptoms of pneumonia. On 30 January 2020, WHO declared COVID -19 as sixth world emergency and announced as pandemic. Two major outbreaks were caused previously in the Middle East by SARS-COV and MERS-COV. The third outbreak by SARS viruses (Covid-19), till today highest positive cases encounter is reported in US, Italy, Spain, India and Pakistan. Many confirmed and suspected cases have been reported in Pakistan. Pakistani government is trying to ensure all the facilities in health sector for treatment of deadly virus by increasing the number of hospitals, quarantine centers, test facilities and awareness among people. The reported mortality rate by COVID-19 is 1.3 % and patient recovery rate is 4.8% in Pakistan. Total 6 hospitals are functional for COVID-19 treatment and testing in Punjab, 7 hospitals in KPK, 4 in sindh, 10 in Baluchistan, 4 in Gilgit baltistan and 3 in Azad jammu Kashmir. Government nominated experts in infection prevention and control and also have appointed focal person to make all the arrangement related to COVID-19. Proper SOPs have been developed for dealing with hospital waste, staff was also trained for handling waste. Pakistan testing facilities are increased by 280,000 from 30,000, Conventional PCR testing is used globally for COVID-19 testing and Pakistan is also following it [1].

Such outbreaks weakened the healthcare system. This can be related to the timely detection of disease, quarantine and isolation procedures, tracing contacts and preparedness beyond the health sector. Pakistan spends 2% of its total economy on healthcare against a global average of 10%. This percentage in terms of health-related indicators is much worse than its neighbors e.g. Iran and India. The latest data from the World Bank shows that in 2016 Pakistan spent around \$40 per citizen on healthcare. By contrast, in India and Iran was \$62 and \$415. Despite, the growing crisis in Iran, higher spending on healthcare per capita is observed during pandemic. Preventive measures are the best alternatives with proper vaccination [2].

Current situation of Pakistan in developing medical facilities is not satisfactory, country still lacks the required facilities, quarantine centers, hospitals and testing facilities as compared to US, Italy and Spain. Testing kits for COVID-19 must be increased from 10 fold to

meetcountry's requirement(Figure 1)[3].It's increasing death rate with a new peak (Table 1).Many workers are getting infected in offices and factories [4].

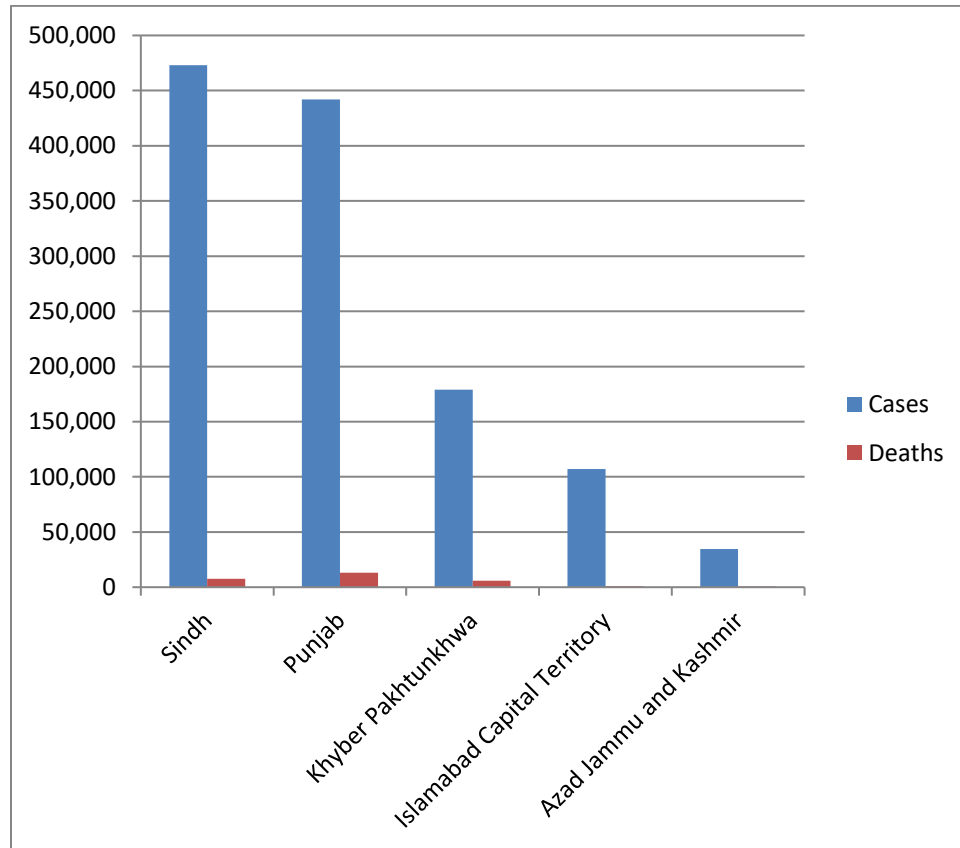


Figure 1: Comparison of Covid-19 cases with death in different province of Pakistan

