



# Securing the medicine distribution network in Africa



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## **Richard Bielle** **Chairman and CEO, CFAO**



CFAO is committed to the development of the African continent. With over 170 years of expertise and a presence in 38 of the 54 African countries, the Group mobilizes its 23,000 employees around a common ambitious project: *With Africa For Africa*.

In our four business domains - Mobility, Green Infra, Healthcare, Consumer - our global strategy aims to master each step of the value chain - from import to production, through distribution to the final customer - a critical condition in emerging markets to ensure the quality of our services and products.

Among our strategic sectors, healthcare holds a central place. Every day, millions of people depend on pharmaceutical distribution networks to access safe and reliable medicines. However, access to healthcare remains unequal, worsened by the proliferation of falsified medical products and increasing health challenges.

CFAO Healthcare's mission is to secure access to quality medicines for all African countries. Through this white paper, CFAO Healthcare, in collaboration with the OPALS Foundation, strengthens this commitment.

The CFAO Group is proud to be part of this publication aimed at raising awareness about these issues among health stakeholders in Africa, as well as the general public.

**Richard Bielle**  
**Chairman and CEO**  
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## **Prof. Marc Gentilini** **President, OPALS Foundation**



The scourge of falsified medicines, vaccines, and medical devices is a severe, global and expanding public health problem that is primarily affecting the poorest populations. All continents are affected, and the situation in Africa is critical, especially in Sahel countries where access to healthcare is exacerbated by political instability.

Markets and streets are full of products of unknown origin and composition, presented as medicines by street vendors trying to make a living to feed their families, to a population unaware of the risks or unable to afford medicines through the official distribution system.

The criminals fuelling these markets are highly organized and take advantage of the deficiencies in health systems, medicine control, and trafficking enforcement to make their lethal trade thrive, with no regard for the populations they poison.

This tragedy demands a general mobilization, both at the national and international levels, of all health professionals, the judiciary, law enforcement, and customs, a mobilization supported by a strong and enduring political will. Only then can the medicine distribution networks be secured, control capacities strengthened, and awareness about the dangers of fake medicines raised effectively. Pharmaceutical wholesalers, as key players in the medicine supply chain, have a major role to play.

Thus, the OPALS Foundation, which continues the fight against falsified medicines started by the Chirac Foundation, joins forces with CFAO Healthcare to intensify this battle for the safeguarding of global public health. Beyond information and analysis, this white paper serves as a call to act together to ensure that everyone has access to quality medicines, vaccines, and medical devices.

**Professor Marc Gentilini**  
**President of the OPALS Foundation**  
**Honorary President of the French Academy of Medicine**



## **Jean-Marc Leccia** **CEO, CFAO Healthcare**



Securing the medicine distribution networks in Africa is a major issue that transcends private interests. When these networks are compromised, human lives are put at risk. Ensuring universal access to safe and quality medicines is therefore a public health imperative and is at the heart of CFAO Healthcare's daily mission.

As a leader in pharmaceutical distribution in Africa, CFAO Healthcare relies on robust infrastructure and proven expertise to support all players in the supply chain, from manufacturers to pharmacies and health facilities.

This commitment addresses the immense health needs of a continent severely weakened by the proliferation of illicit networks.

By spreading falsified medicines, these criminal networks not only compromise the health of the population but also undermine the collective efforts to build quality health systems. Protecting legal distribution networks means protecting lives and ensuring the resilience of healthcare systems.

Through this publication, we reaffirm our commitment and our desire to raise awareness among the population and hope to engage all stakeholders – governments, health professionals, private actors, and civil society – to enhance collaboration to secure supply chains and fight illicit distribution.

I thank everyone who contributed to the design of this work, and especially the OPALS Foundation, with whom we share the ambition to guarantee the African population sustainable and equitable access to quality medicines.

**Jean-Marc Leccia**  
**CEO, CFAO Healthcare**



# 01

# Medicine distribution networks in Africa



# Key public players in the distribution networks

## PHARMACEUTICAL REGULATORY AUTHORITIES

Pharmaceutical regulatory authorities are governmental agencies working to advance public health through various tools: scientific research, legislative development, law enforcement, information-sharing, and advice to healthcare professionals and/or citizens. These regulatory agencies regulate the manufacturing, marketing, sale, importation, and distribution of medicines and other healthcare products for human use within their territories.

In Africa, these authorities, traditionally referred to as Directorates of Pharmacy and Medicines and attached to the Ministry of Health, are gradually evolving in each country into true autonomous "regulatory agencies" under the impetus of the WHO (World Health Organization), which has established a global classification of national medical product regulatory authorities. Senegal is the first French-speaking African country to have reached level 3 maturity according to this classification. In English-speaking Africa, seven states have achieved this.

Regulatory authorities play a crucial role in the accessibility of medicine by authorizing the availability of products that meet population needs in sufficient quantities, as well as by demanding and monitoring an acceptable level of quality, safety, and efficacy of medicines.

Two components are essential to this mission:

- Medicine quality control laboratories: they carry out physicochemical and pharmacotechnical analysis of medicines authorized for marketing and circulating within the country or region. Currently, no French-speaking African country has a WHO prequalified quality control laboratory unlike English-speaking Africa.
- Pharmaceutical inspection: this is being progressively implemented to ensure that pharmaceutical network actors comply with dedicated regulation and to combat irregularities, particularly the trafficking of fake medicines and illicit health facilities.

At the continental level, the African Medicines Agency (AMA) aims to encourage each country to establish an autonomous regulatory authority. This initiative seeks to facilitate the sharing of expertise, helping national agencies achieve the highest international standards of governance and operation. Additionally, AMA promotes transnational cooperation and the harmonization of regulations. The goal is to optimize resources, enhance monitoring and distribution, and ultimately improve access to quality medicines.

The Covid-19 pandemic highlighted the Continent's dependence on imported medicines, and as a consequence several states have adopted policies promoting the development of pharmaceutical production in Africa. This dynamic is challenged by the insufficient size of domestic markets, the lack of customs policies, and the distribution of production at the continental scale. It should be encouraged and supported by regulatory agencies, whose prerogatives should be extended to oversee this sector.

## PUBLIC PROCUREMENT AGENCIES

Public procurement agencies are responsible for purchasing essential medicines from foreign manufacturers, storing and distributing them to public care centers, such as hospitals, health centers or dispensaries. They negotiate prices with suppliers and optimize purchases through tendering processes. These agencies exist under various legal statuses depending on the regions of the Continent and the states. Many of them are grouped within the ACAME (African Association of Central Medical Stores), facilitating cooperation and the sharing of expertise.

## PUBLIC HEALTHCARE FACILITIES

Hospitals, health centers, and public dispensaries receive medicines supplied by the procurement agencies, and provide them to patients.

Their operation is based on national public health policies that define priorities in terms of access to care. The supply of public facilities relies on the efficient operation of upstream distribution networks, including procurement agencies and the resources provided to them by health authorities.

A study<sup>1</sup> conducted across 39 African countries revealed that only 59% of the regions analyzed have a local public dispensary or hospital. Moreover, their distribution is highly variable and unequal across countries and between urban and rural areas.

Some public facilities collaborate with private organizations to ensure continuity of care and address medicine stockouts, notably through distribution agreements or public service delegation mechanisms. This coordination between the public and private sectors should be encouraged to strengthen the medicine distribution network, adopt best practices from the highest international standards, and improve access to quality medicines for all.



<sup>1</sup> 'La santé pour tous et partout ? - Afrobarometer - 2024

# Key private players in the distribution networks

## PHARMACEUTICAL LABORATORIES

The pharmaceutical industry is one of the pillars of health systems around the world. The sector includes numerous companies involved in the development, manufacturing and marketing of medicines for human and animal health.

The professions involved at each stage of a medicine's lifecycle are varied: research and development, quality assurance, production, medical and regulatory information, marketing, etc.

Most pharmaceutical groups operate in international markets. Their activities and products are subject to the laws, regulations, and health policies of each country.

The African continent has a limited number of manufacturing plants, leading to a heavy reliance on medicine imports.

According to the WHO, 94% of medicines and health technologies are imported. As for vaccines, 99% of them are imported<sup>1</sup>.

## WHOLEALER-DISTRIBUTORS

The other key players in the distribution of medicines are wholesaler-distributors, who purchase, store, and distribute all pharmaceutical products that require authorization by the health authorities of the destination country.

As actors closest to the points of delivery for medical products, they play an even more crucial role in health systems in Africa, bridging the gap between local distributors and distant manufacturers.

In French-speaking Africa, wholesaler-distributors deliver exclusively to pharmacies and authorized establishments. This ensures traceability and security up to the final link in the chain: the patient.

In English-speaking Africa, the distribution system is different. Wholesaler-distributors deliver medicines to intermediaries (procurement centers, depots, etc.) which are responsible for redistributing to individuals and authorized structures. This can compromise the integrity and security of the distribution network.

## PHARMACIES

A pharmacy is the physical setting for medical retail activities, from the storage of medicines to their dispensation. The multiple roles of a community pharmacist make it one of the key players in the ambulatory care system: providing advice, vaccinations, monitoring chronic diseases, dispensing health products, and preparing custom formulations.

Retail pharmacies must comply with layout standards defined by various national public health codes, in order to carry out all authorized activities in compliance with good practices.

The pharmacist plays an essential role as a public health advisor, educating patients on the correct use of medicines and, particularly in Africa, raising awareness about the existence and dangers of illicit medicines.



<sup>1</sup> 'A case study on the ecosystem for local production of pharmaceuticals, vaccines and biologicals' - WHO - 2024



# Private medicine distribution networks in Africa

## FRENCH-SPEAKING COUNTRIES

The legislation in French-speaking African countries is more restrictive than in English-speaking countries. This enhances the security of the medicine distribution network. Manufacturers sell their products to authorized wholesaler-distributors, allowing pharmacists in any French-speaking country to access thousands of market references. These same wholesaler-distributors handle transportation and distribution in accordance with good storage and traceability practices designed to ensure optimal quality of the medicine delivered directly to pharmacies and authorized establishments.

