



Morocco: Drug Stock Management and Shortage Issues Related to Covid-19. Sharing the Moroccan Experience

The president of Moroccan Council of the Pharmaceutical Industry, Rachid Lamrini, tells about the country's experience in dealing with the Covid-19 emergency and reflects on its possible future impact on how to manage the global supply chain for pharmaceuticals

EIPG 17 April 2020

by Rachid Lamrini: President of the Council of Pharmaceutical Industry and Distributors

An Overview of The Pharmaceutical Industry in Morocco

The Moroccan pharmaceutical industry as such started in the mid-1950s, immediately after the independence obtained in 1956. Where the first pharmaceutical production units stemmed as an initiative of some Moroccan industrialists who were pioneers in the field.

In 1960 **the first law** governing the pharmaceutical sector was published. The *Dahir* (Act) of 1960 emanating from this law is the fruit of the first National Health Conference which took place in Rabat under the high patronage of His Majesty the King Mohammed V in 1959. It introduced strategic measures which made **having a production unit a requirement in order to be in possession of Marketing Authorisation** (MA) and be able to market medicines in Morocco. This provision forced a number of international pharmaceutical groups at the time, to **set up small production units**, such as Bayer, Rhône Poulenc and Hoecht-Polymedic laboratories. Other Moroccan drug companies had to do the same, for instance Laprophan and Copharma, which later became Maphar.

These facilities with a mixed Euro-Moroccan management have allowed **a transfer of technology and know-how** which have ultimately been the reason behind the positioning of the Moroccan pharmaceutical industry as leader in Africa today.



Rachid Lamrini: President of the Council of Pharmaceutical Industry and Distributors and Author of this article (credits: COPID)

Global drug shortages as a result of Covid-19

Globalization and the **multiplication of production sites for raw materials** in search of economies of scale have been the cause of **several supply disruptions** in the pharmaceutical market. Government authorities as well as the World Health Organization now consider stock shortages as a major public health concern.

With the appearance of the first cases of coronavirus in Wuhan, China, in December 2019, it became clear that Covid-19 is particularly contagious and requires appropriate precautions and exceptional emergency measures. As a result, several regions worldwide have been significantly impacted both economically and health-wise, starting from **China, one of the world’s largest exporters of pharmaceutical raw materials**. Some of Wuhan Factories have been closed and some others have seen their activities reduced because of the spread of the coronavirus. This slowdown had **a severe impact** on the supply of their first American and European customers.

India herself, not immune to the pandemic, began as well to **restrict the export of certain active pharmaceutical ingredients**, including chloroquine and hydroxychloroquine, two molecules recommended for the treatment of the COVID19 disease.

With the risk of shortages that may result from the various restrictions and delays in supply. The **United Kingdom** on the other hand had ironically started **banning the parallel export** of certain essential medicines as consequence of Brexit, in order to guarantee their availability for British patients.

At the other side of the Atlantic, the **Canadian government** instructed doctors and hospital pharmacists **to be as sparing as possible in the stockpiling of certain drugs**. An unusual increase in hospital orders has put the pharmaceutical industry in a dilemma between focusing on the manufacture of essential drugs used for Covid-19 or ensuring the manufacture of other routine therapeutic areas.

Drug Shortage and Supply Management Plan

By the end of February 2020, **the FDA** addressed the pharmaceutical industry, requesting the development of **a risk management plan** to improve the critical infrastructure, and ensure a normal and regular supply to the American drug market.

The FDA required marketing authorization holders to conduct **periodic risk assessments** that highlight vulnerabilities in their supply chain. The objective is to strengthen the supply chain by integrating priorities and contingencies for emergency situations.

As for the European Union, the **EU Executive Group**, in collaboration with the pharmaceutical industry, has set up an **i-SPOC (industry single point of contact) system**. Through this system, each pharmaceutical industry will report directly to the EMA on foreseeable or future shortages of essential medicines used in the context of COVID-19.

In **Morocco**, the health authorities have anticipated possible shortages by recommending that pharmaceutical companies and wholesalers put in place **shortage management plans for essential medicines**. A procedure has been published in this context by the Council of Pharmaceutical Industry and Distributors (COPID) to help anticipate and alert to the risks of drug shortages. Similarly, COPID has recommended **a quota management** in this case in order to ensure equity of supply in all regions of the kingdom.

