

Multidimensional impact of COVID-19 pandemic in India—Challenges and future direction : Journal of Family Medicine and Primary Care

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Review Article

Multidimensional impact of COVID-19 pandemic in India—Challenges and future direction

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Abstract

Direct impact of COVID-19 pandemic on lives is almost well known to the world with gradual reporting of its various systemic effects from almost every country. But this disease doesn't have direct impacts only, it causes collateral damage along with some hidden effects which may or may not be reported now and many will be come in future. India, a developing country, also got affected during this pandemic and now ranks under five in relation to the number of cases being reported till now. Here in this manuscript, various hidden aspects of COVID-19 has been discussed like issues related to healthcare infrastructure, food insecurities, domestic issues, mental and physical health, effect on education, screen time, and its challenges because of new trend of distant education, human resources, effects on labor class, material management, monetary issues, economic and industrial downfall, etc., along with challenges on both side for the Government as well as general public faced during this pandemic. Manuscript has been structured on the basis of concept and design of authors and various information put here on the basis of practical scenario being seen in the community and from various data published on Government sites, published articles from journal as well as media report.

Introduction

World Health Organization (WHO) has first declared COVID-19 as public health emergency and later on a pandemic. More than 200 countries have been affected by this pandemic. In most of the countries there are lockdown and national emergency. As on date the total number of coronavirus cases as on date 10th August 2020 is 221,5074 while the death reported to 44,386 according to the Government of India data.[¹]

India's effort to combat COVID-19 pandemic has been acknowledged all across the globe. However, there is cascading impact laid on various sections of society and economic cost at various levels because of the lockdown. This pandemic has led to compulsion for massive and reverse migration in large parts of the country from the urban to rural areas. Indian roads are flooded with laborers marching back to their villages to find some warmth, safety, and empathy.[²]

Workers at the grass root levels are basically the growth engine from centuries who works day and night for the economic growth of many region around the globe. Still, they are vulnerable and have no access to social security. This reverse migration from urban to rural areas will lead to significant impact on the health of society, demography, and economy of rural India.[²]

As this pandemic affected all over country, the role of primary care physician are very important as patient first reports to them for any illness related to non-COVID/COVID. They play important role in the assessment, management, and reporting to health administration about the burden of COVID in their posting/working area.

The dire consequences of COVID-19

This unparalleled pandemic comes with many dire economic prospects. The harsh reality of divergence in countries like India is that as social distancing is difficult to follow poor people are more likely to become infected with the coronavirus. They have less access to health care facility, are more likely to lose their job, and are more susceptible to hit with spikes in food prices.[²³]

Due to the population burden, the low reporting of COVID-19 cases as per the health infrastructure will result in the community spread of the novel virus. The reverse migration of labors will also create excess pressure on rural economy and the agriculture which will lead to number of people to fall into trap of poverty. COVID-19 will have both short- and long-term effect on various aspects of economy in India.[³]

Issues and Challenges

COVID-19 will bring crisis on several economic and non-economic fronts over the globe. There would be demand and supply gap because of trade restriction and labor mobility. In India, there would consequence on 81% people employed in the informal sector.[³] Almost 90% of the workers in the informal sector has survived with no minimum wage or adequate social security.

Even after the unorganized worker's social security act, only 5–6% got enrolled for social security. According to Periodic Labor Force Survey (PLFS) of 2017–18, 71.1% had no job contract, 54.2% are not eligible for paid leave, and 49.6% had no social security.[³] The reverse migration amid the crisis in the agricultural sector pose big challenges on the rural economy.

Health infrastructure

In India, expensive private healthcare is not bearable for the majority of people who visit public healthcare as the only option in the time of need. For COVID-19 patients, we require adequate healthcare facilities along with intensive care units (ICU). Currently, majority of COVID-19 positive cases are transferred to government hospitals. Hence, it is important to assess where we stand in

terms of health infrastructure for management of the novel virus. Despite high population density, mass poverty, and poor health infrastructure, per million cases reported in India is lower than advanced economies.^[4]

Low COVID-19 Mortality Rate in India Might Be Result of Country's Large Young Population

One of the major reasons postulated for the low COVID-19 mortality rate in India below 3% is the country's large percentage of young population. 27% of India's population is below 14 years, which marks the significant difference in comparison to major countries of the world.^[4] There seems to be a high association between percentage of above 65 years population and the mortality rate. Italy, Spain, France, UK, and Belgium all have a very high percentage of their population in this specific category with alarmingly high fatality rates.