Furthermore, price regulation in the French-speaking market guarantees patients equitable access to medicines: they will find the same product at the same price in all pharmacies. However, prices may vary from one country to another.

This system, inherited from the French legislation with supplier laboratories subject to ICH<sup>1</sup> standards, has effectively protected the pharmaceutical markets of these countries from the circulation of fake medicines until the 1990s. However, due to structural adjustments imposed on African countries by international financial institutions, as well as the misinterpretation of the Bamako Initiative<sup>2</sup> for better access to essential medicines, new players entered the markets and began selling "the cheapest or financially accessible" products, flouting established rules, at the expense of product quality.

This period of the 1990s marked a significant turning point in the development of the illicit medicines network in French-speaking Africa. Weak regulatory systems, without adequate means, were quickly overwhelmed by the avalanche of generics to be controlled. Pressure also increased on actors across the distribution network, who had to find ways to contribute, at their level, to protect the formal network from the infiltration of fake medicines.

Private distribution organization in French-speaking Africa



1 ICH (International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use) standards are international guidelines aimed at harmonising regulatory requirements for the development, registration and monitoring of human use medicines.

2 The Bamako Initiative is a reform of the management of essential medicines in Africa, launched in 1987 under the auspices of the WHO and UNICEF, aimed at ensuring their accessibility through a cost recovery system and community involvement, but whose application has sometimes promoted the development of informal networks and fake medicines.

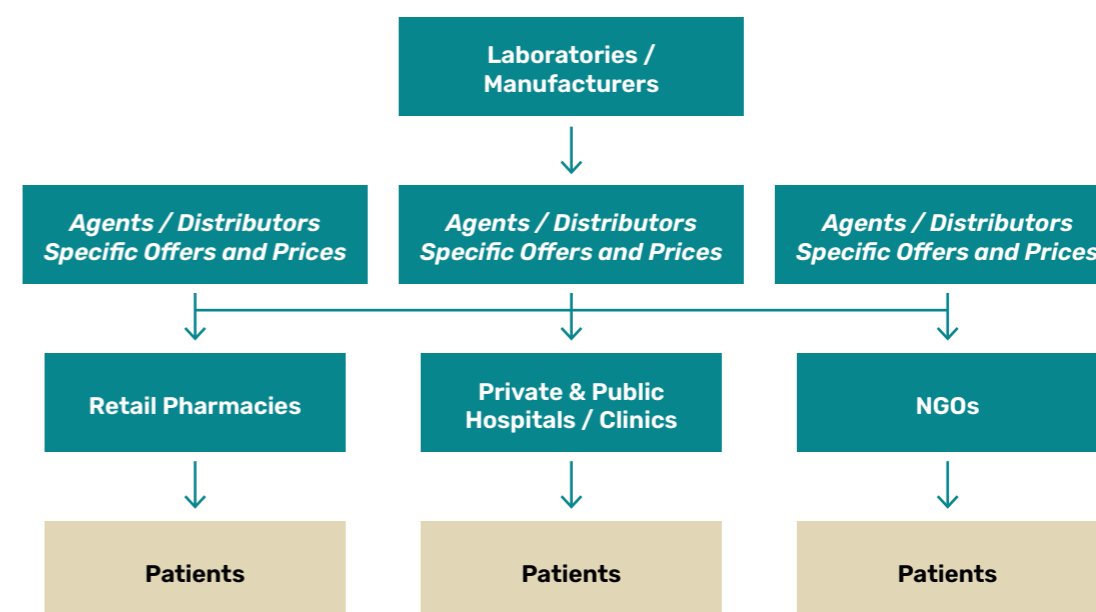
## ENGLISH-SPEAKING COUNTRIES

Legislation in English-speaking African countries imposes fewer regulatory constraints on the medicine distribution network than that of French-speaking countries. Neither a complete offer availability nor a manufacturing site associated with the product registration dossier is required, resulting in a proliferation of actors and intermediaries, including manufacturers from all countries, wholesalers, intermediaries and depositaries. This abundance of operators, paired with the absence of a pharmaceutical monopoly (dispensing can be done in commercial establishments such as drugstores), complicates the traceability of products and can affect their quality.

Moreover, the impact of currency fluctuations and free pricing lead to price variations for the same medicine. This reality encourages populations in the most vulnerable situations to turn to cheaper medicines, often of lower quality, or even to the informal market, exposing them to significant health risks.

While the processes for granting Marketing Authorization (MA) and authorization of establishments are less stringent than in French-speaking countries, market surveillance is highly rigorous.

Private distribution organization in English & Portuguese-speaking Africa



# Case study: Cameroon

**Home to 27.9 million inhabitants over more than 475,000 km<sup>2</sup>, Cameroon serves as a representative case of the medicine distribution networks in French-speaking Africa: a system combining the involvement of a public agency, non-profit organizations and the private sector, with the latter playing a central role in delivering products to pharmacies.**

More than 90% of the Cameroonian pharmaceutical market relies on imports<sup>1</sup>, with a significant percentage coming from France. The market is divided between the public sector (6%), the private sector (79%) and non-profit organizations (15%)<sup>1</sup>. The country's economic difficulties pave the way for the informal sector, whose prevalence, while difficult to assess, is considered substantial by health authorities.

## PUBLIC SECTOR

Reorganized in 2024, CENAME (National Procurement Centre for Essential Drugs and Medical Devices) is responsible for implementing public pharmaceutical policy. CENAME's mission is to ensure the availability, continuity and accessibility of essential medicines and medical devices at the best quality-price ratio across the country. The agency purchases products from official suppliers and mainly supplies them to the FRPS (Regional Health Promotion Funds), faith-based central warehouses, NGOs (Non-Governmental Organizations), public health facilities, and central and general hospitals. These bodies are responsible for delivering the medicines to other structures or to their patients.

## PRIVATE SECTOR

The private sector is responsible for providing all duly registered pharmaceutical products. The distribution network is under the responsibility of authorized wholesaler-distributors, who ensure the quality of the products and adherence to best practices for preservation, from suppliers to final recipients, including retail pharmacies, private clinics, NGOs, and faith-based organizations. The security chain deployed throughout the network ensures traceability and guarantees that all patients obtaining supplies through official channels are not exposed to fake medicines.

## NON-PROFIT PRIVATE ORGANIZATIONS

NGOs and faith-based organizations, which are very prevalent in Cameroon, generally group together in purchasing centers, primarily sourcing their supplies from abroad and – to a lesser extent – from wholesaler-distributors or CENAME.

<sup>1</sup> 'La production locale de médicaments se développe mais la filière dépend toujours des importations' – Ambassade de France au Cameroun – 2019

# Case study: Kenya

**With an area of about 580,000 km<sup>2</sup> and a population of 54 million, the Republic of Kenya offers three pathways for patients to access medicines: the public distribution network, the private distribution network and NGOs.**

## PUBLIC SECTOR

In Kenya, the public sector focuses its efforts on making essential medicines available, particularly those related to the treatment of infectious diseases (malaria, HIV, cholera, etc). Patients access various products through public health facilities: the national hospital – managed by the central government – and reference hospitals, health centers and dispensaries managed by the districts. These structures place orders primarily with the CMS (Central Medical Store), a governmental agency managed by the KEMSA (Kenya Medical Supplies Authority), which handles supply, storage and internal distribution. This network provides 70% of public sector medicines, along with 28% for the NGO MEDS (Mission for Essential Drugs and Supplies) and 2% for private sector actors<sup>1</sup>.

## PRIVATE SECTOR

The private network ensures the availability of all types of medicines, primarily sold by retail pharmacies – the only entities authorized to dispense them to patients, with the exception of certain products offered by private hospitals. A pharmacy must be owned or supervised by either a pharmacist or a pharmaceutical technologist. In the first case, the entire range of registered medicines is authorized, as opposed to a subset of products in the second case.

<sup>1</sup> 'Kenya Health System Assessment' – Aaron Mulaki, Stephen Muchiri – 2019

Medicines in the private network are 70% imported by license holders, including distributors, local representatives of the manufacturer or wholesalers.

The multitude of actors in the Kenyan market is particularly significant. Moreover, the multiple levels of intermediaries associated with free pricing contribute to a significant markup of medicine prices, as well as a fragmentation of the supply chain which can lead to accessibility issues, thereby promoting the unofficial market and falsified medicines.

At the same time, this situation complicates the efforts of compliant companies, who seek to offer quality medicines at fair prices. These companies not only face higher costs but also have to adapt to unfavorable market conditions while complying with existing regulations.

## NGO

Non-governmental organizations provide medicines directly to patients, which remains the case in their partnerships with the public and/or private sectors. The main player in Kenya is MEDS, which collaborates with all stakeholders. Another important NGO entity is MedSource, a subsidiary of Management Sciences for Health, which was launched in 2018 to provide group purchasing services to private sector retailers.





# 02

## Falsified medicines in Africa: state of play

### Fake medicines in Africa: challenges and context

The trafficking of fake medical products is constantly expanding, with African countries the primary targets. All medicines, both patented (princeps) and generics, as well as vaccines and medical devices, are impacted. The risks are both individual and collective. For patients, exposure can lead to toxicity, treatment failure, worsening conditions, or even death. On a broader scale, fake medicines contribute to the spread of epidemics and, in cases of underdosing, fuel antibiotic and antiviral resistance.

According to the WHO, falsified medicines are "medical products whose identity, composition, or source is misrepresented, whether deliberately or fraudulently." This definition should be complemented by the notion of substandard medicines, which are authorized but do not meet international quality standards and/or specifications, often due to unintentional manufacturing defects. In practice, the challenge of distinguishing between falsified and substandard medicines at times leads pharmaceutical industry stakeholders – including manufacturers, wholesaler-distributors, healthcare professionals, and regulators – to use the term "illicit" medicines to describe any product that, in some manner, fails to meet administrative or scientific standards.



The global impact of fake medicines: a tragedy for populations, a lucrative market for traffickers.

