COVID-19 and Indian Pharmaceutical Industry

T. C. JAMES

The major problem for public health in India is lack of adequate infrastructure, medical supplies and human resources, as may be seen from Table 1. Against a global average of 2.7 hospital beds for 1000 population, we have only 0.7. The global average is 3.4 nurses and midwives per 1000 population, but in India it is 2.1. Italy, which is badly affected by the current virus outbreak it is a healthy 5.86. Similarly, the world level statistic for average number of doctors per 1000 population is 1.50, whereas in India it is 0.78. Italy has an average of 4.09 and still it is facing a daunting problem.

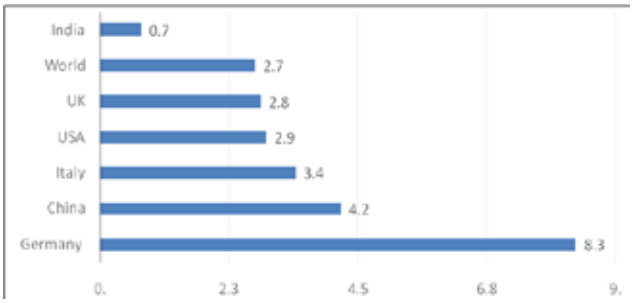
Table 1: A comparative analysis of healthcare in India and the World

Indicator	India		World
	In absolute terms	Ratio	
Physicians per 1000 population	10,44,420	0.78	1.50
Nurses and Midwives per 1000 population	28,11,900	2.10	3.42
Hospitals Beds per 1000 population	8,75,000	0.7	2.7

Note: Data taken for the latest year available,
Source: World Development Indicators Dataset, World Bank

The World Health Organisation recommends one doctor per 1000 population. It also recommends five hospital beds per 1000 populations. The infrastructure disparity with developed countries and India's own gross inadequacy can be gauged from Figure 1.

Figure 1: Figure- Hospital Beds per 1000 Population



Note: Statistics as per the latest available year
Source: World Development Indicators, World Bank Database

The challenge for the country will fall in right perspective when we realise that in Universal Health Care (UHC) service index, which encapsulates accessibility, and affordability of quality health services in a region, India scored 55 in 2017 compared to the global average of 65.7. Italy, a country that is struggling with COVID-19 pandemic, scored 82 in the UHC service index. While it may not be possible to find a solution to all the issues identified above, in a short span, certain steps can be identified.

Immediate priorities

The first and most urgent action required is to boost medical supplies. These include sanitizers, disinfectants, face masks, surgical gloves, protective gears for health personnel, test kits, infrared thermometers, scanners, ventilators, inhalers and so on. Some of these are high end technology but most require low level of technology only and can be easily manufactured. What could be done is that apart from the conventional pharmaceutical and medical equipment industry, other sectors of industry can buttin. In view of the economic impact of the pandemic, the demand for convenience and luxury items, including automobiles, is declining. There are industries like Hindustan Latex Ltd. which can easily switch over to manufacture of gloves and masks. In the USA, companies like General Motors and under garment giants like Hanes Brands are now producing masks and gloves. In India, Mahindra and Mahindra has already announced its intention to move in the direction of General Motors. Maruti Udyog Limited, instead of shutting down its production units, which would render thousands unemployed and impact GDP of the country, can also follow suit.

MSME is a sector that needs high focus in this endeavour of twining public health and economic development. This crisis situation could be made into an opportunity for MSMEs. They need to be given special incentives for producing low end technology items in medical and sanitary equipments like masks, gloves, cottons, etc. That will revive the stagnant sector.

So far as health infrastructure is concerned, although we have created a sizeable infrastructure, because of growth in population, the reach of health care services per person is still very limited (See table1). The immediate demand is likely to be for more and more isolation camps with minimum facilities. The country of 130 crore people will have to prepare for an explosion of the cases once the third phase sets in. As of now, countries like Italy and UK who had much better health infrastructure than India are finding it difficult to accommodate all COVID-19 patients. What can be planned as an emergency measure in India is setting up a massive number of transit and/or isolation facilities for quarantine. Considering the size of the population, we may have to look for each centre accommodating 3000-5000 patients and one centre should cater to around 10-lakh population. India is a country still prone to infectious diseases and various natural disasters. That being so, these new facilities are likely to be used in the future also. The central and state government funding earmarked for various infrastructure projects may have to be diverted for this, perhaps. But that is likely to stand in good stead for the country in the short, medium and long term.

Generic Pharma and Human Resources

The generic pharmaceutical sector of India has always been a reliable source for cheap medicines for the world. But the outbreak in China has raised many handicaps for the industry because of shortage of Active Pharmaceutical Ingredient (API) supply. What the industry can immediately focus is on manufacturing that can be done with available raw materials and linking with the Indian supply chain instead of waiting for the revival of the global value chain. In order to guarantee the back-end suppliers that they will not be left in the lurch in case of the global value chain getting restored in a year or so, the front-end firms should enter into medium term contracts with them. The industry should on its own form a consultation group of public health experts and medical personnel who can identify and prioritise requirements in the case of the outbreak of the epidemic and calibrate the production.

Human resources pose a different kind of problem, as they cannot be readied in at a short notice. What could be done is the optimal utilization of available resources and redeployments. The emergency also raises certain fundamental questions about the kind of health personnel that a country like India requires. Our medical education system should be geared to the high-end speciality medical care or more suited for the requirements of a rural and suburban community with low or medium paying capacity is the question that the policy makers will have to address seriously. It should also be remembered that India has been subsidising medical education in a big way. While there is nothing wrong in that, one will have to ensure that public funds are utilized in the most efficient way that is conducive to development and public good. It may also be necessary to develop the medical education models that are tuned to not only the public health needs but are also suited to the levels of pharmaceutical industry in the country, so that they become co-players in national development.

Handling of the COVID-19 crisis is likely to have long term and global implications. As of now, almost all countries are tackling their own issues. However, the models may have to vary depending on country situations. A country like India with certain strong basics like a well-spread pharmaceutical industry and well-developed education system can construct its own models of nation-building by marrying public health requirements and economy for national development.

Visiting Fellow, RIS. with research inputs from Dr Dinesh Kumar, Research Associate and Mr Apurva Bhatnagar, Research Assistant.