# COVID-19 Pandemic and India

- Editors -

Mukundraj B. Patil, Vikas D. Ragole

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# Contents

1.	Raghunath Jare	Iahadeo 1
2.	COVID-19 and Education - Rajkranti Walse	15
3.	Impact of Pandemic Disease COVID-19 on Education i Maharashtra- <i>Sandip Rathod</i>	n 19
4.	Impact of COVID-19 Pandemic on Mental Health and I Solutions: Indian perspective- <i>Dnyaneshwar Shamrao V</i>	
5.	Smartphone: The students saviour in COVID-19 Pander Satishkumar R. Mekewad	mic - 35
6.	Ethnomedicinal Treatment of Asthma during COVID-1 Pandemic in the Marathwada region of Maharashtra- <i>Yadav S. G.</i>	9 43
7.	Review on Impact of COVID-19 on Education System and Emergence of Online Education - <i>Dnyaneshwar Shwankhede</i>	
8.	Impact of COVID-19 on Education in India - <i>Rajabhau Kamble</i>	Anantrac
9.	Online Education: Opportunities and Challenges - <i>Pana Manoranjan Sitaram</i> .	lit 77
10.	COVID-19: Impacts on Education - Miss. Sunita Manor Bais	harrao 96
11.	Impact of COVID-19 on Chemical and Pharmaceutical companies in India - P. K. Vibbute	10

12.	Effect of COVID -19 pandemic periods on Migrant Work.  Khiste Sachin Aatmaram	rkers - 107	
13.	Impact of COVID 19 learning online: A problem at secolevel - Sunil P. Gaikwad	ondary 124	
14.	Covid-19 and education - S. S. Pawde, U. K. Shirshi	132	
15.	Impact of Covid-19 on Sports and Sportsman in India - Vitthal Dumnar	<i>Dr</i> . 140	
16.	Challenges and Problems Faced in Educational Institutions During Pandemic – Manorama B. Motegaonkar 147		
17.	Impact of COVID – 19 on Indian Students and Teachers R. V. Suryawanshi, G. D. Tingare, B. D. Ingale R. M. Mahindrakar	163	
18.	Rising online learning in the pandemic of covid-19 - <i>De S.M.</i>	vraye 168	
19.	Impact on environment as a consequence of Covid-19 - Ragole	Vikas D. 178	
20.	Impact of COVID-19 Pandemic on animal life – S.V. Rankhamb	187	
21.	India's Humanitarian Diplomacy During	Covid-19	
	Pandemic Period - Dr. Charuta V. Joshi	195	

# IMPACT OF COVID-19 ON CHEMICAL AND PHARMACEUTICAL COMPANIES IN INDIA

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Originating from China, the novel corona virus (COVID-19) drastically spread throughout the world in quick span of time and affected almost all countries across the globe<sup>1</sup>. In few months, COVID-19 has been spread rapidly and infected about 122 million world populations out of which more than 27 lacs people died<sup>2</sup>.

As in other industries, COVID-19 has impacted the chemicals industry from every direction and all its sectors. Just as supply chains are being disrupted by outbreaks in key regions, demand may fall due to uncertainty in the global economy and capital markets. Workforces are facing the risk of infection, and governments are beginning to enact restrictions on movement and both add an unpredictable dimension to the crisis.

The COVID-19 pandemic is causing widespread concern and economic hardship for consumers, businesses and communities across the globe. The situation is fast-moving with wide-ranging impacts.

Typical contingency plans help enable operational effectiveness following events like natural disasters, cyber incidents and power outages, among others. They don't generally take into account the widespread quarantines, extended school closures and added travel restrictions that are now being enforced in countries across the world. Each company's response to these forces should be carefully tailored to the dynamics of its industry.

The coronavirus pandemic is also affecting the global economy as governments undertake lockdown measures and curb the movement of their populations. Industrial activities are being halted, international travel has ceased and only essential businesses such as food and pharmaceuticals are being allowed to operate. These measures are having a significant toll on almost all industrial sectors as factories are facing supply chain breakdowns and labour shortages.

Global chemical production witnessed a decline of nearly 3% in March 2020. The reasons behind this reduction are raw material and labour shortages as well as government-mandated plant shutdowns. Among the different categories in the chemical industry, the specialty chemicals sector observed disruptions and production declines since February 2020. The most severe effects were felt in March, when global specialty chemicals production fell by more than 6%.