Fake medicines are responsible for at least **700,000 deaths** per year worldwide.<sup>1</sup>

The trafficking of fake medicines is **20 to 45 times** more profitable than drug trafficking.<sup>6</sup>

At least **10%** of medicines circulating globally are believed to be falsified. In Africa, this figure could reach 30% of the market<sup>2</sup> and up to 60-80% in conflict zones.<sup>3</sup>

The fake medicine market is estimated to be worth between **\$75 and \$200 billion** annually.<sup>7</sup>

Between **72,000 and 169,000 children** would die each year from pneumonia treated with subpar or fake antibiotics.<sup>4</sup>

**75%** of fake medicines originate from China and India, with half of these products routed through Dubai to hide their origin.<sup>8</sup>

Of the one million annual deaths caused by malaria, **200,000** could be avoided if patients were treated with genuine medicines.<sup>5</sup>

**50%** of medicines sold on websites concealing their identity would be fake.<sup>9</sup>



## HETEROGENEOUS AND ALWAYS DANGEROUS COMPOSITIONS

Fake medicines may contain active ingredients in insufficient or excessive concentrations, no active ingredients, or various toxic substances. Analysis of seized or online-purchased fake medicines reveal the regular presence of several substances:

- Heavy metals (mercury, lead, arsenic, aluminum, etc.), which are carcinogenic and toxic to the central nervous system, kidneys and liver.
- Poisons (rat poison, boric acid, antifreeze, etc.), which can cause kidney failure and developmental anomalies, and which are potentially fatal.
- Household products (brick dust, paints, floor waxes, etc.), used to improve the appearance of fake medicines, are the cause of a wide variety of adverse effects ranging from vomiting and dizziness to coma and even death.
- Other and unwanted active ingredients, all carrying varying risks depending on their activity and dosage (respiratory difficulties, muscle spasms, high blood pressure, strokes, etc.).<sup>10</sup>

## TYPES OF MEDICINES INVOLVED

The most frequently faked medicines in Africa are those considered essential and vital: anti-malarials, antibiotics, antiretrovirals used in the treatment of HIV/AIDS, painkillers (particularly opioids, like tramadol), and genitourinary medicines. Anti-inflammatories and blood-derived products are also affected. The growing burden of non-communicable, chronic diseases requiring regular and substantial expenditures by patients and their families (diabetes, hypertension, cancer, etc.) has fueled the expansion of the illicit market, leading to an increased spread of fake medicines targeting these conditions.

<sup>10</sup> 'Faux médicaments', Science et pseudo-sciences n°334 - octobre / décembre 2020 - 'Le fléau de la falsification des vaccins' - Médecine tropicale et santé internationale - 2021

# FOCUS

## MALARIA AND FALSIFICATION

Malaria is a potentially fatal disease caused by Plasmodium parasites. Transmitted to humans by the bites of infected mosquitoes, malaria was responsible for 608,000 deaths worldwide in 2022, with the vast majority (94%) in Africa, particularly among children under 5 years old (80% of deaths)<sup>11</sup>. The best prevention against the disease relies on mosquito protection measures, including repellents, insecticides and insecticide-treated nets. In cases of infection, the medicines currently available are remarkably effective. However, the fight against malaria is weakened by the growing presence of fake antimalarials in the countries most affected by the disease. A 2017 study revealed that more than 50% of medicine distributors in Nigeria and the Democratic Republic of Congo (DRC)<sup>12</sup> lacked quality antimalarials in their stocks. These falsified products, being ineffective and thus very dangerous, can also be responsible for potentially fatal side effects and undermine the population's trust in genuine medicines and health actors. Furthermore, fake medicines undermine efforts to control the malaria epidemic and compromise the effectiveness of certain treatments, heightening the risk of the emergence and spread of Plasmodium strains resistant to antimalarials.

Since 2021, decades of research efforts have led to the discovery of two partially effective vaccines against malaria, offering new hope in the fight against this disease. These new vaccines will inevitably be targeted by traffickers, if they are not already. To ensure this significant advancement is not counterfeited and falsified, coordinated vigilance from all concerned parties is imperative.

<sup>11</sup> 'Malaria' - World Health Organization - 2024

<sup>12</sup> 'Do anti-malarials in Africa meet quality standards? The market penetration of non quality-assured artemisinin combination therapy in eight African countries' - AC-Twatch Group, Newton, P.N., Hanson, K., et al. - Malar J - 16, 204. - 2017

<sup>1</sup> 'Keeping it real - Combating the spread of fake drugs in poor countries' - International Policy Network - 2009

<sup>2</sup> 'Les médicaments falsifiés. Plus qu'un scandale, un crime' - Académie nationale de médecine - 2015

<sup>3</sup> 'Illicit trafficking of medical products in Burkina Faso and Guinea', ECOWAS Commission - 2023.

<sup>4</sup> 'Trafficking in medical products in the Sahel' - Transnational Organized Threat - Assessment Sahel - United Nations Office on Drugs and Crime (UNODC) - 2023

<sup>5</sup> 'Faux médicaments : un trafic environ dix fois plus rentable que celui de la drogue' - Le Figaro - 2018

<sup>6</sup> Report from the international Institute of Research against Counterfeit Medicine (IRACM) - 2013

<sup>7</sup> 'Fighting the scourge of fake medicines' - World Economic Forum - 2014

<sup>8</sup> 'Counterfeit medicines and criminal organisations' - IRACM - 2013

<sup>9</sup> 'France : se protéger des faux médicaments sur Internet' - Fondation Chirac - 2016



## A BREEDING GROUND FOR TRAFFICKING

The situation in many African countries provides conditions that favor the rise of medicine trafficking. The primary factors behind this dynamic include:

- Lack of access to quality medicines. Given the insufficient and/or unevenly distributed presence of pharmacies, hospitals or dispensaries across the territory, street markets often remain the only recourse for the population. Moreover, in health facilities, the price of medicines is sometimes excessively high for impoverished populations without a health expense coverage system – a situation compounded by frequent stock shortages mainly due to organizational inefficiencies and the need to import the majority of medicines. In many regions, insecurity exacerbates the situation by limiting the ability of patients and medicine distributors to travel to health facilities.
- Multiplicity of actors in networks requires rigorous controls to ensure medicine safety. However, some actors and public authorities do not always ensure this monitoring process, which can create risks.
- Lack of resources for regulatory authorities. Controlling the network is particularly challenging given that public authorities often lack financial and human resources, both for monitoring the legality of imports by customs and for checking the quality of pharmaceutical actors and products (pharmaceutical inspection of establishments, quality analysis of products on the market, etc).
- Weakness of sanctions. According to a report by the International Institute for Research Against Counterfeit Medicine, trafficking in fake medicines is 20 to 45 times more profitable than drug trafficking. Nevertheless, the penalties for such crimes are often insufficient given the trade's severity and profitability, making them ineffective as a deterrent in many African countries. The fake trade is therefore highly attractive to traffickers, from small dealers to organized criminal groups.
- Corruption. Inextricably linked with organized crime, corruption is omnipresent in the trafficking of fake medicines and can involve all links in the supply chain.

## MEDICRIME CONVENTION, AN INTERNATIONAL CRIMINAL TOOL AGAINST FALSIFIED MEDICINES

Adopted on December 8, 2010, by the Committee of Ministers of the Council of Europe, the Medicrime Convention is the first international treaty that criminalizes and sanctions the production, trafficking and sale of falsified medicines, with the goal of "safeguarding public health." Countries that have ratified the Convention commit to transposing it into their national law, thus giving it the force of law, with the main objective of strengthening and harmonizing legislation and sanctions against the trafficking of falsified medical products (medicines, vaccines, medical devices). The Convention promotes the establishment of an essential mechanism for coordination and collaboration among the various actors fighting fake medicines both at the national (justice, police, customs, etc) and international levels to effectively oppose a global traffic that disregards borders.

Beyond the 47 member states of the Council of Europe, the Medicrime Convention is open to all countries, in line with its goal to serve the greatest number. African states have played a crucial role in the progression of the Convention. Guinea was the first country on the Continent and the fifth globally to ratify the treaty, enabling its entry into force in January 2016 – however, it must still be transposed into national law. Following Guinea's lead, Burkina Faso, Benin, Côte d'Ivoire, Morocco and Niger have subsequently ratified the Convention.

## CONCLUSION

The commitment of actors fighting against fake medicines has provided the international community with legal means to oppose traffickers. Nevertheless, the lack of political will in many states around the world to evolve and harmonize their national legislations around these new weapons – coupled with limited resources to enforce them – allows pharmaceutical crime to thrive. Raising awareness of the growing threat of fake medicines is an essential step towards implementing an effective fight against this scourge.

# The Internet and the siren song

**In Africa, the fight against fake medicines is primarily organized around the "physical" channels and actors involved in trafficking. However, this effort must now be strengthened to address a growing threat: the Internet. Although the web is not yet ubiquitous on the Continent, the widespread availability of smartphones and the expansion of mobile networks are facilitating the growth of illicit online commerce – already the main vector for fake medicines in industrialized countries.**

An increasing number of patients are turning to the Internet to buy medicines. The reasons cited are often the same: saving time, attractive prices and access to prescription-only medicines. The desire to maintain anonymity – for example, when buying sexual enhancers – as well as the hope of finding treatments for serious or incurable diseases like cancer, Alzheimer's, Parkinson's or autism add to the appeal of online purchasing<sup>1</sup>.

Behind these promises lurk serious dangers. According to the latest figures from the WHO, 50% of the medicines sold on the Internet by sites that conceal their physical address are fake<sup>2</sup>. Moreover, up to 96% of sites selling medicines online are illegal<sup>3</sup>. The deception extends from the merchandise to the purported reliability of these sites: 94% do not have a pharmacist with verifiable credentials<sup>4</sup>, while 86% of "licensed pharmacist" seals are fake<sup>4</sup>. In fact, the individuals authorized to sell on the Internet as well as the types of medicines allowed vary from one country to another, even within the European Union. On other continents, this ambiguity increases with the diversity of legislation, at times overly permissive, which faci-

litates the trafficking of fake medicines via the Internet. In Africa, deceptive actors prey on a range of vulnerabilities that often underpin the continent's trafficking of fake medicines: ignorance and poverty, financial inaccessibility of healthcare, supply shortages and the supposed modernity of the Internet for purchasing.

