

Policy Review

**Pandemic, Economy and
Response Mechanism: An
overview**

Sana Malik and Ali Rehmat

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SDPI
Sustainable Development Policy Institute

Abstract

This policy review presents an overall overview of COVID-19 pandemic impact on health and economy in developed and developing countries. Besides, it highlights the key responses and measures taken so far to control the spread of the diseases.

The COVID-19 pandemic seems to impact economy so hard that the global growth could be as low as 2%, along with drop in trade from 13% to 32%. In the US only, 22 million people applied for unemployment benefits. In Europe, services sector has crashed as lockdowns caused businesses closures. Similarly, Spain, France, and Germany have all recorded the lowest readings in their business surveys.

In Pakistan, more than 25% of the population lives below the poverty line; it is estimated that poverty shall increase from 75 million to around 130 million in case of protracted lockdown. Moreover, the absence of universal health coverage may also force people to sell their possessions or get loans from informal moneylenders at manipulative rates.

In this chaotic situation, the government should allocate more money for its health budget. Pakistan should take steps towards practical policies to tackle the further impact of COVID-19. Pakistan should keep digital database of all sorts of labourers (formal and informal) as it will help the government reach the poor and needy segments of the communities on time.

Contents

1. Introduction
 2. Methodology
 3. Literature Review
 - 3.1 Impact of COVID-19 on developed economies
 - 3.2 Impact of COVID-19 on developing economies
 4. Measures taken to cope with the pandemic
 - 4.1 Pakistan
 - 4.2 China
 - 4.3 South Korea
 - 4.4 Japan
 5. Conclusion
 6. Policy Recommendations
- References**

1. Introduction

With a continuing loss to economy, COVID-19 that has been labelled as ‘world shattering’ has proven to be the greatest pandemic of our times – certainly over the last 100 years. It has affected us all either directly or indirectly in every field of life. Apart from impacting health, it caused significant implications to our economy, governance structures, international political dynamics, etc. Some of the realities are visible as the crisis is unfolding whilst others will be revealed later as secondary effects of the pandemic.

In a country like Pakistan, where a large number of people is associated with informal sector, the impact of the disease is catastrophic. According to the International Labor Organization (2020), 195 million jobs could be lost globally in the near future due to the pandemic – a figure with devastating consequences coupled with uncertainty regarding return to normalcy. It means the impact will vary across the different income groups and as such will not be universal in its nature and scope.

This study aims to give an overall overview of impact of COVID-19 on health and economy in developed and developing countries. It further evaluates the key responses and policy measures the countries (including Pakistan) took to control the spread of the pandemic.

2. Methodology

The study is mainly based on the current literature review available online. The limitation of this study is the use of secondary data in comparison to primary data, which brings in better accuracy and originality. Another disadvantage is of using literature review as a method which limits access to certain information and that may have unnecessarily forced the researcher to spend time and resources.

3. Literature Review

3.1 Impact of COVID-19 on developed economies

The pandemic seems to be having devastating impact on the global economy with estimates that economic growth could be as low as 2%, if the current conditions remain. Global trade will also drop significantly from 13% to 32% (Jackson et al. 2020). Despite lockdowns, social protection measures and insurance services are still in place. These measures essentially helped lessen the worries of people, who may experience loss of jobs or income in the developed countries.

In the US only, 22 million people applied for unemployment benefits (Kelly 2020). Many developed countries are predominantly relying on tertiary markets, which mean people can work from home thus not limiting their ability to complete official tasks.

In Europe, despite making efforts to contain the pandemic, services sector activity has crashed as lockdowns caused businesses to record their largest monthly falls ever to have been witnessed to severely low levels (Arnold and Romei 2020). The European Parliament (2020) indicates that businesses have had to temporarily suspend and/ or in some cases reduce their activities and working hours. Furthermore, Italy's purchasing manager's index falls to levels, which are far below than what was experienced during the financial crisis 11 years ago. Spain, France, and Germany have all recorded the lowest readings in their business surveys since the time they started 20 years ago. Even in Sweden, the services sector industry has been hit hard falling from 56.9 per cent to 36.8 per cent in case of consumption, leisure and travel. Unprecedented falls in business activity have given rise to an extremely challenging economic situation with indexes falling farther than they did even at the height of the financial crisis indicating Europe's vulnerability to experience an economic recession in 2020 due to COVID-19 (Schwarzenberg et al. 2020).

