

Impact of Covid-19 Pandemic and Human Development

Md Sharfuddin Ahmed*

In all countries, but especially those with low and middle incomes, there is concern regarding the effects of the pandemic on the most impoverished populations. These population groups have difficulties in adopting preventive measures (such as social isolation); they are exposed to a context of pragmatic vulnerability that increases the risk of contamination, and, if infection occurs, they have limited access to health services. It is a complex, dynamic context that requires special attention from governments.

These conditions in which people live and express, to a greater or lesser extent, the risk of illness are called social determinants of health (SDH). Identifying the SDH that influences the dynamics of COVID-19 is of fundamental importance for dealing with the pandemic and its consequences, thus contributing to the definition of mitigating public policies.

The Human Development Index and the Social Vulnerability Index are essential sources for studying the SDH. They help understand the context of the population's living conditions and thus support decision-making. The SVI measures the access, absence, or insufficiency of some assets in areas of the country's territory, which should, in principle, be available to every citizen due to the action of the State. The SVI varies from 0 to 1; the closer to 1, the greater the degree of social vulnerability. Based on this, our health policymakers should understand the relationship between COVID-19 and the population's living conditions to identify the SDH related to the incidence, mortality, and case-fatality rates of COVID-19.

COVID-19 currently represents the leading global health, social, and economic challenges. In Bangladesh, the disease spread started in the country's most developed cities in early 2020. It has spread throughout the territory without delay, reaching smaller and more vulnerable areas whose populations are exposed to a chronic and historical context of social deprivation. This process of spatial dissemination justifies the complex influence of SDH on the spread of the virus across the country.

But the 2nd wave with the Delta variant of Covid-19 virus mainly spread

* Vice-Chancellor, Bangabandhu Sheikh Mujib Medical University. E-mail: sharfuddin.bsmmu@gmail.com

through land borders between India and Bangladesh. It infected most of the cities and villages of border areas and gradually moved to larger towns and the capital. It then spread again to village areas during Eid vacation to infect millions of people. Concerns about the advance of the COVID-19 pandemic in the country's smallest, most vulnerable, and least developed municipalities raise the red alert. Our government and local authorities adopted the following:

1. Delay the arrival of the disease in these locations by adopting effective prevention mechanisms that consider the collective risk of illness, the social context experienced by these populations, and the best existing scientific evidence;
2. Expand and prepare the health network with urgent investments in all levels of care, especially vaccination; and
3. Guarantee social protection for the vulnerable population.

Considering that the virus is reaching the most vulnerable and least developed areas in the country after those with better living conditions, there is reason to believe that people of these areas are more severely affected and would have suffered incalculable consequences if consistent support measures were not adopted urgently.

The first reason concerns the risk context of these populations and the difficulties in implementing and/or adopting preventive measures. Tens of millions of workers earn their income from activities related to the sale of products and the provision of services, constituting a population vulnerable to contamination. In poorer areas, the percentage of these populations rises considerably.

Furthermore, in many cases, this is the only source of income for the family's subsistence, making adherence to voluntary social isolation challenging to maintain for an extended period without the proper support of emergency public policies. COVID-19, therefore, has a double effect on the most vulnerable populations to the extent that it both perpetuates poverty and is perpetuated by poverty itself.

It is perpetuating in the sense that, for each percentage point reduction in the global economy, it is estimated that an additional 10 million people will be placed in poverty. It would furthermore increase inequality in income distribution.

It is perpetuated by poverty because this vulnerable population, having no financial reserves and depending on emergency government assistance, will be unable to adhere to non-pharmacological preventive measures, such as social isolation, wearing masks, and hand hygiene. In this regard, their living conditions can maintain the COVID-19 transmission chain active.

The lack of home structure and access to minimum resources, such as water and basic sanitation, both on the outskirts of large cities and in the country's interior, can increase the risk of illness due to COVID-19, as observed with other respiratory diseases.

Even in rich countries, such as the United States of America (USA), the social inequalities in cities determine the greater or lesser risk of illness for their residents. In Boston, for example, there is a high concentration of poverty and a prevalence of diseases caused by it in certain areas and good living conditions and a low prevalence of these diseases in other nearby points. This scenario reinforces the relationship between social policies and the health conditions experienced by the population.

A study carried out in the USA, with data from 433 cities, involving 283 256 cases and 6644 deaths from COVID-19, showed that the highest social vulnerability index was associated with a higher incidence and lethality due to the disease (Relative Risk- RR = 1.19), being still higher when considering the population aged 65 or older (RR = 1.63). In the study, 28.9% of the municipalities had a high social vulnerability (SVI \geq 0.46) and a high adjusted lethality rate (\geq 2.3%). In addition, mortality caused by the disease, especially in household providers, can increase the poverty of families. In this investigation, municipalities with small population sizes and those with high SVI already show high mortality rates.

The situation tends to become more critical when all municipalities are affected. Even with the set of actions implemented by the government to contain COVID-19, it is likely that after this pandemic, our country may face a second crisis related to poverty and the diseases associated.

The second reason refers to the capacity of municipalities to face the contamination of their population and offer conditions for the detection and treatment of patients. Considering that 7% of those infected will need hospitalization and 2% will require intensive care, the municipalities with very high vulnerability (which recorded 4964 cases of COVID-19) would need 347 hospital beds and 99 intensive care units (ICU) beds.

The loss of income can bring other consequences for the population's health, such as a higher frequency of mental illnesses, increased substance and other drug abuse and increased domestic violence. It is not yet possible to predict the size of the impact of the pandemic on people's lives, especially on the most vulnerable. Therefore, strategies to combat COVID-19 must be developed on different fronts of action.