## A COMPLEX BATTLE

Consequences: Data from the WCO (World Customs Organization) indicate that mail and express courier services are the most used means of transport for falsified products. In 2023, seizures amounted to 4,338 tons of illicit medicines<sup>5</sup>. Many governments and agencies involved in tackling this threat are now hiring highly qualified engineers to track fraudulent websites and monitor traffickers. At the same time, however, traffickers are perfecting their techniques, making the fight against the electronic trade in fake medicines a major challenge for the years to come.

With the experience gained so far, African nations need to anticipate the surge in online trafficking that will automatically accompany the development of Internet access on the Continent, by stepping up their market surveillance, their digital control resources and their legislation, and by alerting the public about the dangers of the Internet: "medicines are not a commodity like any other".

1 'Explosion des propositions de faux médicaments sur Internet' - Science et pseudo-sciences n°334 - October / December 2020 - by Quentin Duteil and Marc Gentilini

2 'The growing threat of counterfeit medicines' - Bulletin of the WHO - vol. 88, no. 4, April 2010, p. 247-248

3 'Internet Drug Outlet. Identification Program' - The National Association of Boards of Pharmacy - Progress Report for State and Federal Regulators - 2017

4 'Lutter contre les faux médicaments : une urgence pour la santé publique mondiale' - Leem - 2019

5 'Illicit Trade Report' - World Customs Organization - 2023



# Deadly syrups in Gambia

## CASE STUDY

The Sahel region is a sub-Saharan belt 6,000 km wide, stretching from the Atlantic coast of Mauritania to the Red Sea, through Chad. The region comprises about ten countries, with a population totaling around 300 million people, engaged in a complex battle against the trafficking of falsified medicines and vaccines, and the dangers associated with the inefficacy or toxicity of these products. This section revisits the tragic case of pediatric syrups that led to numerous deaths in Gambia, as well as in Indonesia and Uzbekistan.



According to a threat assessment report by the UNODC (United Nations Office on Drugs and Crime) published in 2023, using estimates calculated by the WHO, falsified antimalarials and antibiotics alone are responsible for the deaths of several hundred thousand children in sub-Saharan Africa each year. In autumn 2022, a new tragedy illustrated this scourge: at least 66 Gambian babies and young children (and several hundred globally) died following the ingestion of cough syrups, despite adhering to the usual dosage.

### SEPTEMBER 2022: A WHO ALERT FOR 4 PEDIATRIC SYRUPS

After the deaths of several children, some as young as 5 months to 4 years old, the Gambian health authorities conducted an investigation that led to the launch of a global WHO alert on suspected adulteration in September 2022. This alert targeted four "non compliant" pediatric syrups, detected in Gambia and potentially distributed in other countries or regions, particularly through informal markets. Analysis of the various syrups, produced in India, revealed contamination with diethylene glycol and ethylene glycol, solvents commonly used in the chemical and mechanical industries but banned when manufacturing medicines due to these substances' extreme toxicity to humans, causing severe acute renal damage. The adulterated syrups thus caused sudden renal failure which proved fatal to the young victims.

### FAKE MEDICINES THAT HIGHLIGHT REAL SHORTCOMINGS

The tragic example of these contaminated syrups reveals the shortcomings of the pharmaceutical networks and the difficulty of accessing quality care and medicines in many African countries, particularly in the Sahel. "A phenomenon that fits within a complex framework, combining converging factors: failures of health systems, lack of public health centers, qualified human resources, economic means, corruption, absence of social coverage for the most disadvantaged", explains the report. The disparity between the legitimate demand for healthcare and the inadequate supply is (partially) filled by illicit products of unknown origin and dubious quality, masquerading as genuine medicines, often used in "self-medication" to treat "self-diagnosed" illnesses or symptoms. The most optimistic studies estimate the rate of substandard and falsified medicines on the market at between 19% and 50%, with direct and serious consequences for the individual and collective health of local populations.

The activation of the WHO alert mechanism following this tragedy also led to the discovery of the same type of contamination in other parts of the world where regulation and supply are insufficient, involving similar products but from different manufacturers. This situation highlights another cause of the circulation of substandard medicines: the reliance on unqualified raw material suppliers who sell impure components and/or those contaminated with hazardous, even deadly, substances.

### COLLECTIVE RESPONSES

The WHO believes that the threat posed by the trafficking of falsified medical products requires a coordinated response at both national and international levels, to improve access to quality medical products through legal, controlled, and monitored supply chains, while combating informal networks. To this end, initiatives are underway in the Sahel and elsewhere. All countries in the region, except Mauritania, have ratified a treaty aimed at creating an African medicines agency. An initiative to harmonize the regulation of medicines in Africa was also launched by the African Union in 2009, to improve access to safe and affordable medicines. "We must help these countries to increase their cooperation to fill the gaps, strengthen the capacities of detection services, law enforcement, and criminal justice, as well as raise public awareness to ensure people's safety," concluded Ghada Waly, Executive Director of UNODC (United Nations Office on Drugs and Crime), in the same report.<sup>1</sup>

<sup>1</sup> 'Act with Determination' - World Drug Report - United Nations Office on Drugs and Crime - 2023



# The market of illusions

**The pervasive presence of the illicit market and fake medicines in Africa, driven by a range of human, economic and logistical factors, deceives a significant number of patients who are unaware of or underestimate the risks.**

## THE FINANCIAL LURE OF THE STREET

Lack of financial means is the primary reason why African populations turn to street markets. Perceived as less expensive, they promise medicines that suit patients' budgets, regardless of their actual medical needs. No matter if the products sold individually are not effective and lack traceability and instructions, trust is placed between the patient and the merchant, who asks no questions and does not charge consultation fees. The origin and composition of the medicines are undetermined; they could be original or falsified, but in any case, they have been exposed to questionable storage and transport conditions.

Doctors are meant to guide towards the safety of the legal medicine distribution network, but the financial barrier also limits access to consultations. As a result, patients are rarely informed of some treatments covered by public authorities and/or the availability of affordable generic medicines in pharmacies. Lack of knowledge explains why many Africans hesitate to enter a pharmacy for fear of a bill they could not pay and the embarrassment that might cause.

Moreover, there is sometimes a distrust among the population towards its leaders and the healthcare system. This can manifest itself in a rejection of the medicines offered in pharmacies by patients who consider them equivalent to those on the street, sometimes even of lesser quality and manufactured solely for African countries<sup>1</sup>.

## A RESPONSE TO THE SUPPLY-DEMAND IMBALANCE

The recourse of some African populations to the illegal market also reflects another reality of their daily lives: the low availability of medicines and other medical products near their places of residence. In many isolated and/or highly insecure regions, pharmacies are rare (including "depositories" in English-speaking countries), too distant, or inaccessible, and medicines are frequently out of stock. Sub-Saharan Africa has 0.8 pharmacies per 10,000 inhabitants; 5 times less than the global average<sup>1</sup>. Coupled with a severe lack of doctors and patients' propensity to prefer self-diagnosis or the advice of their relatives or even street vendors, the street market often represents more than an alternative; it is the only option available for accessing treatments.

## CULTURAL HABITS

To understand the degree of adherence of populations to the unofficial network, the cultural dimension is central. Traditions are deeply rooted in African customs and practices, whether it's prioritizing ancestral practices, herbal medicine, or a healer. It is also common to do daily shopping at the street market, including medicines. Far from being considered fraudsters, the actors in the illicit network enjoy a real level of legitimacy and assure people that their medical products are of good quality. Apart from traffickers who operate upstream in the distribution chain, the informal market represents a means of subsistence for street vendors to feed their families and help their fellow citizens who cannot afford a medical consultation or treatment. For instance, in Guinea, following the seizure of containers of fake medicines in 2022<sup>1</sup>, illegal vendors closed their shops and organized a demonstration to protest against administrative constraints and the loss of earnings for their profession. This case, among others, illustrates the journey still necessary to achieve a general awareness of the dangers of fake medicines.



<sup>1</sup> 'Illicit trafficking of medical products in West Africa' - Report by the ECOWAS Commission - 2023



# Burkina Faso and Guinea: key fronts in the fight against falsified medicines

## CASE STUDY

The context of insecurity in Burkina Faso, driven by a period of political and security instability that began around 2015 and has worsened over the years, has contributed to a significant expansion of the fake medicine market. The country has become one of the main smuggling routes for pharmaceutical products, with shipments arriving from the Guinean port of Conakry.



According to ECOWAS (Economic Community of West African States), illicit medicines, meaning falsified in one way or another, represent up to 80% of the official market in Guinea and Burkina Faso. The magnitude of the phenomenon has prompted the organization to examine the mechanisms behind the growth of this trade, which is pervasive across Africa and has reached dramatic proportions in these two countries. The organization also outlines key initiatives aimed at strengthening this fight.

Conducted in 2022 as part of the fourth phase of the OCVAR-T project (Organized Crime: West African Response to Trafficking), the work in the eponymous report relied on interviews with a large number of actors from the legal pharmaceutical network (international organizations, national authorities, public and private sector experts, healthcare professionals, patients) as well as the illicit market (manufacturers, consumers, and street vendors). The data collected provides a precise portrait of the situation and the major challenges to be addressed in order to help health systems evolving towards greater security for patients and better access to quality medicines for all.

## A FINANCIAL BOON AT ALL LEVELS

In Burkina Faso and Guinea, the illicit market involves both generic and patented medicines, expensive products (hormones, steroids, cancer treatments, etc.) and cheap generics (like paracetamol). As is typical of the entire region, the most frequently falsified medicines are antimalarials, antibiotics, and antiretrovirals (HIV/AIDS treatments). From the manufacturer to the street vendor, all participants in the fraud chain are motivated by the prospect of high profits for a low risk, as many countries, like Burkina Faso, do not have a national law criminalizing this type of trafficking. Guinea is an exception, with dedicated legislation and maximum penalties of 5 to 10 years in prison, which are still significantly lower than those for drug trafficking and should be enforced to be a deterrent. The trafficking networks rely on numerous actors each playing a specific role in the production or distribution process, including importers, transporters, intermediaries, wholesalers and vendors. "But the illicit market can only thrive with other complicities: police officers, customs officials, politicians, healthcare professionals... Corruption plays a crucial role in allowing the illicit market to flourish, despite countermeasures taken by national and regional authorities," the report's authors lament.