Yet, disparities show that countries with high human development index have on average a 55-bed hospital, more than 30 physicians, and 81 nurses per 10,000 people. Whilst comparing these statistics with that of a developing country show that these factors impact a country's ability to respond to the pandemic making it less susceptible to a crisis like the COVID-19. On the contrary, it appears that people, who are already vulnerable, are badly hit the hardest as is reflected below.

3.2 Impact of COVID-19 on developing economies

According to a doctor in the United States, COVID-19 is a socioeconomic disease as the ones who have the least are the hardest hit (Nicola et al. 2020). According to the World Bank, although the Sub-Saharan African region has been hit less in comparison to others from a health perspective (Mahler et al. 2020). However, projections show that it will be the worst hit region in terms of increase in extreme poverty and economic loss. At least 23 million out of a total of 49 million people forced into extreme poverty will be of Sub-Saharan Africans whereas 16 million will hail from South Asia (Sanchez-Paramo 2020). This signifies that people living in low income countries suffer the greatest consequences.

With workers continuing to fall sick, factories remaining shut and healthcare systems finding it a serious struggle to cope with the true impact of COVID-19 will have dire implications. This may be because of several factors, including inaccessibility to proper medical care, fractured public health infrastructures and pre and co-existing medical conditions. Other factors which contribute are cramped and dilapidated housing conditions, over population, living in close proximity and lack of nutrition statuses that stops people from practicing social distancing and isolation (Oshitani 2014).

Most of the populace works in informal sectors spend their lives having limited access to clean water, malnutrition and other basic essentials required for daily living (UNIDO 2020). In addition, Latin America and Caribbean countries, East Asian and Pacific and the Middle Eastern and North

African are expected to have 10 million additional people living on less than \$5.50 per day, i.e. an astounding number for global economics.

Considering a poor country like Zambia with weak healthcare system, there is only one doctor for 10,000 people and in Mali, there are three ventilators for one million people. This suggests that although COVID-19 has made us all less safe it unarguably poses much more catastrophic risks on certain countries. In conflict zones, for instance, one refugee camp shares a doctor with 25,000 people indicating a desperate need for prompt humanitarian response (The New Humanitarian 2020).

Another way developing economies will be impacted is through loss of jobs, the effects of which may well be potentially experienced more severely by migrant workers. This undoubtedly has multiplier effects trickling to their countries of origins as their loved ones are dependent on remittances from abroad. Low trade and investment from advanced economies to less developed ones are also showing negative results in already unstable financial markets and a failure in the prospects for industrialization.

Furthermore, the absence of social safety net and/or protection systems in low income countries has found to increase their vulnerability to the COVID-19. Sub-Saharan Africa and South East Asia have limited provision for health insurance or other forms of universal health coverage. Thus, there is a great divide in the response to health shocks for people in poor countries as healthcare systems lack preparedness plans, whilst government services and health facilities are usually beyond the reach of people in poverty.

The UN has also expressed its deepest concern that the COVID-19 will lead to a setback in the progress in fight against eliminating the inequalities through the implementation of Sustainable Development Goals. To summarize, whilst evident that COVID-19 has meandered a pathway for global economic recession. In addition, it can be also seen that poor countries will be a lot more aggressively hit then the developed world with shortages of basic necessities contributing to the virus's continued spread.

Case Study of Pakistan

Pakistan announced lockdown with the closure of educational institutions, restaurants, shopping Malls, industry, construction industry, large gatherings and allowed people to only come out of homes in emergencies. However, a lockdown in a country already struggling with its economy (Abbasi 2019) has potential for further economic fallout especially when its undocumented economy is estimated to be 36%. Pakistan Workers' Federation notified as of March 28, 2020, that at least half a million workers of textiles and garment industry had been dismissed in the Punjab province alone.

It was a disaster in a country where 25 per cent of the population lives in extreme poverty, who often lack disposable cash or savings to access food whilst taking isolation measures. Women thus are another

segment of population, who are affected as they work as home-based and/ or domestic workers, i.e. the informal economy.

