Socio-economic impact of coronavirus disease 2019 (COVID-19) – An Indian outlook

Dinesh Dhamodhar Mathevan Pillai¹, Nagappan Nagappan², Sekar Veena Dharani¹, Kalaivani Subramanian¹, Bharath Champakesan³, Thomson Maridasan D'Cruz⁴

¹Department of Public Health Dentistry, SRM Dental College, Chennai, ²Department of Public Health Dentistry, Chettinad Dental College & Research Institute, Kolambakkam, Tamil Nadu, ³Department of Public Health Dentistry, Vinayaka Mission's Sankarachariyar Dental College, Vinayaka Mission's Research Foundation (Deemed to be University), Salem, ⁴Department of Oral & Maxillofacial Surgery, Dr. G D Pol Foundation’s Y M T Dental College & Hospital, Navi Mumbai, Maharashtra, India

ABSTRACT

It took only days to a few months, for the coronavirus to spread across the globe from its place of origin, Wuhan city, China. Though, India is not among the worst affected countries of coronavirus, it is still a major Public Health emergency which pose a serious threat of crippling the nation's economy. A densely populated country like India, cannot afford getting its population infected with coronavirus, as that will have an enormous strain in existing healthcare facilities. Although the government of India has implemented complete lockdown, there are many economic concerns to be addressed. Even though, relief fund was announced, the nation's huge population could use additional financial support, to take care of their essential needs like groceries, provisions and medicines. The livelihood, employment and income of many citizens remains questionable. This article attempts to give a socio-economic perspective of the coronavirus pandemic in India.

Keywords: Coronavirus Disease 2019, COVID-19 pandemic, economical impact, health

Introduction

The Coronavirus Disease (COVID-19) originated from a seafood market in Wuhan city, Hubei Province, China. From there, the disease has spread to all the continents of the world, except the Antarctica. The resultant mortality is more in some countries than the others. The countries like the United States of America, Italy, France, The United Kingdom, Germany, Spain and China has more number of deaths. The spread of coronavirus in poor people would leave a tremendous burden on the national health care systems. The disease has not even spared the affluent people like celebrities, politicians, professionals and athletes throughout the world. The snowballing of COVID-19 cases and the consequential mortalities has put an enormous pressure on the global healthcare systems. The socio-economic impact has put tremendous pressure on individual, family and community levels. Several nations used quantitative easing and fiscal measures to reduce the anticipated economic recession. There would be a paradigm shift in the criterias of demand and supply. The cost of goods and services, especially healthcare

Received: 11-05-2020
Revised: 14-06-2020
Accepted: 18-06-2020
Published: 30-10-2020
services has increased.[3] All these ramifications and ever increase of COVID-19 cases may pose a huge challenge to primary care providers who are providing health care at grass root level.

A Global Scenario

COVID-19 can spread from an individual, to another individual through droplets from mouth or nose, expelled from speaking, coughing and sneezing. A person can acquire COVID-19 if they inhale these droplets from an infected person. Upon touching the droplets on surfaces like door handles and furnitures, an individual can be infected. COVID-19 virus can survive for up to 72 hours on plastics, not more than 24 hours on cardboard. However, anyone can be infected with coronavirus with serious illness, older people and person with diabetes, blood pressure, heart and lung problems, cancer have more risk of becoming seriously ill.[2] Fever, breathlessness, malaise, fatigue, cough and sorethroat the usual symptoms. Elevated C-creative protein and white cell counts are some of the common laboratory tests. Abnormal computerized tomographic chest scan. Treatment given is essentially supportive with the effect of antiviral drugs yet to be established. The spectrum of disease can range from an asymptomatic state to acute respiratory distress syndrome and multi organ dysfunction.

Many properties of the virus makes the prevention aspects challenging, as the infectivity can start even prior to the onset of symptoms during the incubation period and there is an elaborate period of illness in the patients. In buildings, good ventilation with sunlight aid in destruction of the virus. Preventive measure includes home isolation of those with mild infection and suspected cases. As healthcare workers face the highest risk of virus transmission, they must be provided protective gears like goggles, protective suits and fit tested N95 respirators. Aerosol generating procedures like tracheotomy and suction must be done with airborne transmission precaution. Drastic initial preventive measures were taken by implementing travel ban from and to China. Later, these measures were executed by other counties. The admission in intensive care unit was warranted for about 30% of the hospitalized patients. The estimated case fatality ratio varies between 2-3%.[9]

According to the World Health Organization (WHO), till 17th June 2020, the number of confirmed coronavirus disease cases are 7941791 with a total number of 434796 consequential deaths.[9]