## THE STREET AND MARKETS FAVORED BY THE POPULATION

Fake medicines are most often sold in the street, at markets. These are part of the daily life of Africans and hold significant legitimacy in the eyes of the population. Various economic and sociocultural factors explain why patients turn to these markets, even for medical treatment.

The first factor is the perception, or even prejudice, that the price on the legal market is too high. Without social security coverage, like that in France, patients have to pay the full cost of treatments, prompting the poorest to explore alternatives, even at the detriment of medicine quality or even consumer safety.

The second factor is the limited availability of certain products in the legal network (pharmacies, clinics, hospitals, etc.) and the difficulties in accessing these healthcare facilities, which are nonexistent or too distant, compounded by insecurity in some regions. The third factor: it is culturally typical in West Africa to "buy everything at the market", including medicines, particularly due to a lack of awareness of the risk of falsification and the illusion that these products might be cheaper than their (supposed) equivalents in pharmacies, in countries where cost is a determining factor. Yet, fake medicines sold at markets are not always less expensive than quality medicines from pharmacies. However, at the market, everything is negotiable, and it is possible to buy just a few pills, while medicines are sold by the box in pharmacies to ensure their integrity and safety. "It should be noted that the Burkinabè and Guineans often do not trust generics, considered inferior quality medical products made only for African countries. Some prefer to buy branded products on illicit markets rather than generic paracetamol in pharmacies, despite being ten times cheaper in Burkina Faso and up to twenty-five times in Guinea," the authors add.



## PREVENTIVE RESPONSES: BETWEEN REORGANIZATION AND AWARENESS

Improving access to medicines is essential in the fight against the trafficking of medical products. To this end, Burkina Faso and Guinea have worked towards centralizing their markets. The aim is to reduce the number of players involved and improve control of the distribution chain, in order to reduce the opportunities for diversion into the illegal trade. The two countries have established a national agency to oversee the import of the majority of generics, and have limited the number of private wholesalers to a maximum of ten (compared with around a hundred a short time ago), to ensure the supply of other specific and/or branded medicines. At the same time, public authorities must improve access to and availability of medicines, by providing more free healthcare and an increased number of quality-controlled medicine depots distributed across the territories. Another essential area for action is information and awareness raising about the dangers of fake medicines, to encourage the public to obtain their treatments exclusively from authorized and certified health structures (pharmacies, clinics, hospitals).

## LEGAL RESPONSES: CRACKDOWN INTENSIFIES

The crackdown on the trafficking of illicit medical products is unfolding at multiple levels. Internationally, operations are regularly conducted, notably by the World Customs Organization and Interpol, coordinating police and customs forces from many countries. In West Africa, operations like Heera and Flash, targeting medical products related to Covid-19, have resulted in the seizure of illicit medicines worth a total of 41 million euros and 12 million euros respectively<sup>1</sup>. On the legislative front, an essential complement to law enforcement intervention, the Medicrime Convention of the Council of Europe is the only international legal tool criminalizing the trafficking of falsified medical products, strengthening applicable penalties, promoting cross-border judicial cooperation, and providing for the care of victims of this deadly trade. It is open to all countries in the world and must, to be effective, be transposed into national law and applied.

National initiatives are also being taken, such as the creation in 2018 of an intervention brigade in Guinea, following the ratification of the Medicrime Convention two years earlier. A series of measures has been taken as part of a plan to combat what authorities consider to be "a real public health problem." The establishment of a single medicine window, with a licensing requirement, represents an additional effort against the illicit market and the transit of fake medicines through the port of Conakry.

Given the magnitude of the trafficking of falsified medicines and vaccines, national and international initiatives remain insufficient. This scourge requires coordinated mobilization supported by strong political will, both from law enforcement, to fight traffickers, and from healthcare system actors, to strengthen the security and quality of medicines distributed and delivered by qualified and controlled healthcare professionals.



<sup>1</sup> 'Illicit trafficking of medical products in West Africa' - Report by the ECOWAS Commission - 2023

# Fake medicines: health under attack

**The impact of the trafficking of fake medicines in Africa is severe and multifaceted, endangering public health through the spread of products that are at best ineffective and at worst toxic, and also affecting economic and social spheres. However, the central issue remains their negative effects on health. Here are a few examples to illustrate the wide range of therapeutic areas affected and the risks involved.**

Responsible for causing at least 700,000 deaths a year<sup>1</sup> - more than malaria - the traffic in fake medicines is not a marginal phenomenon, but an ever-growing health tragedy. From under/or over-dosed medicines, to products devoid of active ingredients or containing an active ingredient other than the one consumers might expect, to products adulterated with toxic excipients (additives): there is a long list of ways in which medicines' composition can be altered. These alterations mean that the medicines are - in the best of cases - ineffective at curing the patients, and in the worst case scenario can actually cause toxic effects, including potentially the death of the patient. Tragically, patients are often unaware of the danger of these products bought on the street or in the markets, i.e. outside authorized distribution networks. "The threat is all the greater in Africa because falsification affects all therapeutic classes of medicines - both human and veterinary medicines, but also vaccines and medical and surgical devices", warns Quentin Duteil, pharmacist and Secretary General of the OPALS Foundation.

## SERIOUS DISEASES PARTICULARLY TARGETED

The most frequently falsified medicines are those intended to treat the most serious diseases<sup>2</sup> (malaria, tuberculosis, AIDS, diabetes, etc.), a pattern which has an impact both on an individual and collective scale. The distribution of ineffective or inappropriate anti-infective medicines, in particular, facilitates the spread of epidemics or, in cases where medicines have been under-dosed with their active ingredients, feeds resistance to antibiotics, antimalarials, and antiretrovirals. In 2013, a study published in the International Journal of Tuberculosis and Lung Disease on more than 700 samples of the two main antituberculosis medicines, randomly taken and analyzed by private laboratories, revealed that 9.1% of the samples tested were of insufficient quality, a rate which rose to 16.6% (about one in six) in Africa<sup>3</sup>.

## FROM ANTIMALARIALS...

Due to their effectiveness and very widespread use, antimalarials (particularly artemisinin-based combination therapies, or ACTs) are among the most frequently falsified medicines, aggravating the burden of a disease that kills about 600,000 people each year, more than 90% of whom are in Africa<sup>4</sup>. Fake antimalarials are responsible for the deaths of at least 100,000 of these people in sub-Saharan Africa<sup>5</sup>. In 2013, 122,000 deaths of children under 5 were attributed to poor-quality antimalarials in a region comprising 39 sub-Saharan African countries.

<sup>1</sup> 'Keeping it real - Combating the spread of fake drugs in poor countries' - International Policy Network - 2009

<sup>2</sup> Report of the WHO global surveillance system for substandard and falsified medical products (GSMS) - 2017

<sup>3</sup> 'Substandard and Falsified Anti-Tuberculosis Drugs: A Preliminary Field Analysis The International Journal of Tuberculosis and Lung Disease' - R. Bate, Volume 17, Number 3, March 2013, pp. 308- 311(4).

<sup>4</sup> 'Malaria' - WHO - 2024

<sup>5</sup> 'In developing countries, 1 in 10 medicines is substandard or falsified' - WHO





More than half of these cases were in Nigeria alone, where 64% of antimalarials in circulation were falsified<sup>6</sup>.

### ...TO SEXUAL STIMULANTS

So-called "comfort" medicines such as sexual stimulants, whose use is popular worldwide including in Africa, are not without risks. In 2024, Côte d'Ivoire suspended the manufacture and marketing of two artisanal products (Attote and La Paix Cognon-Mouso) purportedly intended to treat erectile dysfunction. Analysis revealed that they contained sildenafil at doses five to ten times higher than the regulated concentration<sup>7</sup>. Sildenafil, the active ingredient in Viagra<sup>®</sup>, presents (like any effective molecule) potential severe adverse effects if misused: headaches, dizziness, increased risk of strokes, heart attacks, or even sudden death in patients with hypertension or particular cardiovascular risk factors<sup>8</sup>.

Despite this noteworthy and dangerous fraud, messages opposing the suspension of the sale of these local stimulants flourished on Ivorian social networks, highlighting *"the complex challenge for health authorities to protect populations while respecting their beliefs, habits and products supposedly from traditional pharmacopeia, at the risk of victimization in the face of 'Western pharmaceutical firms,'" explains Dr. Jean-Marie N'Guessan Bosson, deputy director of national inspection within Côte d'Ivoire's regulatory authority.*

### WOMEN EXCESSIVELY EXPOSED

African women are 130 times more likely to die from complications related to pregnancy or childbirth than European and North American women<sup>9</sup>. This disparity is partly explained by the complexity of accessing contraceptives, which can prevent many cases of unwanted pregnancy, with sometimes dramatic consequences for the life of the mother. For economic, geographical or cultural reasons, or due to the unavailability of quality medicines in pharmacies, many African women resort to the informal market, posing an immense and intolerable risk to these women. As a result, for example, a pill banned ten years ago in Kenya given that it had a concentration 40 times too high of the potent progestin levonorgestrel, is still circulating covertly<sup>10</sup>. *"Women do not know that this product is banned, due to a lack of communication from public authorities, particularly at the local level to ensure that populations understand why a medicine was banned,"* says Dr. Joséphine Kibaru, a Kenyan specialist in population and development. The implicated pill, which is readily available, affordably priced and frequently recommended from woman to woman, disrupts hormonal cycles and can cause fatigue, headaches, menstrual disorders, as well as serious cardiovascular damage to patients and risks of malformations in their breastfed children<sup>11</sup>.

### CASCADING ECONOMIC CONSEQUENCES

Faced with the widespread presence of fake medicines, many African countries are implementing innovative technologies and engaging in cross-border collaboration to ensure access to authentic medicines. Beyond fulfilling a human imperative, this effort also aims to counter the major socio-economic impacts of fake medicines: healthcare resources, which are particularly precious in low-income states, are wasted on purchasing ineffective therapies and treating ensuing complications. These additional costs are passed on to patients, healthcare facilities, and society as a whole<sup>12</sup>. The WHO estimates, for example, that managing people who have used falsified or substandard medical products for the treatment of malaria in sub-Saharan Africa costs between \$12 million and \$44.7 million each year<sup>13</sup>.

