

**OUTBREAK OF COVID-19 PANDEMIC IN PAKISTAN: A BIRD EYE REVIEW**

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**ABSTRACT**

**Background:** The first case of corona virus was reported on 17 November, 2019, when a 55 year old man from Hubei province of china contracted COVID-19. It takes more than a month when the doctors of china noted further cases in Wuhan China. The corona virus surfaced in a Chinese seafood and poultry market quickly spread to at least 177 countries, killing more than 120,000 and sickening more than one million in a week. **Method:** Through content analysis, data from 26, February, 2020 to 21 April 2020 was screened in Pakistan for coronavirus pandemic. Our data included the total number of coronavirus cases, total number of new cases, total number of recover cases and total number of deaths due to pandemic. **Results:** Results show that, COVID-19, effected both the developing and developed countries. Similarly in Pakistan coronavirus active cases and deaths are reported from all the provinces. **Conclusion:** Coronavirus started from china effect 177 countries including Pakistan. Pakistan is a poor country and not ready for such pandemic. Therefore in future, Pakistan may face hug number of challenges due to this coronavirus Pandemic.

**KEYWORDS:** Coronavirus, COVID-19, Pakistan, health, Pandemic, Developing countries.

**INTRODUCTION**

On 17 November, 2019, a 55 year old man from Hubei province of china contracted COVID-19. Initially people working in seafood market in Hubei province reported Pneumonia like symptoms. But later on, same patients were reported in other areas also. The clinical findings among most patients were dry cough, dyspnea, and fever. Soon many people were effected, therefore the centers for disease control and prevention designate the pathogen as "sever acute respiratory syndrome coronavirus 2. Later on research found that it belongs to SARC family and it was named as COVID-19 or coronavirus disease in 2019.

Although rest of the world was ready to control this outbreak in their countries but In short time it spread to rest of the world through travelling and physical contacts. Now at least 177 countries are facing the corona virus pandemic. Till date around 144,683 people have been died and 216, 2408 are sick. Throughout the world the number of sick people is increasing which can leads to further deaths. Not only the developing but developed countries such as USA, Spain, Italy, France, Germany and UK reported large number of deaths.

In Pakistan first two cases of coronavirus was reported on 26 February 2020. First case was reported in Karachi in a 22 year old male with a traveling history of Iran, while second case was reported in Islamabad. After that many cases were reported from all the provinces of Pakistan. In Pakistan due to insufficient coronavirus testing kits, number of coronavirus cases are 8,418 and 176 people have been died. However health minister stated that, number of cases may be more than lakh. This number may also increase with passage of time and after the major lockdown in Pakistan. Therefore this paper highlight the current stats and figure on coronavirus disease in Pakistan. The implication of this paper are discussed.

**LITERATURE REVIEW**

Coronaviruses infect mammals and birds worldwide and some of these viruses infect humans to cause respiratory illness and rarely a server illness(Ullah, 2020). After the spread of coronavirus from china to rest of the world, The government of Pakistan also taken rigorous measures like designed special hospitals, laboratories for testing, isolation and quarantine centers, awareness campaign and lock down in its all provinces to control the spread of the pandemic. However the population of

Pakistan is high and current situation of Pakistan is not satisfactory. Pakistan is facing financial problem to invest in health and secure the lives (Waris, Khan, Ali, Ali, & Baset, 2020). In another study conducted by (Iqbal *et al.*, 2020) find that coronavirus belong to SAARC family spread very quickly. The virus spread through interaction with an infected person, sneezing, coughing, touching and air inhaling of aerosol droplets. There is no vaccine available therefore it can only be control through social distancing using protective gear such as masks and gloves, avoiding gathering and handshakes, hugs or any other form of social contact. Similarly, (Ahmad, Khan, Khan, & Hui, 2020) find that Pakistan is a developing country and due to lack of facilities such as testing and diagnosing kits, and other resources in the form of doctors and hospitals, Pakistan is not ready to control any trauma associated with Covid-19, which may result in crises by the number of increase in cases and deaths.