An Indian Scenario

As of 2020, the current population of India is 1377678007 with a population density of India is 464 per square kilometer, ranking second in the world, in both total population and population density.[3] This demographic status of India, raises the concern of rate of spread and the transmission of Coronavirus disease 2019. According to WHO, till 17th June 2020, the number of confirmed corona virus disease cases in India are 355052, with a consequential death toll of 11922. The patients who were confirmed with laboratory tests are considered as confirmed cases, regardless of clinical signs and symptoms. WHO continues to fund the medical equipments and supplies, which is not sufficient because of the rapid increase in demand throughout the world. In addition the designing and installation of COVID-19 treatment Centre are being done. India, along with Thailand and Indonasia, has signed for multi-country trial which compares the safety and effectiveness of different drugs and drug combinations.[8] According to the Ministry of Health and Family Welfare of India, as on 17th June 2020, 186934 patients were cured from coronavirus disease and one patient migrated.[7]

The Government of India implemented total lockdown from 25th March 2020, along with travel ban and social distancing, resulting in closure of production facilities. The worst affected sectors being tourism, hotels, aviation and transportation, bringing their earnings to zero. This would have a sudden adverse effect on jobs. While regular permanent employees will continue to receive salaries during lockdown, the daily wage earner and unskilled laborers earnings are severely affected. Social events including weddings are cancelled. Overall, there is a reduction in supply. To battle the ongoing pandemic, the government of India announced relief fund allocation of INR 15000 crores fund to increase protection equipments, isolation wards, intensive care units, and to train paramedical staffs.[11]

The mortality and morbidity of COVID-19 could have a significant influence on the long-term economic effects. To halt and fight this pandemic, the Indian government has to immediately spend a significant amount of money from the budget. The expenditure includes healthcare related expenditure, social security and the expenses to revive the slowdown of economy. The tax collection will also be considerably low due to the dip in economic activity. All these factors will cause fiscal deficit situation for India.[9] COVID-19 could directly hamper production and supply chain by adversely influencing the market. The shutdown of industries in China, can affect the distribution of goods and services, in countries which rely on them. This economical phenomenon, also known as stagflation, may also occur as a consequence of either higher product price or fewer output. Reduction in the gross domestic produced (GDP) is anticipated.

Even if central banks offer reduced interest rate on loans to encourage the demand, it would only increase the output and employment to a limited extent for a short span, which could not prevent the potential economic inflation, due to the failure of finding alternative materials and goods. A second wave of this disease could lead to moderate or even severe shrinkage of demand. The inconsistencies in supply, leading to the shutdown of industries and workplaces, added with people's reduced consumption, can result in the reduction in Gross Domestic Product (GDP). After the lockdown and travel ban is uplifted, some demands which are lost temporarily, like vacations might get revived, some demands will be lost permanently, which will
reduce the economic growth on the long run. If the reduced demand is not proportionate the contraction of supply, the Indian citizens might encounter initial indications of economic inflation.[9]

The already existing combination of fuel taxes like Excise duty, value-added tax (VAT), and state value added tax on fuel mounts to more than 50% of the actual cost of the fuel. Including diesel and petrol under the Goods and Service Tax (GST) would cut down the fuel prices.[10]

During 2019, India exported drugs which are worth around 19 billion dollars. In terms of volume, this accounts to one-fifth of the global exports. Drug manufacturers in India are not able to fetch the required quantities of crucial raw ingredients for vitamin tablets and antibiotics, from Chinese factories, which were closed for several weeks. This strong case of disruption in supply side of pharmaceuticals is a problem for India and the other countries of the world.[8]

The World Health Organization Guidelines for primary health care providers for corona virus disease (COVID – 19)

Throughout the world, the responsibilities, roles and rights of primary health care physicians has taken a paradigm shift after COVID-19 outbreak. Their chances of acquiring an infection are high as they are in the front line for providing care for the affected. Prolonged working hours, fatigue, stigma, distress, burnout, physical violence, psychological violence and pathogen exposure are some of their occupational health hazards which needs to be addressed.

The guidelines for infection control and prevention for primary health care providers have been adopted from WHO’s Infection prevention and control protocol for confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection and based on current knowledge of the situation in all nations of the world, where the patients with severe acute respiratory syndrome (SARS)-CoV and MERS-CoV.[11] Rationale utilization of personal protective equipment (PPE) community settings and health care institutions. While performing aerosol generating procedures, well ventilated single room is recommended along with use of PPE, eye protection, gloves, long sleeved gowns and particulate respirators. While taking care of patients with respiratory symptoms and cough, medical mask should be used, if the care giver is working within 1 metre from the patient. Patients shall be placed in a separate room, or the patients with same etiology can be grouped together. The movement of the patient within the institution shall be restricted.[12]

