

# Economic Growth Vulnerability Amid the COVID-19 Epidemic: A Systematic Review of Different Sectors of Pakistan

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## Abstract

This research investigates how the economy of Pakistan, education system and poverty line got influenced by seventh member of coronaviruses family (COVID-19) which formed another clade within the subgenus sarbecovirus, Orthocoronavirinae subfamily and different from MERS-CoV and SARS-CoV. This global epidemic not only destroys the comprehensive system of developing countries but also it became a formidable challenge for developed countries to manage it and reduces the sudden impacts of it. Being a developing country, Pakistan also faced the increasing demand for surgical masks, ventilators and other health care instruments with a lockdown in the country. Lockdown contributes to economic deterioration and increase in poverty. Pakistan initiated new prevention strategy; called smart and micro-lockdown to avoid the rapid increase in COVID patients, death toll, poverty, economic decay and dynamically response system to open the business in the country with flexible and sprightly operations. The controllability of government on population, online education system with better cyber-management, strict social distancing at workplaces, testing and tracing policy for workers, quick informative strategy about new patient, medication and health promotion policies are the only solution of this epidemic COVID-19 until the vaccine is not produced or confirmed by World Health Organization (WHO). These steps can reduce the negative impact on economy, education system and rapid growth of poverty in Pakistan.

**Keywords:** COVID-19; Economic Growth; Education System; Poverty Line

## Introduction

A cloud of gloom has descended over the year 2020, when the news of locking down 6.5 million population of Hubei province spread with a speed

of light to contain the spread of the virus, never in the history, human witness with huge containment of population. Few pneumonia cases reported in Huanan Sea market in Wuhan in December 2019, with clinical presentations resembling viral pneumonia-like the epidemics of the two beta coronaviruses, severe acute respiratory syndrome coronavirus (SARS-CoV) (Ahmad & Muhammad, 2012; Ali *et al.*, 2020; Ogen, 2020) with 10% mortality rate (Basit *et al.*, 2019) and Middle East respiratory syndrome coronavirus (MERS-CoV) (de Groot *et al.*, 2013; Drosten *et al.*, 2003) with 37% mortality rate (Ksiazek *et al.*, 2003) until a deep sequencing analysis from lower respiratory tract sample of pneumonia patients indicated it to be a novel coronavirus. This coronavirus too belongs to the family of Coronaviridae and the order Nidovirales enclosed in non-segmented positive-sense RNA virus which is mainly presented in

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humans and other mammals. The symptoms of this pneumonia with unknown aetiology characterized by dry cough, dyspnea, fever, and bilateral lung infiltrates on imaging (Ksiazek *et al.*, 2003; WHO, 2003).

In the beginning, the economic wheel of Wuhan has stopped, jobs have lost, debts are mounting, people are quarantined in their homes but no one knew that the within two months' entire world including Pakistan followed the footsteps of Wuhan and after centuries earth has got a chance to breathe healthy and clean air. Pakistan being an under developing country with weak institutional structures has been affected miserably by COVID-19 and the country has not reached the peak. Pakistan is a developing country with a population of 207.77 million (Qadeer *et al.*, 2016) which has limited resources, poor economy, and insufficient funding to tackle the devastation caused by the lockdown. The time when the developed countries were fighting against the COVID-19, Pakistan is yet to arrive at the point where they are overwhelmed. Since the first case of COVID-19 reported in Karachi city (Sahin *et al.*, 2020), the number of infections has sharply reached to 125933 cases including more than 2000 death till 12 June 2020 (Singhal, 2020; Alimolaie, 2020). The main reason behind this fast spreading of the disease is the inappropriate response of government and public to the epidemic which is a matter of serious international public health concern due to various factors including the asymptomatic transmission of infection and a lack of proper Surveillance (Sahin *et al.*, 2020). Further, Pakistan with 154 per million measles cases (Sahin *et al.*, 2020), ranked fifth highest burden of tuberculosis, the endemic status of malaria, and 6% of its population carries the hepatitis C virus (Alimolaie, 2020) has made the country unable to tackle the devastation caused by the epidemic. Along these, low health budget and poorly-equipped health system, a serious level of hunger (Zaki *et al.*, 2012), the grip of IMF and other International monetary organization, and religious gatherings (Kim *et al.*, 2020) have made it a very big challenge for the country to control the spread of the disease. The decision to shift classes online with high complains connectivity challenges faced by students from remote areas (Kim *et al.*, 2020) are another challenge for the country because most of the students from the remote area have a problem in the connectivity of internet.