Pakistan is in higher risk of COVID-19 due to intra country traveling and lack of health facilities. Due lock down, people were traveling from their destination to various parts of the country. Therefore cases were reported in all parts of the country. The researchers suggest that corona outbreak can be control through social distancing and restrictions on traveling (Inamullah, Nasir, Rehman, Rehmatullah, & Ashrafuddin, 2020). In a study conducted by (Qureshi, Imdad, & Abbas, 2020) find that, in Pakistan healthcare workers have insufficient knowledge of preventive measure and infection control. Therefore not only the other people but doctors are effecting from this pandemic. The government need to increase awareness both in general public and health care workers to combat the covid-19 in Pakistan. (Mukhtar & Mukhtar, 2020) Highlighted that corona virus is a pandemic and it can be control through care. World health organization is offering online training courses to interested individuals to fight the virus. Similarly, people can be safe from this disease through simple precautions such as washing hands, social distancing and avoiding contacts. (Ali & Gatiti, 2020) highlighted the role of librarians and informational professional in the control Covid-19 in Pakistan. This research conclude that Pakistani librarian support public health awareness, support research teams, research and faculty and provide routine core services for regular library users. (U. U. R. Qureshi *et al.*, 2020) highlighted that, the main reason behind spread of coronavirus in Pakistan is the traveling from China to Pakistan. As the pandemic was first identified in China, Wuhan city, therefore many people were effected. To control this disease, Pakistan need to check airports and test the people coming from other countries on airports and borders.

Likewise, (Khan, Siddique, Ali, Xue, & Nabi, 2020) Suggested that poor countries such as Pakistan, India and Bangladesh are already facing many issues and due to poverty and economy they cannot go for lock down and

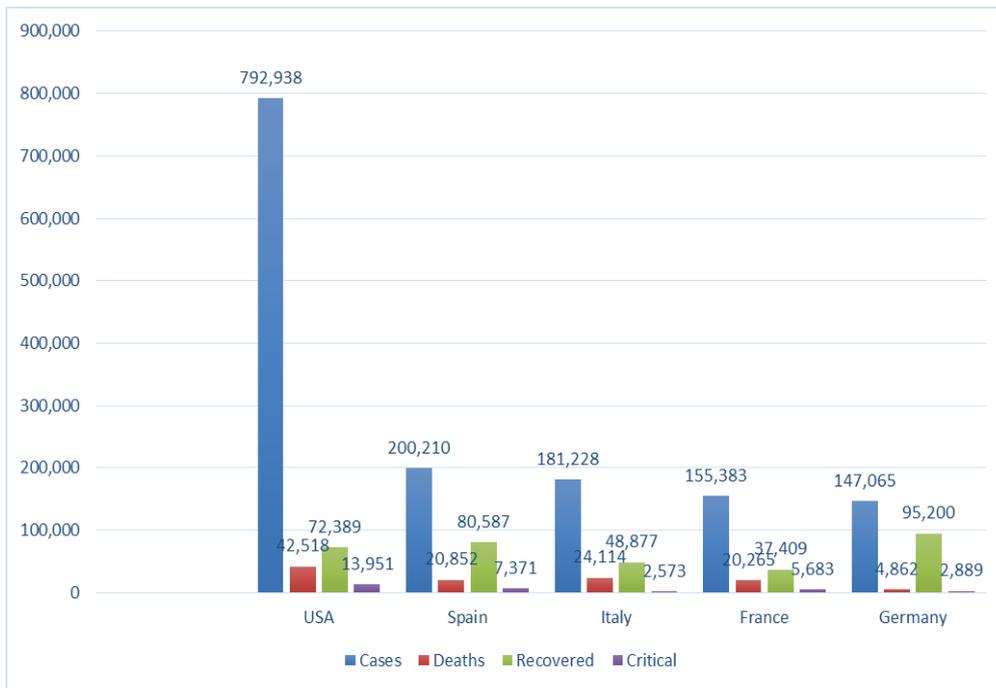
health emergencies. Therefore these countries need to invest their energies on the primary level of prevention. (Ahmed *et al.*, 2020) Find that Covid-19 need further research and studies to control the pandemic. However it is advised to keep distance and avoid gathering which will reduce its spread. Similarly, (Durrani & Zaheer, 2020) highlighted that, currently no vaccine is available for this pandemic. Currently for the screening purpose of Covid-19, RT-qPCR based test are used as an initial detections. However for massive people these tests are expensive and time taking. The new development in the form of Immunoassay procedures (liquid Phase tests or bed side test which takes only 10-20 minutes can help and accelerate the treatment. Pakistan facing difficulties in diagnosis, and treatment need to adopt the immunoassay procedure for mass scale screening and confirmation of Covid-19 Pandemic. (Saqlain, Munir, Ahmed, Tahir, & Kamran, 2020) Highlighted that Pakistan is located between two main coronavirus centers, one is Iran and the other one is China. However in comparison to china and Iran Pakistan is not prepared to fight this pandemic. As Pakistan have not sufficient technology, healthcare workers, hospitals, quarantine units and economy to feed its people in lock down.