By May 2019, the rupee had depreciated 30% vis-a-vis the US dollar. Looking at the multidimensional poverty index score, which was publicly available in 2017/18 suggests that 38.3 per cent of the population (75.5 million) are multi-dimensionally poor while an additional 12.9 per cent (25.5 million) are classified as vulnerable to multidimensional poverty, i.e. totaling up to 51.2 per cent. A large-scale quarantine could consequently result in the poor dying from hunger and lack of health services.

In health financing domain, the country spends only 0.4% (Rs 50 billion) on health against a global average of 10 per cent. A larger segment of the population (78%) pays out of their own pockets for medical treatments. Moreover, Pakistan is faced with shortage of labs, health infrastructure and trained health professionals, which amplifies pandemic risks. There is a shortage of testing kits, supplies of facemasks, gloves and ventilators. Studies show that people with low incomes suffering from other chronic diseases such as diabetes or heart diseases are more vulnerable to catch coronavirus. According to Chinese Centre for Disease Control and Prevention, people at the bottom of the socio-economic strata are 10 per cent more likely to have a chronic health condition.

At a macro-level, the lockdown has already inflicted a loss of Rs 30 billion on the country's economy and it is estimated that this figure might increase to Rs 1.3 trillion (Saad 2020). Expert's estimate that from 12.3 million to 18.5 million people employed in a variety of sectors may face unemployment. To make matters worse, lack of labour contracts, insufficient legal protection and weak enforcement and abidance to laws escalate the problems for the poor during pandemics. Workers may not as result have paid sick leave, social security or health insurance.

At a micro-level the hardest hit segment is that of daily wagers and self-employed, who have been pushed further into poverty. This has seriously curbed their means of feeding their families, inability to pay rent, bills, school fees or medical expenses. Along with labourers, farmers are also faced with despair as their crops are ready, but they cannot hire people for harvesting (Khattak 2020). Furthermore, farmer's inability to export their produce to major cities has caused a massive decrease in prices. On the contrary, sugar and flour have seen surge in price due to hoarding and interprovincial transport.

4. Measures taken to cope with the pandemic

This section will focus on the response strategies adopted by both the developed and developing economies. This will be done by considering the case of CJK countries (developed) and comparing their strategies with those adopted in Pakistan. The purpose for carrying out this exercise is to examine the key challenges a developing country may face whilst responding to the pandemic because of its inclination towards poverty and how these can be alleviated. It further provides recommendations in the subsequent section for Pakistan by identifying gaps and then providing a way forward to address these gaps.

4.1 Pakistan

In order to cater for the crisis of COVID-19, Pakistan has announced a relief package of Rs 1.2 trillion for 4.5 million households. It was also suggested to escalate the number of households in the relief package by further including 7.5 million household to receive a one-time amount of Rs

12,000 (Pakistan Institute of Development Economics 2020). The government has also allocated Rs 200 billion under Benazir Income Support Program (BISP) to support the poor segments of the society. Under this programme, Rs 3,000 will be transferred to ultra-poor. Yet how will the federal and provincial governments coordinate for quick and efficient response to the crisis remains questionable.

The International Monetary Fund (IMF) has approved the disbursement of US\$1.386 billion under the Rapid Financing Instrument to flatten the curve of economic impact of the COVID-19 shock.

On 28 March 2020, a special aircraft from China brought relief assistance to Pakistan including 300,000 masks and 10,000 protective suits and 12,000 test kits. The Chinese government has also provided financial support of \$4 million to construct a COVID hospital in Pakistan (Ali 2020).

Though, a majority population in the country's outskirts is poor or prone to poverty which means that geographical spread and distances will pose a challenge for the distribution of funds which as a result may be lopsided or sporadic. In Pakistan, more than 25% of the population is living below the poverty line and it is estimated that poverty shall elevate from 75 million to around 130 million in case of protracted lockdown. Moreover, in the dearth of health insurance or universal health coverage may also force people in poverty to sell their possessions or take out loans from informal moneylenders at manipulative rates for treatment. So, the measures which may be taken by the government may be fraught due to the social, political and cultural perspective of the country attached to the already established lack of trust in governmental organizations which jeopardizes any means or form of help.

