



China, India and the political economy of medical supplies

Stein Sundstøl Eriksen

KEY TAKE AWAYS

- The pandemic and lockdowns threaten the supply of medicines, especially from India
- Poor countries relying on supplies of cheap Indian medicines are especially vulnerable
- New medicines and vaccines are likely to be developed and patented by Western companies and will be expensive.
- Norway should help fund the supply of medicines and promote reforms of patent rules to make medicines more affordable

The corona crisis has exposed challenge and vulnerabilities related to medical supplies and production of medicines in a system characterized by global supply and value chains. In these supply chains, China and India already play significant roles that may now increase.

China is by far the largest supplier of raw materials and chemicals (active ingredients) that go into the production of medicines. In fact, more than 80%, of ingredients necessary to make medicines globally are produced in China. China, moreover, has considerable capacity for production of medicines that may become relevant for dealing with corona, for malaria in particular, but also some ARVs and basic drugs, like pain killers, symptom relief medicine and other drugs. China also has a large production of medical equipment.

Until now, Chinese pharma has been relatively slow to internationalize, having prioritized the large and growing domestic market, although both Chinese authorities and international organizations have been working to increase exports, especially to developing countries. Diplomatic and commercial incentives for scaling up international sales and provisions may now change a great deal. We already see Chinese health supplies provided to crisis-struck countries, both as trade and as aid.

India is already a large producer and exporter of finished medicines, especially in the production of so-called generics, which are medicines not covered by intellectual property rights and are significantly cheaper than original brands. But in contrast to China, it produces little chemical inputs. Instead, it imports most inputs from China. When an Indian company (CIPLA), developed a generic version of HIV medicines, India was able to soften the protection of intellectual property rights and pressurize the US and European companies` price setting. The result was that treatment became affordable for poor countries. This downward pressure on prices has weakened as more Indian companies have linked up with Western companies, but is still important, particularly for low income countries.

In the short run, ruptures in the supply of chemicals or medicines from these two countries will have severe effects on the availability of medicines globally. This gives China, and to a lesser extent India, a key role in dealing with the corona crisis. If China or India stop or interrupt their export of medicines and other critical supplies, there would be global shortages. Likewise, if China and India are able to maintain production and perhaps produce medicines or vaccines, they may play a key role in dealing with the crisis.

Risks of supply disruptions

Supply could be disrupted in several ways:

- The pandemic may severely reduce production capacity of both medicines and chemicals used in production of medicines in China. This will also affect the production of medicines in other countries, who depend on chemicals imported from China. For India, which imports 70% of the chemicals used in its pharmaceutical industry from China, reduced availability of chemicals from China will severely affect production. It is claimed that India has supplies to maintain production until May, but if new supplies are not available by then, production will be affected (expresspharma, 13 April 2020). India now considers increasing domestic production of chemicals and bulk drugs, and may, over time be able to replace chemicals imported from China, but this is difficult in the short term. However, it currently looks like production in China is picking up again.
- If, as now looks likely, China is able to contain the pandemic, it may still restrict the export of medicines and chemicals to ensure sufficient domestic supplies. The same applies to India, which has already imposed restrictions of export of medicines. However, after pressure from President Trump, India agreed to lift the export ban of hydroxychloroquine, the anti-malarial medicine that Trump believes will be an effective treatment of corona.
- Reduced production capacity and export restrictions may lead to competition for access to medicines and steep price increases, as countries scramble to obtain supplies for themselves. There have already been [reports of competitive bidding](#) and attempts by American buyers to get hold of supplies on the way from Asia to Europe.
- The pandemic has created severe shortages in the supply of medical equipment, such as respirators, protective masks. Such shortages severely affect the ability to treat patients suffering from corona. Like vaccines and drugs, [specific types of respirators are patented](#), making it illegal for others than the holders of patents to produce them.
- Lockdowns affects the production capacity of all countries. For instance, it is reported that in India, the pharmaceutical industry is only allowed to use 25% of the regular workforce during the lockdown, even though the industry has been defined as an essential sector partly exempted from restrictions. Lockdown also create logistical bottlenecks, as train and lorry traffic, shipping, port operations and air freight are affected.