Uneven demand has been observed for specialty chemicals across different segments since the outbreak. While demand for specialty chemicals in the paints and coatings industry has gone down drastically, its requirement in the manufacture of pharmaceuticals, cleaning agents, detergents, flavours and fragrances, and plastics has either gone up or remained stable. The paints and coatings industry was hit severely as its two major end-use sectors, construction and automotive, have witnessed a significant slump in demand. Soon, specialty chemical manufacturers will need to make well-

informed strategic changes and restructure their businesses to navigate this uneven demand scenario until the threat of the pandemic is over and industry dynamics return to pre-outbreak levels.

# Impact of COVID-19 on Pharmaculical Industries:

In Indian scenario, the rate of infection increased abundantly in the last few days which make India the 3<sup>rd</sup> most affected countries in World<sup>3</sup>. Subjects suffering from infectious and non-infectious diseases of the lungs are found to be more risk from this viral infection due to the lower immune system. Hence, enhancing the immunity may possess the major contribution as a prophylactic measure against multiple pathogenic conditions as well as maintaining optimum health. Hence, there was a high need of development of pharmaceutical sectors including synthetic drug industries, herbal industries and pharmaceutical biotechnology in India.

The Indian pharmaceutical industry is the world's third largest drug producer by volume and the country's market manufactures 60 percent of vaccines globally. India supplies affordable and low-cost generic drugs to millions of people around the globe<sup>4</sup>.

# Challenges faced by the Indian pharma companies:

Manufacturing units/warehouses not working at full utilisation, due to unavailability of staff because availability and movement of labour<sup>5</sup>. Non-Availability or disrupted supply of raw materials and packing materials. Absence of seamless internet data connectivity with staff is creating issues in day to day work. Marketing staff facing issues in generating sales as they are unable to conduct in-person sales calls as they used to in the pre-Covid scenario. The companies that have operations across the globe are facing issues with regard to their operations and staff in those locations<sup>6</sup>. Every country has devised its own policies and guidelines. As with all industries, implementing effective and robust cybersecurity measures is a challenge in the work from home scenario. most of the pharma companies had

resumed but have been running at reduced capacities due to these challenges.

According to a report on the Indian pharmaceutical industry, the source of APIs is a crucial part of the pharma industry's strategic plan to combat the COVID-19 pandemic. The majority of APIs for generic drug manufacturing across the globe are sourced from India, which also supplies approximately 30 percent of the generic APIs used in the US. However, Indian manufacturers rely heavily on APIs from China for the production of their medicine formulations, procuring around 70 percent from China, the top global producer and exporter of APIs by volume.

The Indian government should take important steps to remove the technical and financial barriers that will spur the pharmaceutical industry to ramp up API production, reducing the dependency of the pharmaceutical industry as a whole on the heavily impacted Chinese market. The Indian government recently undertook applaudable steps by proposing an incentive package of 13.76 billion Indian Rupees for the promotion of domestic manufacturing of critical key starting materials, drug intermediates, APIs and medical devices.

The Indian pharma industry aspires to become the world's largest supplier of drugs by 2030. Zydus, a foremost manufacturer of hydroxychloroquine (HCQ) has already augmented its capacity to produce both the API and the other formulation manifold. HCQ supplies from India to countries like the US, Brazil and Israel. Current global relation among the developed countries suggests that many foreign countries including Europe, USA and Japan might shift their pharmaceutical companies to India. Provide drug development opportunity in pharmaceutical industries in future.

It is critical to remember that developing a vaccine is neither an easy task nor a guaranteed outcome of research efforts. Therefore, instead of anchoring the entire world's hope

### COVID-19 Pandemic and India

on a successful vaccine, the world will have to work around learning to live with the virus while research continues. It would be prudent to continue exploring other options of both prevention and cure that could manage the symptoms and reduce morbidity.

Rigorous research on the virus to understand it better how it spreads, its journey within our bodies- for different age groups, with or without co-morbidities and symptoms; the impact of different drug combinations, how different temperatures impact it, its interaction with various surfaces; the actual cause of death in Covid positive patients, is necessary for a solution to combat the disease.

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