<sup>6</sup> Renschler, J. P., Walters, K. M., Newton, P. N. & Laxminarayan, R. Estimated under-five deaths associated with poor-quality antimalarials in sub-Saharan Africa. *Am. J. Trop. Med. Hyg.* 92 (Suppl. 6), 119-126, 2015

<sup>7</sup> 'En Côte d'Ivoire, deux faux Viagra « naturels » interdits à la vente' - Le Monde - 2024

<sup>8</sup> 'Substance active sildénafil' - Vidal.fr - 2013

<sup>9</sup> 'African women are 130 times more likely to die from pregnancy-related complications' - Onu info - 2024

<sup>10</sup> 'Kenya battles unsafe Chinese contraceptive pill a decade after ban' - 2022 - bbc.com

<sup>11</sup> 'Substance active lévonorgestrel' - Vidal.fr - 2015

<sup>12</sup> 'Fighting the fakes: tackling substandard and falsified medicines' - nature.com - 2022

<sup>13</sup> 'Fake medicines kill almost 500,000 sub-Saharan Africans a year' - UNODC report - 2023



# Testimony of Dr. Franck Yao



Franck  
YAO

## General Practitioner and Health Educator

The perspective of Franck Yao, currently working as an occupational health inspector for the Directorate of Health and Safety at Work, after having practiced in various health centers in Côte d'Ivoire.

### Have you often observed the effects of fake medicines in the field?

**Franck Yao:** As an Ivorian doctor, I have often faced the problem of fake medicines, especially when I was practicing in the northeast of the country, among particularly poor and destitute populations. I would prescribe treatments, but instead of going to a pharmacy, people naturally turned to the illegal market, thinking they were saving a little money. In reality, they were paying nearly the same amount for products that, in the best case scenario, had no effect. I remember a mother who bought the equivalent of two weeks of antibiotics for her child – an excessive treatment duration – and observed his health condition worsen. Fortunately, it only took 5 days of proper medicine to resolve the infection. But this is not always the case. I have personally known several avoidable deaths, if only the patient had not turned to the illegal market and its deceptive allure. This unfortunately represents the lure of the street market: people fall for the words of charlatans who take advantage of patients' vulnerability and gullibility to offer "miracle solutions," sometimes endorsed by an often fictitious circle of acquaintances.

### According to you, what measures could reduce the risk of the proliferation of fake medicines?

**F. Y.:** It is essential for healthcare professionals to get more involved and educate their patients about the importance of acquiring medicines only through official, secure channels, but also of remaining vigilant about symptoms that do not fade: it is not necessarily the diagnosis that is inadequate; it could be the "treatment." It is all the more regrettable that Côte d'Ivoire is exposed since it now has many official channels through which people can procure

quality medicine that is financially accessible. We are even starting to produce generic medicines in our country, to supply the African market at affordable prices. It is no longer tolerable to hear "we must accept parallel networks because not everyone can access legitimate products." This is wrong. It is crucial to act and inform, but especially to enforce using the new, albeit recent, legislation to combat fake medicines and to make citizens understand that it is their lives they are gambling with.

### As an occupational health inspector, do you believe the corporate sector has a role to play in the fight against fake medicines?

**F. Y.:** In Côte d'Ivoire, it has an important role to play in promoting official medical distribution channels. This role will in part be played out by the corporate sector's social policies for employees, but also by a ripple effect: well-cared-for workers share their personal experiences with their circles, and the information spreads. A company has every interest in doing so, for its image, including its employer brand, as well as for the productivity of its employees.

*This unfortunately represents the lure of the street market: people fall for the words of charlatans who take advantage of patients' vulnerability and gullibility to offer "miracle solutions," sometimes endorsed by an often fictitious circle of acquaintances.*



# Fake medicines: insights from Dr. Richard Kojan



Richard  
KOJAN

**Clinician and President of ALIMA  
(The Alliance for International  
Medical Action)**

The devastation caused by fake medicines is extensive, ranging from mild effects to complications that can lead to death. Richard Kojan shares his field experience.

**Have you often observed the effects of fake medicines in the field?**

**Richard Kojan:** Working in humanitarian settings, I regularly arrive in regions where some patients procure their medicines from street markets, from vendors who provide them with unpackaged pills, whose origin, composition, and expiration date are impossible to determine. It is not uncommon to see patients with an enlarged liver or severely damaged kidneys, as these are the first organs to suffer from the effects of harmful molecules found in fake medicines. It then becomes necessary to perform a differential diagnosis to check if they are genuinely sick or poisoned by their treatment. Hence the importance of turning to products from official distribution networks !

**In your opinion, what measures could reduce the risk of administering fake medicines?**

**R. K.:** Culturally, African populations, especially the poor, turn to street markets. They are attached to them and are not aware of the health issues associated with these markets. Therefore, it is crucial to increase collective awareness, which requires strong government commitment to provide resources and education.

There is reason for hope and reason to continue our commitment: collective intelligence is real and plays a major role in evolving common practices, but this intelligence must be rooted in concrete facts. When a team arrives in a village, in a community, with good medicines and offers real medicine, when they make correct, relevant diagnoses and ensure effective treatments, the local populations see the benefit of modern medicine and turn away from illicit paths: proof that providing concrete examples is the best way to change societies.

# Fake medicines: insights from Dr. Binette Bene



Binette  
BENE

**General Practitioner  
and Oncologist**

The adverse effects of fake medicines are often severe, significantly impacting the health and lives of patients who are often unaware of the danger they are incurring. Concrete illustrations are provided by Binette Bene, who practices in Dakar, Senegal.

**It is often said that fake medicines kill. Have you witnessed this?**

**Binette Bene:** I work in an official medical system that guarantees the safety of the products administered, so I do not witness it in my daily practice. However, I remember the case of a patient being treated for prostate cancer, who decided to abandon modern treatments, which are partly subsidised by the state, in favour of street medicines. I don't know what motivated him, but a year later he came back for a consultation due to the progression of his disease, accompanied by acute adrenal insufficiency, which eventually led to his death.

Note that medical equipment can also be falsified. The guardian of a 6-year-old patient decided to buy pins from the street to reinforce a femoral fracture. As a result, the pins bent, the fracture did not heal properly, and a second surgery was required to fix the situation and allow the little boy to regain mobility.

**Phytotherapy (herbal medicine) holds an important place in Africa, what is your view on this type of medicine?**

**B. B.:** In many African countries, ancestral practices respond to spiritual concerns that modern medicine does not address. Moreover, active ingredients derived from plants can be curative. Therefore, phytotherapy has its place in patient care, complementing conventional medicine. The main concern remains the legitimacy of the prescriber. In Senegal, for example, everyone thinks they are a healer, and that's where the problem lies. It is essential to turn to traditional doctors who have studied pharmacopoeia, know what they are doing, and can prescribe and manage a phytotherapy treatment with expertise. Thus, phytotherapy is not a stepping stone for fake treatments, but it also suffers from them.

**In your opinion, what is the primary lever that helps to reduce the use of fake medicines?**

**B. B.:** Repressive legal measures play a role in limiting the trafficking of fake medicines, but I think that awareness is more important than anything. And this should start from a young age. By reaching out to the youngest, through information and education, we can have a much more significant impact. Television sometimes discusses the dangers of falsified medicines, and so do school textbooks, so the population is increasingly aware of the danger, at least in the more privileged regions of Africa. However, there are still areas and populations that need to be reached.



# Role and perception of retail pharmacies

**In the fight against substandard and/or falsified medical products, the retail pharmacist plays a crucial role. Its expertise must be used to detect non-conforming medicines, sometimes through simple visual observation. Pharmacy outlets, due to their regional and local networks, remain an underused showcase for informing the public and communicating about the dangers of fake medicines and uncontrolled self-medication.**



Oumar BAGAYOGO

**Pharmacist and Technical Referent for ALIMA (Alliance for International Medical Action)**

Oumar Bagayogo has been involved in humanitarian actions and organizations since his student days. Originally from Mali and having operated in about ten African countries, he leverages his rich experience to improve healthcare and support supply management in sensitive contexts. Here, he discusses the perception of pharmacists in Africa and their role in raising awareness about fake medicines.

**How is the profession of retail pharmacists perceived in Africa?**

**Oumar Bagayogo:** Pharmacists are experts in medicines, providing invaluable treatments and advice to patients. However, the local populations do not always perceive their full importance. Moreover, the act of actually selling medicines is often conducted by unqualified staff rather than by the pharmacy's owners or their assistants themselves. As a result, many view retail pharmacists merely as merchants, without realizing their status as key public health players.

I regret the lack of communication about our roles, as well as the lack of orientation of pharmacy students towards other fields besides retail (such as biology, clinical, regulatory pharmacy, etc.). Greater diversity in careers would help enhance the profession's image as a whole, including the retail sector, while contributing to the development of healthcare services, benefiting patients.

**What is the level of patient awareness regarding fake medicine and drugs?**

**O. B.:** There are information campaigns, but they are limited to specific dates, such as World Pharmacist Day or the National Day of the Order of Pharmacists. There is a lack of more comprehensive awareness, like when the Fondation Chirac was involved in this area. Without funds for a continuous campaign in all national languages, the message becomes complicated to convey, as it ideally needs to be repeated and hammered in day after day to be integrated. Lack of political will and funding? It's certain that more information was circulating through the media two or three decades ago, something which seems paradoxical in the age of the Internet...

**What initiatives should be undertaken to reduce the circulation of fake medicines?**

**O. B.:** There are many. Let's say, first and foremost, there needs to be better access to generic medicines, combined with educating populations about the excess of self-medication.