In this review article, we attempted to summarize various factors that led COVID-19 an uphill task for Pakistan. Further, we have

summarized the impact of the epidemic on the economy, education, and poverty of the country.

### Impact on Economic Growth

Its technological revolution that brought us together by making traveling easy and affordable which had led the world to earn the appellation a "Global Village" but in the wake of coronavirus pandemic the world has coined a new name that is "Digital World" as the helplessness in halting virus has demanded human to do all the activities via technology by shelter in a place. The corona incident is more catastrophic than the Second World War that it has disrupted the Global Value Chain (GVC) and the most vendible system like Capitalism now seems to be collapsing in the aftermath of COVID-19 spread (Von Grebmer *et al.*, 2012; Kim *et al.*, 2020) The global economy could be affected in three main ways: production, disrupting supply chain & markets and financial impact on firms and financial markets. China is the largest exporter of intermediate goods and most of manufacturing firms around the world rely heavily on China and this pathogen has impacted on the production and profitability of the significant industries that include automobile, food processing, electronic equipment, textile, petrochemical, iron and steel production. So, if the production in China got effected than the rest of the world will obviously face the repercussions. Currently, 80% ingredients for manufacturing antibiotics and medical drugs are developing in China and there is sever loss of revenues and disruption in the supply chain because of the suspension of operations in China due to COVID-19. Similarly, India is the largest producer of sterile injectable drugs and lockdown in India has affected the supply chain in a massive level (Hibbett, 2020). According to Zhang Yi, chief economist at Zhonghai Shengrong Capital Management, the shock to China's economic activity due to COVID-19 is greater than the global financial crisis<sup>18</sup>. Pakistan's economy has suffered chronic strains since independence and the economy is one of the many critical problems Pakistan is grappling with because Pakistan's economy is already sputtering, with low or no growth for last 2 decades while COVID-19 has added fuel to the fire to its economy. According to Zafar-ul-Hassan Almas, Chief Macroeconomics in Planning Commission of Pakistan, country's economy has suffocated in a number of ways regarding growth, fiscal, the problem of liquidity of banks, expenditure and revenue losses, fiscal space constraints and resetting of IMF program targets (Iqbal *et al.*, 2020; Zahid *et al.*, 2020) which will hit

jobs up to 5 million job losses. Moreover, government has reports that around 30,000 Pakistanis have lost jobs in the UAE and other Gulf countries; exports and remittances have a greater impact on the economy than imports and there will be sharp downtrend in remittances and exports. According to government estimations, if food, pharma and retail sectors are allowed to open the GDP could fall to 2% because government was expecting 3.3-3.4 per cent GDP growth before the crisis but now the estimations have been cut to 2-2.8 per cent (see figure-1), the deficit will hit 9% because of increase in expenditure demand and fall in taxes and non-tax revenues<sup>19</sup>. Pakistan has one more challenge of balance of payment crisis as the economy heads towards a major recession with a 1.5 per cent predicted in the current financial year ending in June, compared with a pre-COVID-19 forecast of nearly 3% growth, according to the finance ministry and central bank. Economic growth was expected to slow to 2.6% this year due to continuing stabilization efforts, slower growth in agriculture (Agriculture is expected to meet slow growth in fiscal year (FY) 2020 as the locust infestation in over two decades' devastated the harvests of cotton, wheat, and other major crops) beside the impact of the COVID-19 outbreak. The State Bank of Pakistan (SBP) has retained a tight monetary stance keeping the policy rate at 13.25 per cent to dampen inflationary expectations but COVID-19 has reduced the policy rate to 11.0 per cent in March 2020. The Current Account Deficit (CAD) contracted to 1.0 percent of GDP in Jul-Feb FY20, from 3.5 per cent in the same period in FY19 (Ramzan & Ahmad, 2014; Dubey *et al.*, 2020;