Globally COVID-19 has already exceeded the death toll of the more recent epidemics of SARS, MERS, and Ebola and dengue. According to the current survey, Pakistan have more than 10,000 confirmed cases and death rate is above 400. Government of Pakistan estimated that by the end of June, the cases could rise up to 30,000 and while mortalities could lie between 5 to 10% of total numbers.The global GDP growth of some economically stable countries decreased to 7.8% including US economy where IMF has already declared a decline of 5.9%. In developing countries including Pakistan, there will be a decrease in economical GDP predicted up to 2%. In the second quarter of 2021, a recovery period can be expected for GDP growth as well. Some economic experiences from past must be taken in consideration to deal with long term effects of the current pandemic to stabilize economy[9].Many health care organizations predicted its severity in the mid of May 2021-22. After this period there will be a decline in COVID-19 Patient [5].

How Pakistan is treating their Health System in this Pandemic?

All the medical resources in Pakistan are very slow to handle the pandemic and the economic implications of the previous lockdowns. This is unparalleled against all countries to specific emergency, budgetary and health issues to challenge the problems. Pakistan has a patient crowded hospitals, exhausted medical and paramedical staff, and health services devoted to the pandemic.

The risks of all health resources devoted to COVID-19 are necessary, but health services should not forget about the patients with chronic ailments, diabetes, hypertension, HIV, TB, cancer or that had received a transplant. Projection in newly identified strains of emerged virus has some drastic clinical impacts. It is difficult to increase the management and control in health expenditures not only in pandemic but also post pandemic (Table 2). There is an impending increase of covid -19 cases in Pakistan and hospitals are constantly reporting fatality rates. Pakistan has taken some important measures to establish a better health system, which includes establishment of new laboratories, importing ventilators, testing kits and personal protective equipments [10].

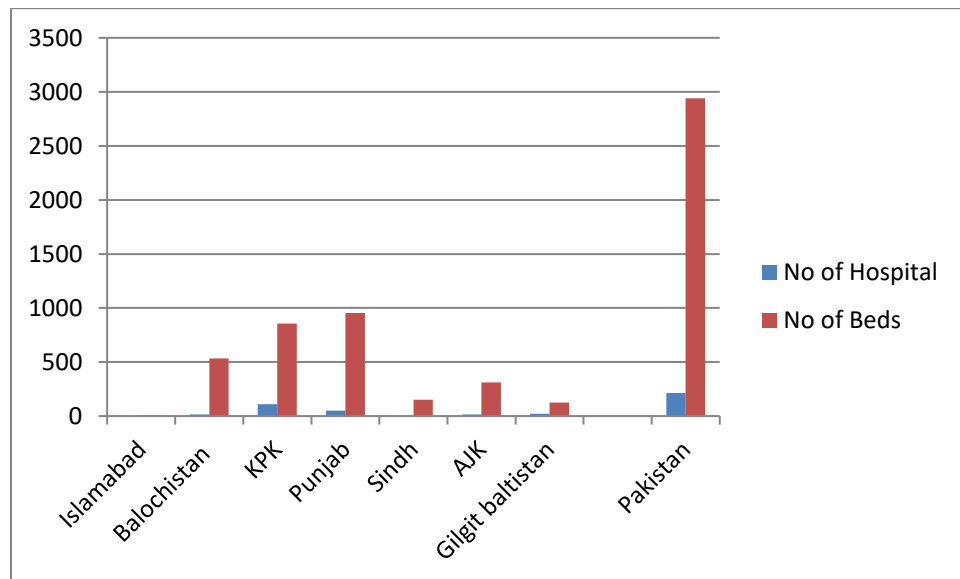


Figure 2: Comparison of health care units in different Province of Pakistan

The situation in Pakistan has impact on the future of health systems towards achieving the goals of sustainability made by WHO. They were almost failed to tackle the pandemic and Pakistan will suffer in the years to come as many as predicted now. According to the WHO's Sustainable development goal, the expected loss of economy and human beings and the people living in a state of vulnerability might be the one's most suffering [6].

A major economic recession in Pakistan:

The countries that sustain infrastructure and budgets allocated every year to health are suffering from the over demand for this equipment like face masks, testing kits and safety kits for doctors. The demand effects even worse to low and middle-income countries like Pakistan.