Drug Supply and the Impact of Covid-19: Sharing the Moroccan Experience

The first Covid-19 case in Morocco was recorded on Monday 2nd of March 2020. This was confirmed by the Pasteur Institute laboratory in Casablanca. This was a Moroccan national residing in Italy who has aroused the utmost vigilance of the authorities following his arrival to Morocco.

As part of the fight against the Covid-19 pandemic program, Morocco was the first African country to join the wave of countries declaring a state of health emergency by closing its borders to endemic European countries on the 10th of March 2020.

The Kingdom of Morocco also chose to act quickly by **implementing mandatory containment** as of the 20th of March 2020, and made **wearing masks compulsory** on the 6th of April.

Furthermore, the Ministry of Health has put in place a number of **additional measures**:

– Publication of a ministerial briefing note on March 17, 2020 authorizing pharmaceutical and cosmetic industry to **manufacture solutions and hydro-alcoholic gels** in accordance with the WHO formula. This briefing note required the distribution to be limited to the pharmaceutical circuit and set the sale price.

– Publication of a ministerial circular dated 18 March which **reinforces the regulatory framework for market supply**. The MoH addressed responsible pharmacists for the pharmaceutical industry and wholesalers by announcing a number of **instructions**:

- To **control the sales** from drug manufacturing companies to wholesalers and from wholesalers to community pharmacies so that these are not significantly higher than the average monthly sale during the months preceding COVID19.
- **Weekly reporting of inventory** taking place every Friday.
- **Implementation of a shortage management plan** as soon as the safety stock threshold is reached.
- Implementation of **the quota procedure** when necessary.
- Obligation of community pharmacies to **report any shortages** or items out of stock noticed.

– Publication of a briefing note from the Ministry of Health on the 31st of March aiming to **restrict drug exports** by requiring proof that the Moroccan market has been prioritized and will not be impacted.

– Publication of a decree by the Minister of Finance on the 2nd of April **setting the prices of surgical masks**.

– Publication of a briefing note from the Ministry of Health **halting the procurement through tendering** within district hospitals and university hospitals as well as announcing the possibility of resorting to direct purchase orders from suppliers.

– Publication by the MoH on 23 March 2020 of **recommendations for the management of Covid-19**. Morocco has adopted a protocol that stipulated a first-line treatment and another second-line treatment:

- *1st Line Treatment*: Chloroquine or Hydroxychloroquine with azithromycin.
- *2nd Line Treatment*: Ritonavir and Lopinavir combined with azithromycin.

– It should be noted that the chloroquine-based medicine “NIVAQUINE 100 mg” is manufactured at the Maphar manufacturing site located in Zenata – Casablanca and that all the stock produced during this period **has been requisitioned by the Ministry of Health** in order to avoid any misuse. Same was the case of the Hydroxy-Chloroquine based “Plaquenil” which is imported into Morocco by the Sanofi.

– The Minister of Health has also decided to **exceptionally reserve the distribution of “Plaquenil”** to the various hospital pharmacies in the Kingdom.



The MAPHAR Pharmacists Team at the Distribution Centre of Casablanca (credits: COPID)

Post Covid-19: what lessons can be learned?

In order to carry out this war against the Covid-19, all the states have been mobilized to take exceptional measures in order to fight against this pandemic. One of the first priorities was to **secure stocks of essential drugs** such as anesthetics, antivirals, antipyretics, anti-infective, etc.

This significant increase in demand has led to **major changes in the manufacturing plans** of most pharmaceutical industries. Most of the major active pharmaceutical ingredients (API) producing countries have restricted exports in order to prioritize the domestic market. These same countries have sometimes even seen their capacities reduced.

The issue of safety stocks in the context of Covid-19 has become even more complex due to **the disruption of the entire supply chain**.

The Covid-19 health crisis is forcing us to ask ourselves **a number of questions**:

- Is **globalization and the search for excessive economies of scale** a solution that is focused on patients interests or rather the economic interests of shareholders?
- Is the **health governance model for access to medicines** globally appropriate?
- Everyone knows the “Disaster Medicine” implemented during wars and pandemics, but is it not time to reflect on **an anticipation of the “Disaster Pharmacy”** as it is the case today?

How come that **European collaboration and solidarity** work so efficiently on the economic level but have not manifested themselves during Covid-19 health crisis. Italy and Spain, which were the first countries to be affected, were not supported by any Member State of the European Union?

Why was it not possible to manage this unprecedented health crisis in a spirit of solidarity so that **all the stock available in the world could be optimized and managed in a fair and not selfish way**?

This article has been developed in collaboration between COPFR and EIPG, as a result of COPFR’s membership within EIPG