Becker, 2020). Travel restrictions have hit the travel industry hardest in Pakistan that it is bringing real and profound concern to millions of families because millions of private to governments jobs are associated with transportation in Pakistan, especially transportation careers like drivers, movers and logistic personals are linked to poor people in Pakistan and their jobs include in industries that transport passengers and cargo via rail, bus, plane, boat and transit system, in tourist industry involves scenic and sightseeing transportation and private jobs duties, from operating public buses, taxi cars, trucks and boats in providing customer service, their joblessness is a grave problem to deal in Pakistan. According to "World Travel and Tourism Council" the trade group representing major global travel companies, If the wrath of pandemic stays for few more months, our glob will lose more than 75 million jobs worldwide with more than \$2.1 trillion in revenue (Shirky, 2010; Bachman, 2020). External Debt in Pakistan has decreased to 109949 USD Million in the first quarter of 2020 from 111047 USD Million in the fourth quarter of 2019 (Sumner *et al.*, 2020; Mahler *et al.*, 2020). Pakistan has agreed a \$6 billion bailout from the International Monetary Fund last year and secured another \$1.386 billion in quick financing from the IMF at zero interest last month. Pakistan is hoping for more bailout packages to save the economy from further disaster from the World Bank and other development partners as it plans to file for debt relief from G20 countries.

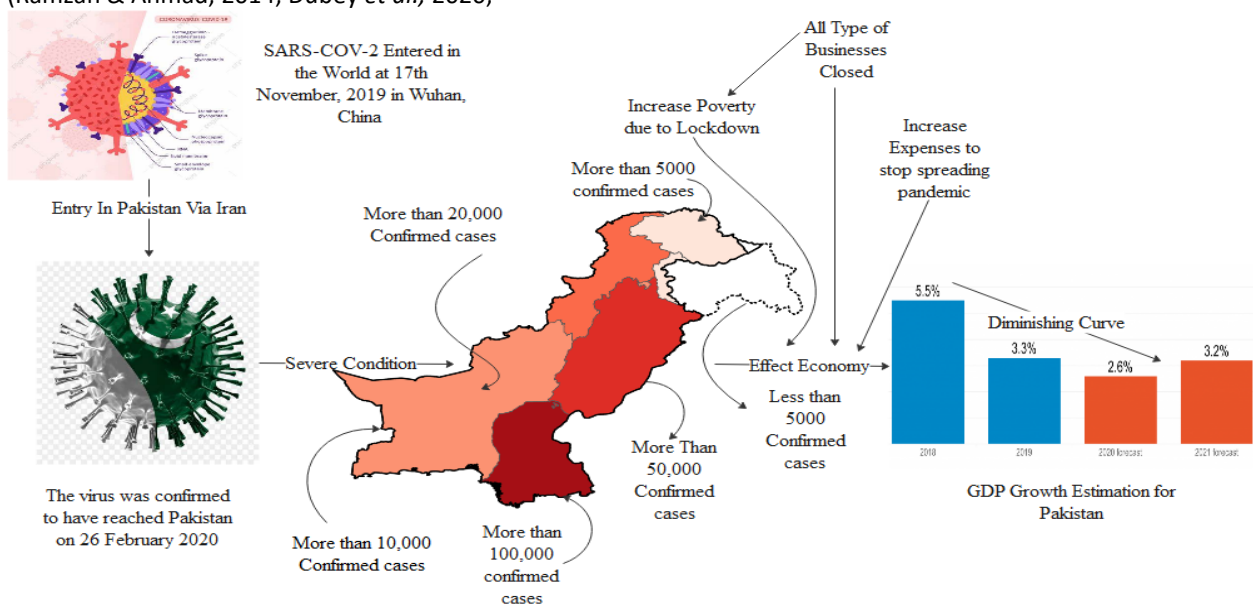


Figure 1. GDP growth in Pakistan and COVID-19

### Impact on Education System

Digital education or e-learning has commenced since the discovery of coronavirus, there are more than 1.5 billion children in 188 countries are unable to attend schools, universities. Now everything is virtual and there is no physical movement, so all kind of institutes have cancelled or postponed examination and online education is the only option worldwide. According to report published by "The World Economic Forum COVID Action Platform" online education is becoming a norm of life these days in all over the world with pros and cons (Vally *et al.*, 2020). Alibaba's distance learning software and DingTalk Tencent classroom software in China, "zoomrooms" software in the United States, "Bitesize Daily", a virtual education learning tool in the United Kingdom, "Lark", Singapore-based digital collaboration tool has connected online students and educational institutions in several regions throughout the world. Similarly, Universities in Pakistan have also commenced online classes in schools and universities with the consent of the Higher Education Commission (HEC). The literacy rate in Pakistan is 60% (Allam & Jones, 2020; Mirza, 2020) which is already very low and COVID-19 has added fuel in fire by further hindering physical pursuit for education while digital education or e-learning is also a big challenge in Pakistan because of a shortage of power supply. Pakistan is suffering from energy crisis for last 2 decades, how one could study online when there is load shading for hours in different cities and villages. First energy crisis then COVID-19 crisis both have disturbed and interrupted the children's social life and learning in Pakistan. Children living in rural areas are facing an enormously complicated problem in learning, neither can they go to school nor is online service available for them which are the central dilemma of Pakistan currently. Government has still didn't adopt any firm policy in this daunting condition how and what can be done to mitigate the negative impact of COVID-19 on children's education living in far-flung areas. How to utilize the resources to target the children who are especially hit hard in mountainous regions? The long term nature of COVID-19 could have a lasting impact on the trajectory of learning education in schools and universities even once a vaccine is discovered because a coronavirus-tinged world without a foreseeable end is here to stay on earth like measles, HIV, Chickenpox, said Sarah Cobey, an epidemiologist and evolutionary biologist at the University of Chicago (Kushal *et al.*, 2006; Coat, 2017; Wan & Johnson, 2020). Experts in all over the