4.2 China

It was in Wuhan, Hubei province of China in December 2019 that an extensive public health crisis of an unidentified cause emerged. The clinical manifestation prominently resembled that of viral pneumonia. Laboratory sequencing analysis of lower respiratory tract samples indicated a novel coronavirus, which was named 2019 novel coronavirus (2019-nCoV). More than 800 confirmed cases of COVID-19, including healthcare workers were consequently identified in Wuhan and several exported cases were confirmed in other provinces in China as well as in Japan, South Korea, USA and Thailand (Huang et al. 2020).

During the early phase of the outbreak, the Chinese government strived to repress the virus in Wuhan. Marketplaces and other overcrowded hot spots were sealed and intense efforts were made to identify the zoonotic cradle of the outbreak. On 3rd January 2020, the ample genome sequences of COVID-19 were shared with World Health Organization (WHO).

Big data and artificial intelligence (AI) were used to upscale the tracing mechanism of cases and management of preeminence zones. Conventional social activities were reinstated in a stepwise manner and people were provided awareness about the disease prevention measures to enhance public health knowledge and skills. In addition, a thorough program of emergency scientific

research were carried out to identify the source of the virus, develop diagnostics therapeutics and vaccines and delineate the continuum of the disease (World Health Organization 2020).

At the initial stage of the outbreak, Heilongjiang provincial health administration department organized training sessions through WeChat for paramedic staff. The content of the training included protocols by using personal protective equipment (PPEs), personal protection, hygiene, safe waste disposal and emergency handling measures. Medical specialists supervised the entire process and movement of medical staff in isolation wards using wireless communication equipment (Wang et al. 2020). Chinese New Year celebrations were also abandoned, the military was mobilized and temporary hospitals were constructed by the Chinese government to contain the pandemic (Surveillances 2020).

Additionally, China utilized robots equipped with AI powered with 5G equipped with five high-resolution cameras and infrared thermometers. These self-driving robots were capable to scan the temperature of 10 people instantaneously within the range of five meters. The progression in facial recognition system helps in investigation of mobility of COVID-19 infected persons. These technologies help in reducing the potential risk of exposing authority to COVID-19 while performing manual procedures (Inn 2020).

Ali Baba developed a smartphone app, which store data to assign based on people visited different locations. This app is used to restrain the liberty of movements of users by prohibiting to public places and the transport facilities (Barbieri and Darnis 2020). Today, there are over one million medical institutions in China. The hospitals are transiting to mobile internet services that are digitalizing hospital facilities, operating procedures and management through mobile applications. Owing to automation and the ability to invest in digitizing healthcare services, life expectancy has become 76.4 years and medical insurance scheme covers more than 95% of the Chinese population (Huateng 2019).

Furthermore, the Chinese government worked to bring substantial and targeted economic assistance to entrepreneurs, individuals and businesses. The aid is engaged in production of essential equipment for the world to deal with the pandemic. The People's Bank of China ensured access to capital to companies and permitted relending money to leading companies manufacturing supplies and providing logistics used in fight against COVID-19. The Chinese banks were also directed to extend loans and rolls over debts without penalty. It eased rules for borrowers that use corporate stock as collateral so that they are not forced to sell equities. Likewise, 60 per cent of Chinese companies have cash on hand to maintain operations and current employment levels for three months which effectively buys time for the government to initiate efforts of subsidies (Maiello 2020).

4.3 South Korea

On 20th January 2020, South Korea reported its first case of COVID-19. The patient was a female resident of Wuhan city who lodged at South Korea airport. The number of infected

persons spiked to 30 by 17th February. On 29th February, the number of reported cases was 909. After China, South Korea was the first most infected country by March 2020. The government in alliance with private sector undertook huge efforts to prepare a national response to contain the pandemic (Cha 2020).

The country organized the disease management system after the outbreak of Middle East Respiratory Syndrome (MERS) in 2015. Today the country has enormous leading healthcare facilities and sophisticated biotech industries (Inn 2020).