#### **METHODOLOGY**

This research applied quantitative method in the form of content analysis. Researcher screened and analyzed data from World health organization and government of Pakistan data bases on Covid-19. As first case of coronavirus was reported in Pakistan on 26 February 2020, therefore researcher analyzed the data from 26 February 2020, to 21 April 2020. After collection and analysis researcher present the data in the form of tables.

#### **RESULTS**

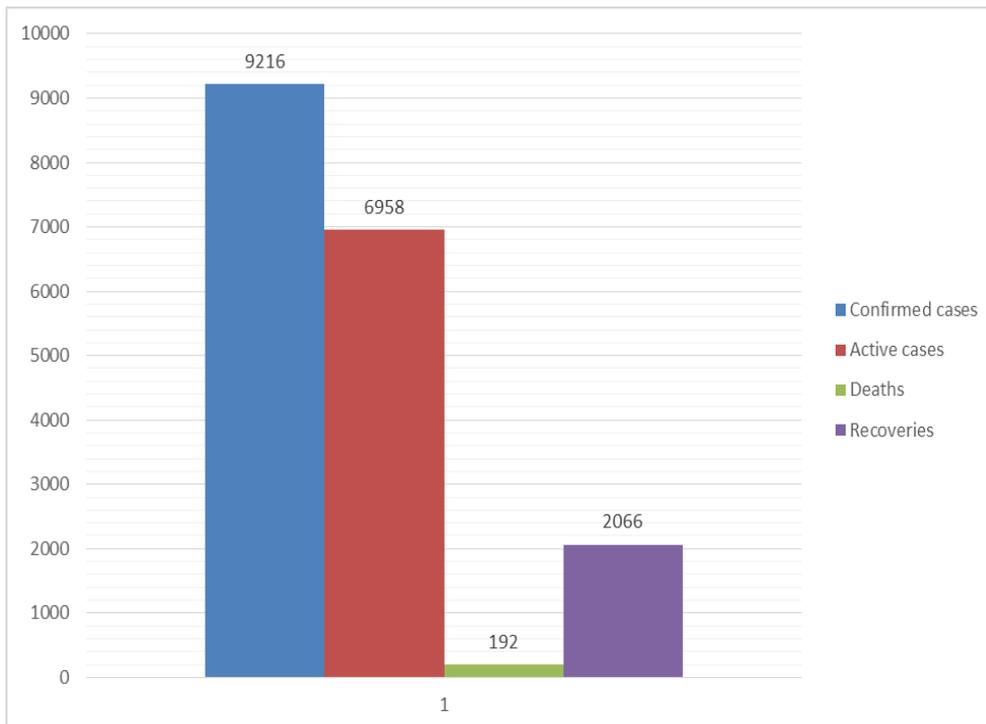
This section of paper present results in the form of tables.



