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Emerging COVID-19 Pandemic in Pakistan: a global health threat

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ABSTRACT

More than 213 countries were affected badly with the novel corona virus disease. Of 17th April 2020, confirmed reported global cases of COVID-19 were 1,995,983 and 131,037 reported global deaths. According to the studies, China and Iran has the higher incidence and mortality rate of COVID-19. As Pakistan share border with these countries and due to high frequency of trade and travel to these areas increases the risk of viral transmission to Pakistan. Using publicly available data, we reported current status of COVID-19 epidemic in Pakistan. On 26 February 2020, Pakistan reported its first 2 confirmed COVID cases that are linked to travel history of Iran. Of 17th April 2020, increase in incidence and mortality rate was reported nationwide. Entrance of pilgrims without testing at the border results in the introduction of the virus in the state. Lack of awareness and non-serious attitude of the people like avoiding social distancing and adopting hygienic measures as well as high population densities of the major cities contributed to the spread of the virus in the country.

Keywords: COVID-19, community transmission, pilgrims, social distancing

INTRODUCTION

Several emerging, reoccurring and contagious microbes possess an incredible hazard to food and public health safety. These diseases can be defined as “the existing or pre-existing diseases with a quick mode of transmission in a specific geographical location. One such infectious disease is COVID 19. For the first time, this disease was originated in December, 2019 from Wuhan, China. Corona virus is responsible for respiratory tract illness 1-2. The disease appear as uncomplicated with mild symptoms, however in 14% of cases oxygen transport and hospitalization is required. In addition to this, 5% of patients requires intensive care unit 3. At final stages, the infection gets worsens and is converted into acute respiratory distress syndrome, sepsis associated multi organ failure (cardiac and kidney injury) and septic shock 4.

Due to the rapid spread of the COVID to different areas of the world after Wuhan, World health organization (WHO) alarmed the globe about its consequences. It was assumed that extraordinary implementation is required to prevent the spread of COVID pandemic within and out of China 5.

INFECTIOUS DISEASES SCENARIO IN PAKISTAN

Pakistan shares cultural, social and demographic relationships with its neighbors like Afghanistan, China, India and Iran. Its total population is 219,675,966 (Sunday, March 22, 2020) with rural population of 142,238,237 (64.9%). Pakistan faces severe health threats to emerging infectious diseases (EIDs) and is ill prepared to combat or prevent such diseases (EIDs) because of

its limited resources 6. The emerging infectious diseases would be a burden on the national economy and public health and can ultimately effects the nation in several aspects like ecology, environmental and socioeconomic status 7. Alterations in human behavior, increased growth and proliferation of food industry, application of agriculture and livestock domain, climate changes as well as environmental destruction opened a new corridor for re-emerging infectious agents. The most threatening issue about these agents is its appearance in the non-endemic regions. Apart from this, these infectious agents' exhibits broader host range with a novel pathogenesis mode 8. In the third world nations including Pakistan, the incidence of such emerging and re-emerging will create a stern situation as these parts have already been hit by several pandemics before.

According to World health organization (WHO), Pakistan because of insufficient primary health care facilities, inadequate government attention, overpopulated cities, inappropriate sanitation system, polluted water, religious misconceptions, limited resources, , poor hygienic condition due to inappropriate awareness, deficient medications and medical practitioners, is posed to risky breakouts in the future 9.

COVID-19 IN PAKISTAN

In north, Pakistan shares borders with China that shows the highest number of deaths due to COVID-19 after Italy (n=3253). In west it is connected with Iran that ranks third among countries with highest number of deaths associated with COVID-19 (n=1284) 10. Apart from it, Pakistan is hub of several respiratory and viral infections with increased mortality and morbidity. Also in comparison to the developed parts of the globe, Pakistan have poor health care system. According to the literature, lower respiratory tract diseases are the leading cause of death and has a high mortality rate under 5 years of age in Pakistan 11 12. In COVID 19 pandemic, Pakistan suffered a lot in the form of confirmed 302 cases with initial two cases of COVID-19 on February 26, 2020 followed by first death on 16 March 2020. To date, the prevalence of confirmed COVID cases in AJK is 1, Gilgit Baltistan 13, 19 in Khyber Pakhtunkhwa (KPK), Baluchistan 23, Punjab 33 and 208 cases in Sindh 13.

RESPONSE STRATEGIES AGAINST COVID-19

After COVID outburst, worldwide COVID endemic countries have taken several immediate preventive measures to overcome the adverse effects. Pakistan Civil Aviation Authority, has taken several preventive steps in the form of introducing screening activities at major airports. Pakistan also suspended all international flights. Pakistan has made the decision to lock-down its borders with neighboring countries endemic with COVID like China, Iran and Afghanistan for two weeks. This implementation was applied on both travelers and traders. Beside this, for the novel COVID pandemic, a National co-ordinate committee was ascertained to monitor the situation on routine basis. For the implementation of preventive measures, National disaster management authority (NDMA) in consultation and coordination with provincial and district authorities lead several preventive operative measures. It was decided to close all public and private sector educational institutes until 5 April, 2020 and was announced that its opening will depend on the pandemic condition. In addition to this, all conferences and public gatherings were banned. In hospitals, wards were isolated for COVID-19 patients. It was decided to build new quarantine centers for suspected and confirmed COVID cases in order to prevent the spread of the disease 14-15.

URGENT ACTIONS REQUIRED TO COMBAT WITH COVID-19

To overcome the disease or break the chain of viral transmission, it is required to identify local, regional and global health security issues. Being a communicable disease, COVID spread like fire. Poor sanitation and unhygienic conditions are some of the factors that contributes to its spread. In comparison to international standards, the present condition of Pakistan's health care system is poor. In order to overcome the disease, basic health problems should be addressed. Health policies should be formulated and implemented 16. Availability of counterfeit medicines in the market contributes in the destruction of our health care system. Formulation of health care policies and national health education curriculum is the basic need of public health sector. This will allow the citizens to identify the dos and don'ts regarding public health policies 17. Currently Pakistan is not in state of identifying these issues, so international community cooperation and efforts are required to overcome the burden of infectious diseases. Also proper training of the response team could be effective in this regard. Serious efforts should be taken by Pakistan in the form of the Global Health Initiative (GHI), Global Health Security Agenda (GHSa) and Cooperative Threat Reduction. All of these aim to build an integrated, robust and globally sustainable health management systems that are friendly and safe 18.

CONCLUSION and RECOMMENDATIONS

Awareness about the disease and increased surveillance system should be adopted in order to break the viral chain of transmission. Regarding the disease transmission, travelling is considered an important contributor. Community sensitization along with reduction in travelling with road route restriction can prove to be effective step in minimizing the viral transmission. Enhancing health care facilities on priority basis as well as research regarding the introduction of vaccines, diagnosis and therapeutics are the efficient ways to break the viral chain.

CONFLICT OF INTEREST

The author affirms that there are no conflicts of interest to disclose.

AUTHOR CONTRIBUTION

Not applicable

FINDING SOURCE

Not applicable

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