South Korea established consistent and robust Standard Operating Procedures (SOPs) for containing COVID-19. Initially, there were five major steps in the SOPs: highly aggressive and authentic information campaign, high volume testing, quarantine of infected people, proper treatment of the infected individuals and disinfection of the environment. The government used electronic and print media to instruct people to avoid congested areas and practice precautionary hygiene measures.

The government widely disseminated detailed preventive measures, including detailed explanations of the SOPs and general advice about viral transmission. Hard coded text messages were shared with every individual to ensure authenticity of the information and relieve concerns about false reports. Medical tests were set nationwide to contain the pandemic. South Korea has the daily capacity of more than 10,000 tests and the results are informed via text messages within less than 24 hours (Fendos 2020).

The South Korean government ensured extensive screening, traced infected people online with alarm and notifications, developed an app for screening COVID-19 and supplied protective kits to the public. The government is using Global Positioning System (GPS) histories from the credit cards and cellular phones to track and record to generate a mobility map. The moving map is displayed on the web and notifications are sent to neighbours to take precautionary measures and people are also monitored under quarantine.

In the Global Innovation Index (GII) 2019, Korea is closer to top 10. It stands as the most sophisticated in business operations and wins positions in human resources and research where it becomes the leading economy in the world (Cornell University 2019). Korea has lowered the interest rate on loan facilities for smaller companies and bonds are issued by banks to its open market operations to upscale liquidity. To counter the effects of COVID-19 on the economy, state-owned and private banks as well as credit card companies provided support to SMEs worth € 2.1 billion. The Ministry of SMEs and startups also announced to provide support worth €1.2 billion as a additional budget to keep the economy stimulated (Klynveld Peat Marwick Goerdeler 2020).

4.4 Japan

The main features of Japan's method included prohibiting entry of travelers from coronavirus-hit constituencies primarily China and South Korea. The travelers arriving from other countries

affected by coronavirus were quarantined to detect suspects. Similar strategies were carried out at harbours and airports. The preeminent example of this is the quarantine of the ship - Diamond Princess. The passengers were averted from disembarking for almost a month. During this period, around 700 cases were identified in the ship.

Japan was the second country to report COVID-19 outside China where the first case was reported between 10th and 15th January. The infected person travelled from Wuhan. Japan prohibited the entry of foreigners in the country, who had visited the Chinese provinces of Hubei and Zhejiang within 14-days before arriving in Japan and extended the travel ban to foreign citizens from the US, China, South Korea, Iran and 21 European countries. The government of Japan declared a state of emergency to contain COVID-19 disease on April 7 2020, which will be extended to all territories of the country (Cabinet Public Relations Office 2020).

The government ensured magnifying the Polymerase Chain Reaction (PCR) capacity to 20,000 per day. Medical facilities are provided to the COVID-19 patients, the number of beds has been increased from 28,000 to 50,000, and 15,000 new ventilators have been installed in the medical facilities (Cabinet Public Relations Office 2020b).

On 16th March 2020, Japan identified 15 coronavirus clusters nationwide. The response approach was thus designed to identify the cluster to spread the disease, and quickly adopted measures to contain the spread of the disease from the clusters. The clusters accounts for more than 80 cases, encompasses four live music spots in Osaka and another live dwellings in Sapporo (Shaw et al. 2020).

The government also mobilized Self-Defense Forces comprising 13,000 recruits to handle the ruthless situation, these workers transport patients with slight symptoms to facilitation centers run by local governments (Abe 2020).

The Japanese government announced closure of schools, restricted inbound travel from coronavirus-affected countries and deferred the 2020 Olympics in 2021. The foreigners disembarked from the MS Westerdam, a cruise ship that is docked in Cambodia and the ship was temporarily not allowed to enter Japan. Japanese authorities recommend symptomatic travelers to wear masks at the airport and while on boarding the plane. The airport staff were also directed to wear masks to prevent spread and infection with door knobs and handrails at the airport terminals (Duddu 2020).