**Chart 1: World Top Five Most Effected Countries in the World.**

After the outbreak of COVID-19 from China, at least 177 countries are effected. Not only have the developing but developed countries faced many problems. Among them are USA, Spain, Italy, France and Germany. These countries report massive deaths and cases, for example

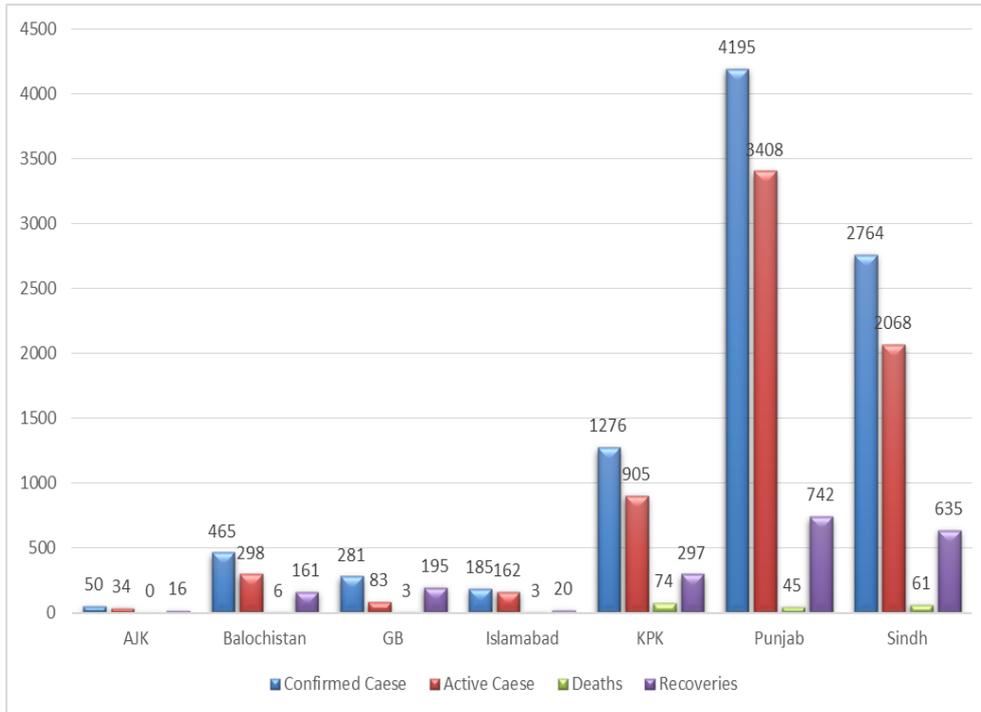
USA report 792,938 active cases, 42,518 deaths and other 13,951 are critical. Similarly Spain, Italy, France and Germany reported large number of cases and deaths due to COVID-19, Pandemic.



**Chart 2: Total Covid-19 Cases in Pakistan.**

Pakistan is also effected by the COVID-19 pandemic. Coronavirus first case was reported on 26 February in Pakistan. So far Pakistan report 9216, confirmed cases, 6958 active cases, 192 deaths and 2066 recoveries.

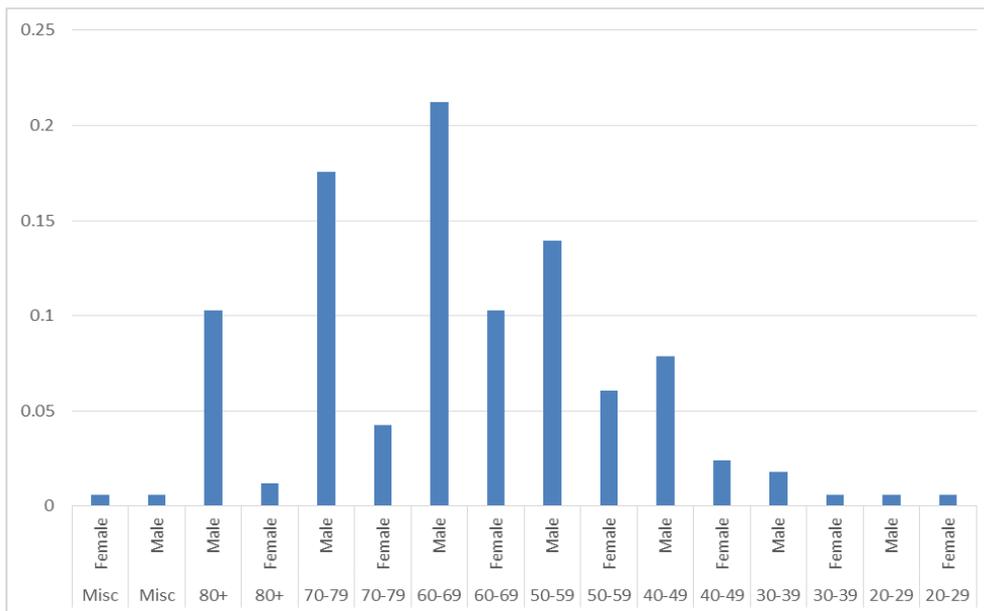
However as reported by the health department of Pakistan, the active cases in Pakistan may be more than a Lakh in Pakistan. But due to lack of resources and testing kits, a small number of people were tested.