Generally, people who buy medicines on the illicit market do not go there with prescriptions, but following self-diagnosis or advice from a close contact, or even a fake expert. Collective awareness is necessary. Beyond raising awareness of the risks, it is necessary to promote legal distribution networks, which guarantee safe and quality medicines. With ALIMA, we first verify that manufacturers comply with good manufacturing practices and that distributors meet good storage and distribution practices. Each product comes with an analysis certificate attesting to its quality. Our suppliers are, of course, audited and qualified, and we perform a visual inspection of the products at the end of the chain. Ink defects, spelling errors, variation and heterogeneity in appearance (colour, shape, etc.) are all signs that might raise suspicion. Finally, investment is also needed in strengthening national pharmaceutical regulatory authorities, both in terms of qualified human resources and cutting-edge equipment, all supported by substantial health budgets.

*Pharmacists are experts in medicines, providing invaluable treatments and advice to patients. However, the local populations do not always perceive their full importance.*

**Are retail pharmacists exposed to security risks?**

**O. B.:** They can be. I was involved in a dramatic situation in Mali. A pharmacy in Bamako was robbed, and the owner was killed. The robbers had begun their criminal spree more than an hour earlier by attacking several establishments, including this pharmacy. In this case, the attack was not targeting the pharmacy for its medicines; the aim was to empty the cash register. Unfortunately, this is common in Mali, as in other regions.





# Fake medicines: destabilizing African societies

**A health tragedy and an economic burden, the fake medicines trade also has severe social repercussions, hindering the development of the most exposed countries and disrupting the proper functioning of societies.**

## **FAKE MEDICINES, A CATALYST OF INEQUALITY...**

The poorest patients, who have no access medical consultations, health facilities or pharmacies, and are forced to resort to low-cost street products, are the primary victims of fake medicines. This situation can create a paradoxical cycle where victims incur higher costs – first, by paying more to treat the original untreated disease, and later, by managing the potential side effects of the falsified product.

## **...AND A BARRIER TO THE DEVELOPMENT OF SOCIAL SYSTEMS**

More broadly, the trade in fake medicines harms African societies as a whole. The illicit market is extremely profitable: for an investment of \$1,000, traffickers can earn up to \$450,000 in profits<sup>1</sup>. This trade is estimated to generate between \$75 and \$200 billion a year<sup>2</sup> – an enormous amount of money escaping the official network that could be reinvested to improve health systems and living conditions.

## **A BREEDING GROUND FOR CRIME AND INSECURITY**

Conversely, revenues from the fake medicines trade foster the growth of local, regional and international organized crime, whose nefarious activities have clear security consequences. Traffickers invest more willingly in the falsification of health products, as the often minimal penalties incurred remain inadequate, given the severity of the trade, and much lower than those observed in drug trafficking. An assessment of the different organized crime levels in Africa places the falsified products trade, especially pharmaceuticals, at the forefront, with a particularly wide presence in West Africa<sup>3</sup>. As this same report highlights, fake products surpass even the illicit trade in consumer goods and financial crime. Moreover, counterfeits trafficking is a major underlying factor in money laundering, according to a report by GIABA (Intergovernmental Action Group against Money Laundering and Organized Crime – ECOWAS).

## **A DRIVER OF DISTRUST**

The trade in fake medicines endangers public trust in health and social systems:

- On one hand, the fake trade diverts people from the formal care pathway. Street markets are not exclusive to the most destitute patients – many people go to these markets out of habit for their daily shopping and pick up medicines, real or fake, at attractive prices. This ease of access, paired with a word-of-mouth factor, creates a negative dynamic for the official network, which suffers from a lack of proximity to populations.
- On the other hand, the omnipresence of fake medicines erodes the messages and legitimacy of health actors. Certain patients believe that health authorities are unable to manage trafficking issues, while others deem them overly alarmist, attributing health officials opposition to traditional medicines to fallacious reasons, such as enriching large pharmaceutical companies.

In the face of these obstacles, health authorities' awareness-raising efforts struggle to convince, particularly given that misinformation is widely present in Africa, as elsewhere<sup>4</sup>.

## **RAMPANT CORRUPTION**

Fake medicines equally have significant consequences for national economies – including reduced revenue and legal job creation – as well as for the rule of law. Organized crime corrupts and weakens societal foundations. The OCWAR-T report notably highlights the diversion of medicine stocks by corrupt agents, at times with the complicity of healthcare professionals, including doctors and pharmacists<sup>5</sup>. Faced with the scourge of pharmaceutical crime, a mobilization of all healthcare, law enforcement and justice actors is necessary to strengthen individual and collective security.



1 Global Risks, Sixth edition, An Initiative of the Risk Response Network, World Economic Forum. 2011, p. 23  
2 Report by the International Agency for Research on Counterfeit Medicines - IRACM - 2013  
3 Organised Crime Index for Africa - ENACT - 2023

4 'Comprendre la désinformation en Afrique' - Le Grand Continent - 2023  
5 'Illicit trafficking of medical products in West Africa' - Report by the ECOWAS Commission - 2023



# Nigeria: at the heart of falsified medicines trafficking

**Nearly three-quarters of medicines distributed in Nigeria, the main gateway for Asian counterfeits, do not meet regulatory standards.**

Nigeria's fake medicines pose a serious public health problem, more so than in any other country. In 2022, 70% of the medicines distributed in the country were counterfeits or failed to meet standards, according to the National Primary Health Care Development Agency, the Nigerian government agency responsible for healthcare<sup>1</sup>.

A 2024 study by Bahir Dar and Gondar University equally shows that Nigeria is the African country where the most fake antibiotics circulate, with 75% of ciprofloxacin and metronidazole judged to be "below medical standards"<sup>2</sup>.

In February 2024, the National Agency for Food and Drug Administration and Control (NAFDAC) acknowledged that more than 50% of the certificates for imported pharmaceutical products in Nigeria were fake<sup>3</sup>. The wave of fake Covid-19 vaccines offers a recent illustration of this challenge, striking the country shortly before the delivery of the first authentic doses<sup>4</sup>.

Lagos, the capital of Nigeria, is the leading port of commerce in the Gulf of Guinea, making the country the main entry point for fake medicines from China and India. From there, these fake products flood the significant local illicit market, as well as those of neighboring countries; namely, Benin, Cameroon, Niger, Chad and Togo.

In October 2023, Cameroonian customs authorities seized 1.5 tons of fake medicines coming from Nigeria<sup>5</sup>. In May 2024, a court in Benin sentenced two street vendors of fake medicines who confessed to having acquired their products in Nigeria, to 24 months in prison – 15 of which are to be served in custody – in a bleak illustration of the region's widespread trafficking problem<sup>6</sup>.

Today, the situation is further exacerbated by an explosion of medicine prices in Nigeria caused by the devaluation of the naira (the Nigerian currency)<sup>7</sup>. The average prices of authentic medicines have more than doubled, while some have seen their prices multiplied by five or six, leading locals to turn to the illegal market.

1 'Nigeria's Counterfeit Drug Epidemic' - Think Global Health - August 2024

2 'En Afrique, près d'un quart des médicaments sont faux ou de mauvaise qualité' - Jeune Afrique - August 2024

3 'Over 50 certificates of imported pharmaceutical products fake, NAFDAC' - Punch NG - February 2024

4 'Nigeria : Alerte aux faux vaccins contre la Covid-19' - Africa News - January 2021

5 'Pays africain : faux médicaments' - L-FRIL - October 2023

6 'La vente de faux médicaments est interdite' - Legi Bénin - May 2024

7 'La flambée des prix des médicaments provoque une crise sanitaire au Nigeria' - TRT Afrika - December 2023

# The financial burden of fake medicines

**The economic consequences of fake medicines are difficult to assess, as data on illicit trafficking is naturally incomplete. However, estimates from international organizations suggest significant repercussions on already fragile African economies. The increase in morbidity caused by falsification notably leads to additional expenditures for healthcare systems and populations as well as productivity losses for society. Smuggling equally results in a loss of tax revenue for states and reduces the attractiveness of the African market – especially to pharmaceutical companies that might invest in the Continent. Moreover, countries must allocate resources to destroy seized products, which in turn pollutes the environment.**

The financial consequences of fake medicines trafficking are direct and severe, as they tend to prolong or worsen diseases. Populations thus have to bear the cost of additional care, such as purchasing genuine medicines or even hospitalization fees when the intake of a fake treatment has severely deteriorated their condition. This increased morbidity also burdens states and health systems, which are forced to care for more seriously ill patients. The fight against trafficking, awareness-raising campaigns and the destruction of fake medicines further strain public budgets.

## PRODUCTIVITY LOSSES

Indirect financial repercussions must also be included in the equation. Increased disease prevalence leads to significant productivity losses, as diseases cause disabilities and premature deaths, which considerably hamper wealth creation. These productivity losses actually constitute the majority of the total cost of illness in Africa<sup>1</sup>, estimated by the WHO<sup>2</sup> at \$3 trillion (€2.75 trillion) annually – more than the Continent's GDP.

By slowing down and hindering healing or even poisoning patients, fake medicines exacerbate this phenomenon. Researchers from the University of Oxford<sup>3</sup> studied the additional economic burden caused by poor-quality and falsified antimalarials in Uganda, finding that this toll amounts to €24.1 million annually, with €2.1 million in direct costs and €22 million in productivity losses due to premature deaths or disabilities.

1 The total cost of the disease includes both direct and indirect costs (treated, untreated, poorly treated disease, premature deaths, disability, etc.)

2 'The indirect cost of illness in Africa' - WHO - March 2019

3 'Poor-quality antimalarials further health inequities in Uganda' - National Center for Biotechnology Information - December 2019

### A WEAKENING OF PUBLIC FINANCES

Furthermore, the trafficking of fake medicines leads to losses in tax and customs revenue, burdening the Continent's public finances. Certain imported medicines in Africa are exempt from taxes, such as those outlined by the West African Economic and Monetary Union (WAEMU) under its regulation 02/1997/CM, which exempts certain medicines from customs duties; and the directive 2/1998/CM, which exempts them from VAT.

However, in East Africa, Kenya, Tanzania and Uganda have estimated<sup>4</sup> that the total unpaid taxes related to fake medicines exceed €500 million annually in their respective countries.

These three countries represented about 8% of Africa's GDP in 2022<sup>5</sup>. By extrapolation, it can be reasonably estimated that falsification across the entire Continent generates billions of dollars in fiscal losses every year.