In comparison, India has relatively low overall mortality rate of just 2.71% because of just 6% of its population being above 65 years. There are several other factors which could also be deemed responsible for the low mortality rate in India—the stringent lockdown, BCG vaccine, hot temperature, high percentage of rural population, to name a few. But having a large proportion of the young and a very low percentage of the old may have just saved a lot of lives for the country.^[4]

While the past few months have changed lives of enormous number of individuals completely, no other group has been more affected by the pandemic and uncertainties revolving around it, than children. A recent report titled “Upended Lives,” the United Nations Children's Emergency Fund (UNICEF) has said that an extra 2,400 children in South Asia could die every day as an indirect repercussions of the pandemic. The report adds that the pandemic is vanishing decades of progress made on health, education, and other areas.^[567]

With reduced access to healthcare systems, life-saving medicines, proper nutrition, and education and movement restrictions, children—both young and adolescent—may pan out worse this pandemic.^[5]

Delayed vaccination and healthcare

A study which got published in Johns Hopkins Bloomberg School of Public Health in the Lancet Global Health Journal, because of reductions in routine health service coverage levels, disruption in life-saving vaccination activities, and an increase in child wasting, up to 3,00,000 children could die in India alone in the next 6 months. The agitation of contracting the virus at clinics and the shutdown of medical facilities has led to delays in the administration of essential vaccinations and accessing healthcare facilities in case of emergency. This intensifies the risk of a child getting infected with the disease that the vaccine was meant to protect against. A widespread delay in vaccination could also menace social immunity that has been developed against many diseases, over time.^[5]

Food insecurity

Malnutrition has been a muted killer in India, even before the pandemic. As per the Global Nutrition Report 2020, India is home to half of the world's malnourished children or those who suffer from low weight for height. Over 40 million children are also chronically malnourished and wasted. This has been aggravated further because of the pandemic. The report from Independent Accountability Panel (IAP) projects that debilitation because of malnutrition could increase by 10–50%, because of COVID-19. With the shutdown of schools, 370 million children worldwide are missing out on mid-day meals, which, in many cases, are the sole nutritious meal these children probably have in a day. In India, while some states are trying to continue mid-day meals schemes

by give out ration to school children, dry ration cannot replace warm cooked meals provided in schools. Furthermore, with many losing their income and with pay losses and dwindling economics, families are enforced to chop corners financially, often at the value of nutritious food, which children may have otherwise had access to.[⁵]

Domestic violence

Among the foremost alarming indirect effects of the lockdown, there is an increased amount of violence on children, where they ought to be safe—their own homes. With job losses, pay cuts, and psychological state problems induced by isolation and curbs placed on movement, overall frustration and anxiety levels have increased. In many cases, this is often directed toward children, who are subject to physical, mental, and sexual assault.

The IAP report also projects that 15 million more cases of gender-based violence might be anticipated for each 3 months of the lockdown. Furthermore, thanks to delays within the execution of programmes to finish such harmful practices, 2 million additional cases of female genital mutilation (FGM) could happen over subsequent decade.[⁵]

Increased screen time

The shift from physical to virtual classrooms has increased screen time for youngsters, who are forced to remain ahead of their mobile phones or laptops for prolonged periods of time. Added on to it, in present scenario, the time already spent is on excessive playing video games, watching television, socializing with friends, or completing online activities. The dangers related to excessive screen time are well documented—it's been known to hamper learning capacities in children and cause attention deficit. It could also cause several disorders like obesity, eye damage, hypertension, and disrupted sleep patterns.

With more children getting online at younger age, and without the required purpose to protect themselves, children are at a heightened risk of falling prey to cyberbullies and sexual predators. Cybercrime are available in many forms—those circulating unwanted material, spreading morphed photos of youngsters, sending threatening emails or messages or emotionally blackmailing children. As per expert suggestions, it's always advisable to monitor the devices their children are using, and spend more quality time with their children to mitigate the negative effects that added screen time may have on children.[⁵]

Mental and physical health

As per reports, 30% of youngsters or parents who are under quarantine or isolation, suffer from acute stress disorder, depression, and other problems. Reduced mobility, inappropriate accommodation facilities or having to measure in cramped quarters, lack of social life, no physical school, stress and violence reception and therefore the inability to continue with outdoor activities has led to increased cases of isolation and aggressive behavior among children as well as in adolescents.[⁵] The pandemic has negatively impacted diet, sleep routines, and physical activity among children, heightening the danger of obesity. This is more so within the case of youngsters who already suffer from obesity. During the lockdown, physical activity decreased by quite 2 h every week, while the intake of sugary food, sodas, and processed food increased.[⁶⁷]