Consequences for developing countries

All these factors could be especially harmful for poor countries. If supplies are limited and/or prices increase, these countries have far less ability to obtain the medicines they need. This applies to all types of medicines, not just vaccines or drugs that may be developed to treat corona. African countries import a large part of their medicines, especially from India but also from China – for the most part so-called generics, medicines not covered by intellectual property rights that are significantly cheaper than original brands. In 2012, India contributed more than 50% of all imports of medicines in Uganda and Mozambique and more than 40% in Nigeria, Ghana and Rwanda. Its share was also substantial in Ethiopia, Tanzania and Zimbabwe (Chaudhuri, 2012). In particular, African countries rely on China and India for supply of medicines for HIV, malaria and tuberculosis.

Although improving in some countries, they still have limited capacity to replace imports from China and India with domestically produced medicines. At the same time, poor countries are hit hard by the decline in export revenue and an increasing debt burden associated with currency

depreciation. Conversely, their ability to deal with it will be significantly improved if China and India are able to supply drugs and equipment, since the prices of generic products are often only a fraction of the prices demanded by Western companies.

However, the implications of the corona crisis on poor countries' access to medicines will also depend on how Western countries respond. One key issue is the system of intellectual property rights. The first anti-corona medicines are likely to be based on medicines developed for other illnesses, since one will know more about side effects and trial periods will be shorter. Currently, the medicines used against malaria, HIV, Ebola and influenza appear to be [the most promising](#). Big Pharma hold patent rights for most of these already, including Remdevisir, the drug developed to treat Ebola which is considered most promising (the exceptions are some of the antimalarial medicines and an HIV-medicine, which was exempted from patents in 2004, which enabled India to become a major supplier of generic versions of this drug).

At present intensive research for developing vaccines and medicines is undertaken by researchers across the world. It is likely that the first medicines will be developed by Western companies with their government upland of research institutions. When products are developed, cooperation is likely to be mixed with intensive competition, where issues like patenting and prospects for developing generic medicines are likely to arise. Both Chinese and Indian enterprise-government clusters are capable of developing and producing new medicines significantly cheaper than the big Western companies but may not be allowed to do so if patents are owned by Western companies.

Developing inexpensive stop-gap medicines is likely to prove especially important in poor countries with weak health systems, where both social distancing and resource-demanding health care are impossible. A crucial issue in the wake of the pandemic is therefore how the policy on property rights will be shaped. Will companies be forced to waive property rights in order to facilitate dissemination of new drugs (vaccines or drugs for treatment) to address the crisis? Will there be political initiatives at the global level (for instance through WHO), or will each state be left to "fend for itself"? Are we likely to see more regulation, reform of patent rules and politically imposed price controls?

So far, each country struggles to obtain supplies for itself, with limited international coordination. WHO has limited resources, and might have even less in the near future because of the US, its largest contributor, decision to suspend funding. [Some countries are using what is called "compulsory licensing of patents"](#), a legal measure by which countries can suspend patent rights to obtain cheaper medicines. Countries that have taken such measures include Chile, Israel, Canada, Germany and Brazil. There have also been discussions about so-called private licensing, an agreement where the patent holder grants rights to other producers. How such deals may affect the price of drugs depends on the terms of the agreement between the patent holder and the producer. In the long term, the crisis may lead to changes in the global supply system, particularly for generic drugs and basic medical equipment, as developed countries are likely to produce more of these products themselves.

Recommendations

In this situation, Norway should prioritize two types of intervention. First, help fund the supply of medicines and equipment to poor countries to help them deal with the crisis, both bilaterally and through WHO. An important issue is that Indian and Chinese medicines are almost always accused of having lower quality than Western ones. Together with assistance in financing supply of medicines, assistance in developing quality controls is pertinent.

Second, in the short run stimulate international research to remain cooperative as long as possible.

In the longer run, support and promote reforms of patent rules to make medical supplies more affordable, at least on a temporary basis until the corona crisis is resolved.

About the author

Stein Sundstøl Eriksen is a Research Professor in the Peace, Conflict and Development Research group at NUPI.

Jens Chr. Andvig and **Hans Jørgen Gåsemyr** (both NUPI) has contributed with inputs to this brief.

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NUPI
Norwegian Institute of International Affairs
C.J. Hambros plass 2D
PB 7024 St. Olavs Plass, 0130 OSLO, Norway
www.nupi.no | post@nupi.no

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