**Chart 3: Province Wise Covid-19 Cases in Pakistan.**

Similarly, Pakistan reported cases and deaths from every corner of the country, starting from Northern areas to Sindh and Balochistan. Among the provinces Punjab report 4195 number of confirmed cases, 3407 active cases 45 deaths. However, it should be noted that Punjab

is the largest province of Pakistan by the size of population. Likewise, Sindh report 61 deaths, KPK report 74 deaths and Balochistan report 6 deaths from COVID-19.



**Chart 4: Covid-19 Demographic Deceased (%).**

Chart number 4 show that among the most effected people are those who are aged and male. Mostly cases were reported in males because in most cases women stay at home while male members go outside the home for earning money to feed his family. Similarly, very few cases were reported in Youngers which show that COVID-19 virus had less effects on the Youngers.

**DISCUSSION**

Seasonal influenza are the pathogens of pneumonia include different types of virus adenovirus, human bocavirus, parainfluenza virus and corona virus. Phylogenetic analysis suggested that SARS-CoV0-2 is similar to the corona virus circulating in horseshoe bats, that was independently originated from animal and

introduced in to humans. SARS-CoV-2 may have originated from seafood market in Wuhan and associated with contaminated material in the market region (Lai, Shih, Ko, Tang, & Hsueh, 2020). Like other viruses, SARS-CoV-2 infect lung alveolar epithelial cells. Studies suggested that combination of antiretroviral therapy might improve the clinical outcome of SARS-CoV-2 patients and can also be the option for Covid-19 patients (Velavan & Meyer, 2020). Although infection are said to be controlled in china through severe public health control measures, but in Iran cases have been increased (more than 8000) and take two months to prepare for the response (Mossa-Basha et al., 2020). Iran and Italy shows high rate of deaths (MacIntyre, 2020). Pakistan borders countries infected with Covid-19, including china and Iran show mortality rate of (3161, 291). Compare with china and Iran, Pakistan has low standard health care system and weak government. Current condition demands high level of preparedness and long term solution. Active surveillance, early detection, quarantine, clinical management and tracing of close contact are the potential strategies Pakistan is following to reduce the number of cases (Saqlain, Munir, Ahmed, Tahir, Kamran, et al., 2020). The economic growth of Pakistan with layoff 18.53 million of those employed in different sectors and this cost would increase if this lock down would extend. Moreover Covid-19 virus in Pakistan was compared with other countries virus to see the alignment, similarity and found maximum similarity with Vietnam, USA, Italy and china and least similarity were found in Indian corona virus. Currently has spread to 181 countries and region and caused 62784 deaths globally and Pakistan will poor health care facilities are at great risk (Qasim, Ahmad, Zhang, Yasir, & Azhar, 2020). The simulation results are quite disturbing, even after social distancing and house quarantine the spread of covid-19 would be significant.

## CONCLUSION

Globally it has become clinical threat for healthcare workers and general population and least information is present to understand this novel corona virus. According to the epidemiological data presents, a huge number of population is susceptible to be infected with Covid-19 infection. Scientists, researchers and doctors are searching the effective option of antiviral therapy which is currently under evaluation. What we can do now is following the preventive measurements to spread Covid-19 in surrounding. As more we learn about this novel virus, the more we can better respond.