world believe that the world will dominate with a hybrid model of education in post-pandemic. United Nation should add and ensure online education in third world countries as an eighteenth goal in seventeen goals agenda of Sustainable Development Goals (SDGs) underpinned by 169 targets where 191 UN members agreed to accomplish by the year of 2030.

### Impact on Pakistan's Poverty Line

In the first quarter of 2020 COVID-19 was epidemic then became pandemic in the second quarter of the year and according to experts, this worse pathogen is all set to become endemic in "Global village". The admiring trait of this disease is unique because it infected everyone in every nook and corner without racism, nepotism, sectarianism, and discrimination rather antagonistic in its approach towards everyone equally with bellicosity (Mahler *et al.*, 2020). Among all other impacts of COVID-19, this disease is impacting the low-income communities and poor people severely. This pathogen is disproportionately affecting the poor in all countries where the cases are concentrated, more likely to go undetected or to be under-detected and experts are soliciting the international organizations and developed countries to lend support the low-income countries because their health care system is weak and rely on support from international community to combat virus (Kushel *et al.*, 2006; Wan & Johnson, 2020). With new forecast global poverty is projected to increase from 8.2% in 2019 to 8.6% in 2020. COVID-19 has caused the first fast increase in global poverty since 1998 when the Asian Financial Crisis hit and this increase is adding about 40-60 million people into extreme poverty in the world. According to "World Health Organization (WHO)" and the World Bank" around 4 billion people in the world have lacked access to essential health care (Liu *et al.*, 2020). Although African countries have not affected more by virus from a health perspective, the graph of their poverty is raising high with a projected increase of 23 million people. In Pakistan, poor in urban areas are living with poor quality services, so there are more chances to get infected while poor people in rural areas have less exposure to the virus but they have less access to health services that poses a big risk. While a lot of rural people receive remittances from urban migrants but lockdowns in the cities have further affected them economically besides health-related issues. In rural areas agriculture is the only self-employed work or business for poor but decline in demand from urban

areas has further affected them. Poor or below middle class are more likely to hold insecure works and can't afford to stay home sick from work (Ali & Rahut, 2020). The gig economy was very convenient way especially for women and poor to work and come into business but this crisis has devastated these two most vulnerable communities in Pakistan. South Asia is the world's highest densely populated region with largest slums living in small, confined spaces, so enforcing lockdowns to promote social distancing to contain the spread of the virus is almost impossible and more challenging. Around 24% of people in Pakistan are below the poverty line and this pandemic disease will increase the percentage of people living below line exponentially. Doctors have insisted government multiple times to re-impose lockdown in the country because the proliferation of virus is recalcitrant and would devastate every nook and corner of the country (Mamun & Ullah, 2020; Mukhtar, 2020). Now, this is happening in the country, on a daily basis, hundreds of people are infecting by the virus and the death toll is skyrocketing while poverty is cultivating its roots deep down.

### Coronavirus Preventions Globally

Every society is defined by its norms, cultures, traditions, Dos and Don'ts. Similarly, in the context of COVID-19, every country has adopted some common measures to thwart the infection like washing-hands on a regular basis, avoiding contacts with other people, banning public gatherings, cleaning and disinfecting surfaces. Besides this, some indigenous country-level precautions are also made to prevent infection like China lockdown 6.5 million people in Hubei with one stroke of a pen and built a hospital at lightning speed in just 10 days. The Prime Minister of Italy declared entire Italy a "Red Zone"; meaning no one can come out of one's home except if there is some emergency. Iran cancelled the Friday prayers including other public gatherings. Soccer matches will be played before empty stadiums for few weeks in Spain. Germany encouraged cancelling events that draw more than 1,000 people. The Centers for Disease Control and Prevention in the United States recommended the use of non-medical face coverings for people in order to reserve medical masks for healthcare workers, New York governor in the US, announced a "containment area" with one-mile radius and deployed National Guards to containment area to deliver food to homes and help cleaning public places.