Inequality in education

In India, as per the UNICEF, the lockdown has impacted around 247 million children enrolled in primary and education, aside from the 28 million children who were undergoing pre-primary education at Anganwadis. This, the report states, is additionally to the quite six million children who were out of faculty pre-pandemic. While many faculties, in India and worldwide, have tried to

continue educational programmes online and through other e-platforms and TV channels, many students who don't have access to any digital media lose out.^[567]

Effect of COVID on education

Impact of COVID epidemic in current time on every segment of primary, secondary, university, technical, and medical education is very vast whose effects might be seen in future. Primary education is suffering most as children of poor parents are not getting education and rich parent's children are getting overwork through online education.

They have side effects of psychological stress, physical inactivity, eyes and neurological problems, headache because of prolonged screen time at the age when visual system is still developing. How and in what pattern child is learning, after effects on parent's productivity, child care, nutrition, physical and mental status, the consequences will come late in future.

On secondary education which is based on boards exams because of closure of schools and college study pattern now changing to online classes and self-study will be changing the pattern of quality of education and results.

The professional education is very important as professional skills are based on practical training because of the closure of college and institute, incomplete or improper training will lead to various negative impact in medical, engineering, nuclear, biological areas, etc., while training and working. In the same way university education will lag behind by online and inappropriate teacher student communication. As human development had occurred by passing information to generation by persons' contact, we do not know what are and will be the consequences on overall education by non-human contacts.

The new normal

Everyone is talking about the "new normal" brought on by the coronavirus pandemic. But what aspects this new normal bring for enterprises, governments, and consumers lies in the future ahead. The new normal has increase the rapid adoption of emerging and new technologies, with technology becoming prevalent across industries and markets.^[6]

Human resources

Greater emphasis will be on automation, mechanization, and off-site fabrication. Alternate strategies to reduce overdependence on labor, technology will play a critical role in tiding over manpower and demand mismatch, providing better on-site facilities (including health and hygiene) to migrant labor; attempt to stop reverse migration in future, splitting work teams (smaller crews and longer, staggered shifts).^[78]

Material management

Sourcing selection to gain more prominence identifying alternative suppliers, greater awareness of geography related supply chain pitfalls, building in sufficient flexibility to counter potential disruptions in supply chain, risk mitigation- data analytics driven mobilization, sensing, configuration, and re-configuration of the entire operating cycle.^[789]

Monetary aspects

Continuous assessment of profitability in low revenue environment, greater importance on cash flow reserves, revolving credit lines supporting day to day working capital requirements, refinancing of debt, although avenues will remain constrained in times of industry wide crisis,

contractors and developers expected to assess contract provisions, insurances, and compliance commitments with much more maturity and foresight.^[9]

Conclusion, Future Challenges, and Policy Options

Honourable Prime Minister announced a mega 20 lakh crore rupees' package for the Indian economy on 12th May 2020 which is 10% of total GDP. The current package is inclusive of the past package (PMGKY, RBI liquidity measures, interest cuts) which was around 4% of GDP. The major focus of the package is land, labor, liquidity, and laws which will cater needs of cottage industries, MSMEs, laborers, and middle class.^[78]

In the long-run to reduce inequalities of income, regional imbalance and share of migrant workers, localization of industries and employment is the need of the hour. Apart from providing credits, there is also a need to work on institutional factors such as law and order, corruption, etc., for effective implementation of the policies. In the manufacturing industry, migration or migrant laborers are the engine of growth. In COVID-19 or post-COVID world there would be always demand of manufacturing goods. Therefore, the government has to work on the mechanism of how these migrant labors are brought back to their respective jobs.^[1011]

As the pandemic surged and spiked, Governments, healthcare professionals, scientists, epidemiologists, and the common man put in their best efforts to contain and live with it. The pandemic is redefining the lives of billions of people across the globe. Humans across the globe have perhaps never felt so vulnerable, as they wait for the pandemic to subside.^[10] Each family will have a story to tell their future generations, of a dreadful illness, unexpected deaths, the lockdown that redefined life for billions, bringing hardships while redefining family and "life" values. Meanwhile, we have to continue our best efforts to contain the disease through the recommended measures of social distancing, masks, and use of sanitizers.^[11] Worldwide development of vaccine by various agencies is still in process although its efficacy is still to be evaluated but these agencies might be working onto take financial advantage from this epidemic as majority are talking about probable number of doses required but not about efficacy and other essential parameters of vaccine as per the various media reporting.

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Conflicts of interest

There are no conflicts of interest.

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