## REFERENCES

- Ahmad, T., Khan, M., Khan, F. M., & Hui, J. Are we ready for the new fatal Coronavirus: scenario of Pakistan? *Human Vaccines & Immunotherapeutics*, 2020; 16(3): 736-738.
- Ahmed, T., Noman, M., Almatroudi, A., Shahid, M., Khurshid, M., Tariq, F., . . . Li, B. Coronavirus Disease 2019 Associated Pneumonia in China: Current Status and Future Prospects. In: Preprints, 2020.
- Ali, M. Y., & Gatiti, P. The COVID-19 (Coronavirus) Pandemic: Reflections on the Roles of Librarians and Information Professionals. *Health Information & Libraries Journal*, 2020.
- Durrani, F., & Zaheer, F. An Approach to Screen COVID-19 Patients: With Special Reference to Pakistan, 2020.
- Inamullah, S., Nasir, S. A., Rehman, A., Rehmatullah, R., & Ashrafuddin, S. COVID-19, A GLOBAL ALARM: INTRA-COUNTRY TRAVELLING, THE ROOT CAUSE OF COVID-19 SPREADING IN PAKISTAN AFTER INTERNATIONAL IMPORTATION. *European Journal of Biology*, 2020; 5(1): 9-15.
- Iqbal, M. S., Haider, S., Essa, S. A., Murtaza, H. M., Maryam, S., Sabir, M. M., & Sherwani, S. K. PAKISTAN JOURNAL OF MICROBIOLOGY. *Pak J Microbio*, 2020; 1(01): 37-42.
- Khan, S., Siddique, R., Ali, A., Xue, M., & Nabi, G. Novel coronavirus, poor quarantine, and the risk of pandemic. *Journal of Hospital Infection*, 2020; 104(4): 449-450.
- Lai, C.-C., Shih, T.-P., Ko, W.-C., Tang, H.-J., & Hsueh, P.-R. J. I. j. o. a. a. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and corona virus disease-2019 (COVID-19): the epidemic and the challenges, 2020; 105924.
- MacIntyre, C. R. J. P. H. R. P. On a knife's edge of a COVID-19 pandemic: is containment still possible, 2020; 30(1): 3012000.
- Mossa-Basha, M., Meltzer, C. C., Kim, D. C., Tuite, M. J., Kolli, K. P., & Tan, B. S. J. R. Radiology department preparedness for COVID-19: radiology scientific expert panel, 2020; 200988.
- Mukhtar, F., & Mukhtar, N. CORONAVIRUS (COVID-19): LET'S PREVENT NOT PANIC. *Journal of Ayub Medical College Abbottabad*, 2020; 32(1).
- Qasim, M., Ahmad, W., Zhang, S., Yasir, M., & Azhar, M. J. m. Data model to predict prevalence of COVID-19 in Pakistan, 2020.
- Qureshi, A., Imdad, B., & Abbas, U. Evaluation of the awareness level of Healthcare workers toward NCOVID-2019 in Pakistan. *medRxiv*, 2020.
- Qureshi, U. U. R., Saleem, S., Khan, A., Afzal, M. S., Ali, M. S., & Ahmed, H. Outbreak of novel Corona virus (2019-nCoV); implications for travelers to Pakistan. *Travel Medicine and Infectious Disease*, 2020; 101571.
- Saqlain, M., Munir, M. M., Ahmed, A., Tahir, A. H., & Kamran, S. Is Pakistan prepared to tackle the coronavirus epidemic? *Drugs & Therapy Perspectives*, 2020; 1-2.
- Saqlain, M., Munir, M. M., Ahmed, A., Tahir, A. H., Kamran, S. J. D., & Perspectives, T. Is Pakistan prepared to tackle the coronavirus epidemic?, 2020; 1-2.

17. Ullah, E. The Novel coronavirus outbreak: A challenge beyond borders. *Pak J Surg Med.*, 2020; *1*(1): 8-9.
18. Velavan, T. P., & Meyer, C. G. J. T. M. I. H. The COVID-19 epidemic, 2020; *25*(3): 278-280.
19. Waris, A., Khan, A. U., Ali, M., Ali, A., & Baset, A. COVID-19 outbreak: Current Scenario of Pakistan. *New Microbes and New Infections*, 2020; 100681.