### Coronavirus Preventions in Pakistan

In the start of COVID-19 breakout, the Pakistan government received the COVID-19 with lukewarm reception and mishandled the issue in myriad ways like the Prime Minister of Pakistan was the last head of any country in the world to address the nation with no preparation how to tackle this issue. Despite the exponential increase in the rates of infections and fatality in both neighboring countries China and Iran, the government of Pakistan could take advantage of her few borders to prevent this virus to penetrate into the country in the beginning like it has 4 international airports that are in operation and around 4 to 5 major border crossings in Afghanistan and 3 main border crossings in Iran, 1 border crossing with China and around 2 to 3 with India except Line of Control (LOC) in Kashmir side, so the government could close all these borders except 1 border from each country by strict preventive measures and install screening machines to examine air and by road travelers but no effort made, as a result, the virus spread with an accelerating rate across the country. Pakistan's private healthcare system is better and quite expensive as compared to the government healthcare system in terms of service quality and patient satisfaction. The Government had the advantage to upgrade the public healthcare system to fight against the virus but the dissonance between upper-class government authorities and ordinary people met with an unabated health crisis in the country. Besides the government's non-seriousness, most people still believe a virus is just a conspiracy. In Pakistan fighting COVID-19 is as hard as fighting misinformation and conspiracy theories about COVID-19. People take the risk of virus seriously when it sprouts in their personal lives, at which point, it will be too late. On the other hand, most people do not go to hospitals for coronavirus tests because they are afraid of being ostracized when forced into quarantine centers after diagnosis. There are no safety precautions adopted by people that are why the alarming infection toll crossed 100,000 in Pakistan.

### Smart Lockdown and Micro Lockdown

Developed countries traced the cases of COVID-19 by advanced technology as Faezipour & Faezipour (2020) explored in his research paper that smartphone-based breathing monitoring system introduced for self-testing of the lungs and breathing sound in a pandemic. Netherland announced "Intelligent Lockdown" means an appeal to citizens follow the preventions by their

selves and avoid unnecessary visit of any place (Kuiper *et al.*, 2020) and many countries decided to complete lockdown (Vega, 2020; Rahman, 2020; Kuiper *et al.*, 2020; Altman, 2020; Maghdid & Ghafoor, 2020; Sonn *et al.*, 2020; Naseem *et al.*, 2020). Being a developing country, Pakistan couldn't afford complete lockdown because the complete lockdown can generate poverty and the death toll due to unavailability of food may higher than the COVID-19. Secondly, the population of Pakistan is not self-responsible even they didn't believe on the pandemic and thirdly unavailability of technology made the situation more complicated. Under above-mentioned

circumstances and short-term complete lockdown, Prime Minister of Pakistan announced smart lockdown which meant that only infected areas will be closed and the working areas will have to follow SOPs. After successful smart lockdown the second term micro-lockdown introduced in which only infected locality or building will be sealed and the people of remaining areas can go for work (see figure-2 for details). These two terms reduced the infected cases of COVID-19, economic decay and poverty at possible extent but Pakistan still have to need the following SOPs and developed modern cyber-system because the loss of education can not be retrieved till now.