Fujifilm Toyama Chemical initiated a Phase III clinical trial of its antiviral influenza drug, Avigan (favipiravir). Avigan blocks RNA polymerase associated with influenza viral replication, which would be used for the COVID-19 treatment in Japan. In March 2020, China's Science and Technology Ministry official, Zhang Xinmin, stated that favipiravir helped patients recover in an 80-day participant trial conducted in Shenzhen city. The drug was proficient to curtail the recovery time from 11 days to four days for mild and moderate cases (Arena 2020).

In Japan, Bespoke Inc. Company, has invented an artificial intelligence-powered Chatbot (Bebot) that provides updated information about the disease, symptoms and preventative measures that can be taken to control the disease (Sohrabi et al. 2020).

The government also announced a ¥108 trillion (20% of Japan's GDP) for Emergency Economic Measures in Response to COVID-19. In order to assist businesses, real interest free unsecured loans were allowed to recur debts to be financed as interest free loans and postponed the payments of national taxes and social security premiums without indemnity and penalties (amounting to ¥26 trillion). Japan will made cash payments of ¥2 million to each micro, small, and medium-sized business and ¥1 million each to individual business owners. The government will also pay ¥300,000 each to the needy households and also support in the form of discounts and vouchers, food services, event businesses, tourist and transport (Cabinet Public Relations Office 2020).

5. Conclusion

Pakistan has tried to mitigate the spread of COVID-19 by channelizing efforts and resources towards the needful. Although the allocation appears sizeable; its true impact can only be assessed by how it is distributed and implemented. Given that, resources are already compromised considering the socio-economic conditions of the country as reflected from the past one year's data there is still a need for people in poverty to be explicitly prioritized in the response to coronavirus. Initially, the government ordered closure of academic institutions, declared countrywide lockdowns with different intensities, established quarantine centers in different towns and cities. It further announced social safety emergency funds for the poor and their families to help them in financial crisis. However, whether the processes of implementation of policy measures consider the needs of groups that may be multi-disadvantaged remains questionable.

Economics determines national level coping strategies and the country still faces hindrances in the engagement of policies to control the fast-growing pandemic effectively despite taking action to handle it better. And the pervasive inequality and poverty itself is acting as a multiplier on the spread of the coronavirus. Pakistan among other reasons has gaps in technology and big database at state level making it riskier for government at federal and provincial level and charities to disburse social security payments to the needy segments of the society. These obstacles are due to the general weak capacity of the state which reflects in fractured healthcare infrastructure, lack of medical care workforce, lack of medical equipment, political and governance instabilities, inadequate social protection, uncontrollable population and gender disparity. Furthermore, socio-cultural issues and religious practices such as with the emergence of the month of Ramadan pose hindrance in the containment of the pandemic. Nevertheless, while we gauge the efficiency of the interventions taken by the government the aim for strategies should be to play a pivotal role in addressing the underlying vulnerabilities as the COVID-19 further compounds the existing shocks and stressors for impoverished households.

6. Policy Recommendations

- The state should ensure the indigenous production and ample supply of personal protective equipment (these kits should include the standard essentials, e.g. surgical masks, face shields, gloves, and gowns), waste management and testing kits. This can be done by incentivizing public–private partnerships.
- The government should allocate more funds in the health budget which is currently 2% of its GDP. Pakistan should take practical steps to tackle the further impact of COVID-19.
- Pakistan should keep digital database of all sorts of labourers (formal and informal) as it will help the government reach the poor and needy segments of the communities in times of support.
- The government claims to help the daily wagers and needy people through BISP and Ehsaas Program. However, there were a lot of layoffs in the formal sector as well, therefore short and long-term policies need to be formulated to manage the layoffs in the formal sector.
- There is a need to devise regulatory policies for religious and cultural sectors by forming committees comprising of well-educated clerics, who can formulate guidelines to follow. We can take the example of Jordan where even the script for Friday sermon is circulated by the government and the clerics are not allowed to talk beyond the script.
- Low income countries often lack requisite resources (specialized manpower, testing facilities, medical equipment, and medicine) to test potential cases and implement containment strategies. Developing countries must work in cooperation with existing global networks (such as the National Influenza Centers) for the detection of pathogens.
- There is a need to conduct further studies on countries’ social context to understand how societies are structured, norms, culture and values make them less or more susceptible to pandemics such as COVID-19.

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