The economic problems of the COVID-19 crisis in Pakistan are also significant. Even before the pandemic reached the country, Pakistan's GDP was likely to decline. The state bank of Pakistan had already cut its GDP growth rate from 3.5% to 3% for the fiscal year of 2020. The Asian development bank also cut its expected growth rate from 2.9% to 2.6%, while the World Bank adjusted its downtrend 1.1%. According to official estimates, PKR's initial loss is 2.5 trillion (Around 15 billion \$US), with economic losses of 5 billion \$US, while Government officials expect a stagnation of between 12.3 to 18.5 million layoffs.

The Government of Pakistan has put forward a rescue and incentive package of PKR 1.13 trillion, which is balanced between direct support to vulnerable industries, businesses, and enterprises. Some of incentive will be funded with support from the World Bank and Asian Development in the coming months [7].

Implementations and Social Support by Government of Pakistan:

Like many other countries, the Government of Pakistan is taking serious action to control this by using technology to create awareness, mitigate the risks, ensuring food security, protecting businesses and focusing on the challenges. These pandemics expose the insufficiencies of the responses of successive managements to healthcare, poverty, governance, and social safety.

The government of Pakistan needs to use social support internally and externally as well and move forward to sustain their vulnerable groups. Pakistan should support the productive sector like industries, mills, supply chain and manufacturing companies and small industries through financial incentives and emergency measures.

As the pandemic continues, government must emphasize on important clinical and policy strategies that are needed to support health care staff. The government must identify a vulnerable group responsive to psychological distress. Government-appointed educational interventions should target non-medical health workers to ensure that infectious control measures are well understood and practiced. Continue to provide access of disinfectants such as phenol, alcohol, bleach to workers and establish disinfection booths at different locations will defiantly help under developed countries population to get resistance from this novel corona virus after with vaccination shots[8].

CONCLUSION:

Such pandemics reveal the limitations of successive governments in terms of social protection, health, poverty, and governance. COVID-19 gave third world countries a big lesson to overcome their health care limitations and crises. Pakistan as an independent nation should take initiatives for designing and implementing proper strategies to make health care system functional and effective against such pandemics. Once the health care system stabilizes in Pakistan, It will also make the economy better by recovering patients in a maximum percentage. Community transfer of this virus is happened in Pakistan with more than 420000 cases in the fourth wave. According to the current studies, an economic loss of almost 12% is expected in Pakistan during 2021. A rise in poverty level up to 33.7% is expected in this pandemic during 2022. A well-managed and coordinated system plan is required to fight with the current economic crisis and health care system which includes the contribution of the public societies.

Acknowledgment

Princess Nourah bint Abdulrahman University Researchers Supporting Project number (PNURSP2022R179), Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia.

REFERENCES

1. **Waris A, Khan A U, Ali M, AliA and A Baset** COVID-19 outbreak: current scenario of Pakistan. *New Microbes and New Infections*. 2020. 100681.
2. **Mukhtar S** Preparedness and proactive infection control measures of Pakistan during COVID-19 pandemic outbreak. *Research in Social & Administrative Pharmacy*. 2020;2(23): 121-123
3. **Waris A, Khan A U, Ali M, AliA and A Baset** COVID-19 outbreak: current scenario of Pakistan. *New Microbes and New Infections*. 2020. 2(13):21-23
4. **Ozil PK and T Arun** Spillover of COVID-19: impact on the Global Economy. *Available at SSRN 3562570*. 2020;1(09):12-15
5. **Tan BY, Chew N W, Lee G K, Jing M G, Yeo L L and GN Shanmugam** Psychological Impact of the COVID-19 Pandemic on Health Care Workers in Singapore. *Annals of Internal Medicine*. 2020;5(12):340-342
6. **Cascella M, Rajnik M, Cuomo A, Dulebohn SC and R Di Napoli** Features, evaluation and treatment coronavirus (COVID-19). 2020;3(34):321-326
7. **Mukhtar S** Preparedness and proactive infection control measures of Pakistan during COVID-19 pandemic outbreak. *Research in Social & Administrative Pharmacy*. 2020;2(23): 121-123
8. **Khan S, Khan M, Maqsood K, Hussain T, and M Zeeshan** Is Pakistan prepared for the COVID-19 epidemic? A questionnaire-based survey. *Journal of Medical Virology*, 2020;4(21): 110-112.
9. **Sharif A, Aloui C, and Yarovaya L**. COVID-19 pandemic, oil prices, stock market, geopolitical risk and policy uncertainty nexus in the US economy: Fresh evidence from the wavelet-based approach. *International Review of Financial Analysis*. 2020: 70, 101-496.
10. **Rasheed R, Rizwan A, Javed H, Sharif F and Zaidi A**. Socio-economic and environmental impacts of COVID-19 pandemic in Pakistan—an integrated analysis. *Environmental Science and Pollution Research*. 2021;28(16), 19926-19943.