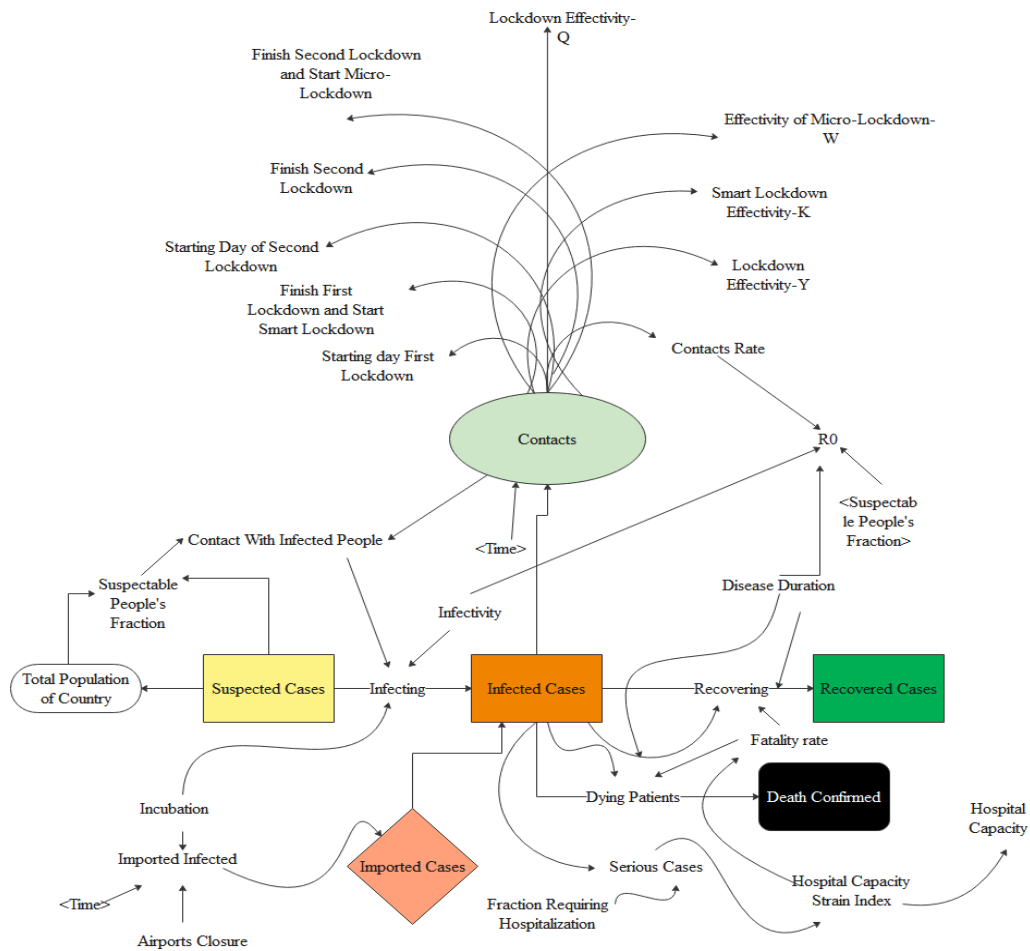


Figure 2. COVID-19 and Lockdown in Pakistan

**Conclusion**

Generally, such kind of sudden viral diseases doesn't give an option for quick treatment at the beginning like SARS-CoV and MERS-Cov in the past. The history testifies that researchers and scientists have always come up with a solution within a short period of time, but this time the figure of infections reached to 7.5 million with 430,233 death tolls and

still there are no signs of vaccine development against COVID-19. Quite unfortunately, the government of Pakistan' apathetic approach in dealing with this fatal disease raises many questions. The Government in Pakistan imposed ineffective lockdown intermittently with no planning to achieve its aim. What Lockdown means is to take drastic steps to make sure that people are

self-isolated in order to avoid infecting each other and fix all kinds of loopholes and gaps in government machinery, healthcare system, management departments in provincial to district level in handling the issue. The Government didn't even provide simple personal protective equipment (PPE) like surgical masks, gowns, sanitizers, shoe covers and gloves to medical staff. Now the situation in hospitals is better than before that has exposed the ill-equipped health care system of the government. Those days people were used to saying that "visiting government hospitals is akin to losing lives and visiting private hospitals means losing wealth". Actually, coronavirus has now become a business tool in Pakistan. Government is still living in the fool's paradise and claims that the infection rate and death toll are not rising very fast. But unofficial data is opposite to their assertions, and the experts believe that Pakistan would suffer more than the US and Europe because there are zero safety measures in the country. Lockdown is already lifted; people are in direct contact with each other in markets, offices, religious centers, commercial and business activities; they are going about their routine business. The grave problem of this disease is worrisome that it transmits from person to person through direct contact, coughing, sneezing and inhalation of both droplets and aerosols near the source. Both the government and the people didn't take the virus seriously like the government and people in the United States in the beginning, which will eventually devastate Pakistan. Only Government cannot do anything collaboration of population is necessary as the presence of fragrance requires the source of its fragrance first. No doubt Pakistan has become successful to overcome the epidemic to some extent but the carelessness of government and people can crash the economy of Pakistan. People should have to understand their self-responsibility as a citizen of the state. Furthermore, every sector should have contributed to control the epidemic, stability of the economy, reduce the poverty by a charity and enhance the standard of education by self-study because the tough time will be passed away but the good deeds always remain there.

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