Certain tools has been developed by the WHO to assess the risk of coronavirus infection for health care workers who are exposed to coronavirus patients and recommendations are provided for management of these workers.[13]

In order, to regulate the consumption of PPE for essential primary caregivers, telemedicine shall be encouraged for evaluation of patients who are suspected of COVID-19 infection. Usage of physical barriers like plastic windows and glasses shall be used to substantially reduce the exposure to COVID-19 virus. Selective entry to primary health care providers shall be granted, where only the personnals who are not direct care providers. In addition, activities shall be combined at one particular time frame to limit the frequency of visits to the room where COVID-19 virus patients are located. The activities to be performed along the bedside shall be priory planned and scheduled. Most preferably visitors entry shall be denied, if absolutely necessary, entry to isolated wards shall be granted by restricting the number of visitors and the duration of time spent in the wards. To cope with the dearth of supply of PPE for primary care givers, the quantification models must be substantiated, to make sure that the supply request is rationalized and it shall be monitored. Centralized management approach request can be encouraged, to avoid overstocking, limit wastage and stock duplication.[14]

Indian Ministry of Health and Family Directorate General of Health Services Guidelines for primary health care providers during corona virus disease (COVID-19)

The classification for risk of acquiring COVID – 19 infection for health care workers can be encompassed into four categories. This classification of no risk, low risk, moderate risk and high risk categories are based on the nature of activity performed and the given setting. The use of various PPE are justified based on this classification. The Anganwadi workers who are engaged in field surveillance are at a low risk of acquiring COVID-19 infection. Wearing gloves and triple layered masks are recommended for them. The surveilance team is insisted to carry sufficient triple layer masks, for the purpose of distribution to suspected cases during their field surveillance. In addition, they are insisted to constantly maintain one metre distance from people. Supervisory doctors providing care during field investigation, are recommended to wear N 95 masks and gloves. They are at medium risk of acquiring COVID-19 infection while performing activities in surveillance and clinical examination setting. Although, the Ministry of Health and Family Welfare insists on appropriate use of PPE, the same cannot be a substitute for preventive measures like maintenance of 1 metre distance from suspects, hand hygiene and respiratory etiquittes.

During home quarantine, individual who are Quarantined and the designated family member, caring for quarantined individual are at a low risk of acquiring COVID-19 infection. The quarantined person is advised to wear a triple layer mask and the designated family member (care giver) is recommended to wear gloves. It is mandatory for the senior citizens in the home to stay away from the persons under home quarantine.[14]

Conclusion

Since Coronavirus disease 2019 is a new disease, studies are
required to monitor the trend periodically. In addition, cost benefit analysis of various preventive procedures, to arrive at an economically sustainable solution, to halt and prevent this disease becomes a dire necessity. This will profoundly reduce the burden of primary health care givers, and this in turn will benefit people at individual, family and community level. Randomized controlled trials are required to measure and compare the effectiveness, efficacy and efficiency of various supportive treatment modalities, with respect to the Indian context. Until an effective, clinically proven vaccine against coronavirus is available, this disease must be prevented, even if it deems extraordinary efforts, which can potentially save numerous lives, manpower and resources and the physical, mental and social well being of the people.

Recommendations

Given, the circumstance of the existing travel ban globally and it's resultant limitation of importing goods, the Indian policymakers and the government’s policies, actions which are conducive for independent national economy, would boost employment, consumer’s consumption, nation’s tax revenue and significantly reduce the nation’s import duty, debts and exorbitant foreign currency exchange imports and foreign currency loans. If the already implemented Goods and Service tax (GST) is applied to petrol and diesel, rather than the combination of fuel taxes like union excise duty, state value-added tax (VAT) on fuel and dealer commission and state VAT on excise duty, the resultant significant tax reduction will eventually reduce the transportation cost, which in turn will slash the price of essentials, goods, commodities and services. With the COVID-19 pandemic posing a threat to the Indian economy, these implementations would significantly reduce the financial burden of the Indians, thereby contributing more to the socioeconomic growth of India. Cost-effective preventive measure will also reduce the burden of primary health care givers.

Keypoints

1. There is a steep rise of Coronavirus (COVID - 19) affected patients globally.
2. The current COVID - 19 pandemic has left even the strongest economic nations around the world, struggling to make their ends meet.
3. The COVID - 19 pandemic has ransacked many nations dynamics of business and fiscal deposits.
4. It's the need of the hour, for the nation's policy makers to take cautious fiscal and financial policies, to boost the morale and the welfare of individuals, families and primary health care givers.
5. Primary health care providers holds a huge responsibility of executing the guidelines, by optimally utilizing the resources and handle the current COVID - 19 pandemic.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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