### FAKE MEDICINES CONSTRAIN AN ALREADY LIMITED LOCAL MARKET

Despite optimistic forecasts, the rush of foreign investors to Africa has yet to materialize. A 2015 McKinsey study anticipated the African pharmaceutical market reaching €60 billion annually by 2020. Yet, the market barely surpassed €23 billion in 2022<sup>6</sup>, thus demonstrating to be less attractive than expected.

While the relative constriction of the legitimate market cannot be solely attributed to the problem of fake medicines, their contribution is evident: in Europe, an EUIPO report<sup>7</sup> estimates the annual revenue loss due to "counterfeits" at 4.4% of the pharmaceutical market. Although there is no similar assessment for Africa, the magnitude of the phenomenon on the Continent suggests that losses are at least equivalent, and likely more severe.

These fake medicines, within a loosely regulated pharmaceutical market, compromise the profitability of manufacturers and thus contribute to hindering the establishment or development of major pharmaceutical firms, which remain the primary suppliers of medicines on the Continent.

### A HINDRANCE TO AFRICAN HEALTH SYSTEMS

Taken together, all of these losses impede the development of effective and autonomous health systems on the African continent. In fragile economies, these revenues are greatly missed, limiting investment in medical infrastructure, healthcare systems, health research applicable to Africa and the local pharmaceutical industry.

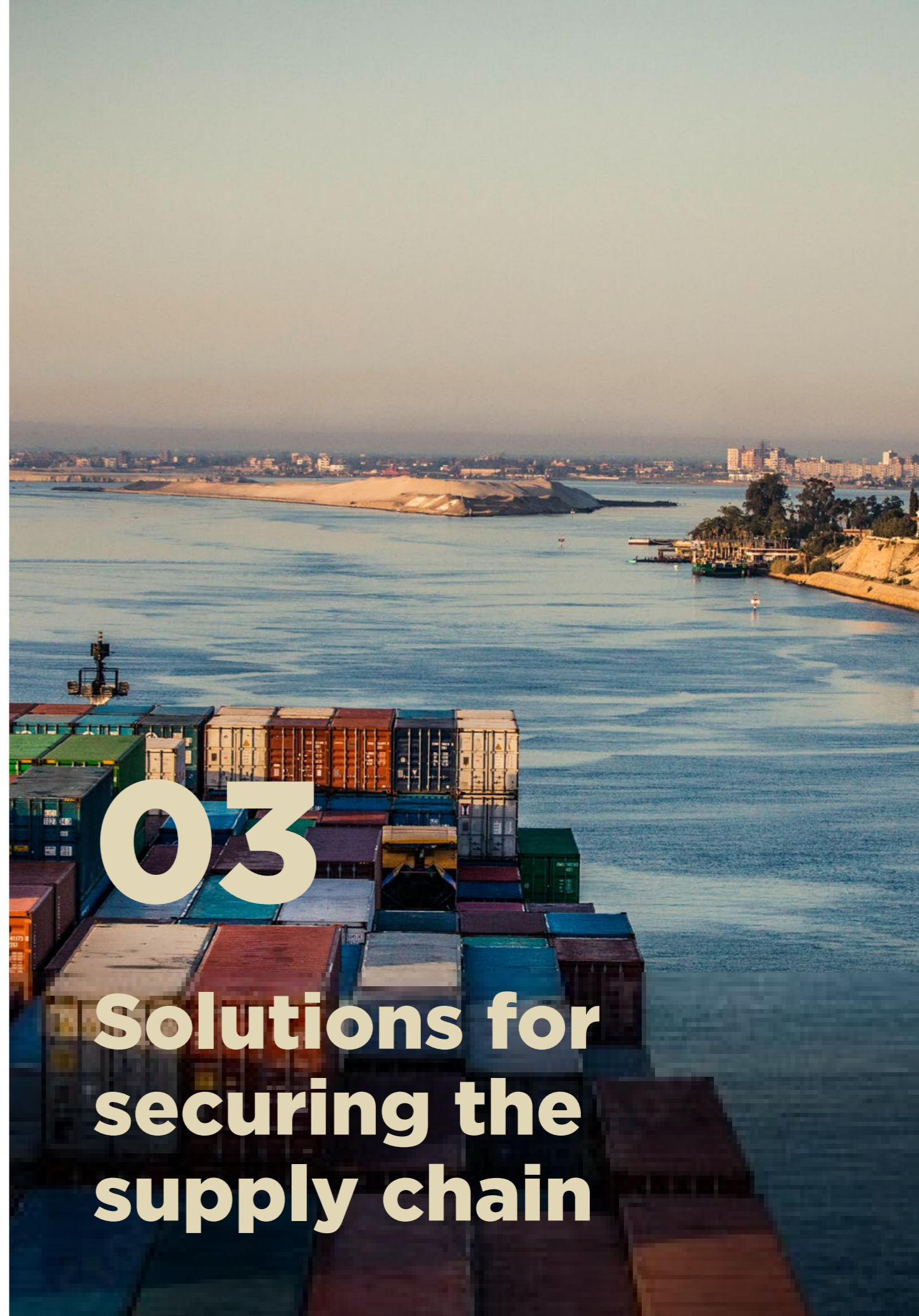
Such investments, if feasible, would help improve the health of millions of Africans. Their absence keeps health systems in precarity and indirectly maintains an environment conducive to traffickers of fake medicines – a vicious cycle.

4 '2nd Meeting of the Continental Health Agency in Africa' - African Medicines Agency (AMA) African Union - 2021

5 'Classement PIB : quels sont les pays les plus riches d'Afrique ?' - ceoafrique.com - April 2024

6 'Faux médicaments en Afrique subsaharienne : comment l'industrie pharmaceutique peut-elle réduire leurs impacts ?' - HAL Open Science - December 2021

7 'Investissements dans la santé : une Afrique à deux vitesses' - Jeune Afrique - August 2024



# Solutions for securing the supply chain



# Public sector commitment: The ANRP of Burkina Faso



Issiaka  
SOULAMA

## General Director of the ANRP (National Agency for Pharmaceutical Regulation)

A non-hospital public health institution established in 2018, the ANRP ensures the quality and safety of health products in Burkina Faso. Its role is to coordinate the implementation of all regulatory functions within the pharmaceutical sector. We discuss the organization and its commitment to combating fake medicines with its General Director, Dr. Issiaka Soulama.

### The ANRP at a glance:

The Agency regulates the entire pharmaceutical sector through licensing, regulatory monitoring and market surveillance. It is endowed with the prerogatives to propose regulatory texts, conduct controls, take health policing decisions, issue orders and impose sanctions to allow for effective regulation of the sector. The Agency has recently validated the National Strategic Plan to Combat Inferior or Counterfeit Medical Products (PSNLPMQIF) for 2025-2029. This plan takes into account the expectations of various stakeholders (healthcare professionals, traders, economists, civil society, etc.), particularly the desire to join forces for a more effective fight against the circulation of fake medicines. This strategic plan is thus a framework whose implementation will improve the health of Burkina Faso's population. The coordination and complementarity between different action axes should ensure the security of medical supplies and surveillance, as well as raise public awareness.

### How does the ANRP enhance the fight against fake medicines in Burkina Faso?

**Issiaka Soulama:** First, we work upstream with various laboratories to ensure the registration and importation of quality products according to national and international standards, that must undergo a regulatory qualification process.



*The fight against counterfeiting must be tackled at the regional level for greater effectiveness, notably by pooling our efforts to provide coordinated and pertinent responses against the trafficking of fake medicines.*

While we authorize the importation of health products into our territory, we also conduct national market surveillance and regulatory monitoring in close collaboration with police and customs services. This way, we monitor, track, and identify potential fake medicines. When found, they are seized and destroyed according to established procedures designed to prevent any risk of distribution to our citizens.

### How do you verify the authenticity of suspected fake products?

**I. S.:** Any importation of products requires authorization issued by our Agency. In the absence of this authorization, the medicines are seized by customs or the police, and the Agency is automatically notified for further action. Checks are carried out by our team, which includes generalist pharmacists and specialists, such as pharmaceutical inspectors and regulatory experts. Our role is to verify the information and determine the next steps for the products in question. This mission is particularly important and complex given the vast borders and the proliferation of illegal networks, despite the mobilization and effectiveness of our security forces.

### What are the main challenges the Agency faces in securing medicines?

**I. S.:** All West African countries face the same problems of illicit trafficking due to the low local production of medical products and a high rate of imports from outside the Continent. Importation ensures the availability of numerous treatments but increases the risk of introducing fake medicines. Therefore, the fight against counterfeiting must be conceived at the regional level for greater effectiveness, notably by pooling our efforts to provide coordinated and pertinent responses against the trafficking of fake medicines.

### What is the role of awareness?

**I. S.:** Awareness is a crucial aspect of the fight because populations often resort to the easiest and seemingly cheapest options, which unfortunately carry enormous short- and medium-term health risks. The risk is to go to the street market without consulting a healthcare professional and acquiring a fake medicine. Then there is a lack of knowledge about the risks associated with consuming products of uncertified origin. Lack of awareness and information contributes to exacerbating these issues, but we are observing a change in behavior, particularly due to the availability of generic medicines. Their accessible price encourages an increasing number of patients to visit health facilities and pharmacies to fill their medical prescriptions legally.

### What are the ANRP's major challenges for the future?

**I. S.:** We are firmly committed to the continuous improvement of our services, to ensure that we fulfill our missions. Our goal is to simplify and optimize our processes and organization to guarantee the safety of our populations. This dynamic was consolidated in July 2024 by obtaining the ISO 9001: 2015 certification, which has reinforced the efficiency of our reorganization. We continue to position ourselves as a reference structure capable of supporting the development of the national pharmaceutical industry and ensuring the availability of safe and effective products for the population.

# The World Customs Organization:

## Training and coordination against trafficking



Maurice ADEFALOU

Customs Inspector with the rank of Lieutenant Colonel in Benin

Maurice Adefalou has been working at the World Customs Organization (WCO) in Brussels for five years. He details the WCO's actions to counter traffickers of fake medicines.

### Can you summarize the role of the WCO?

**Maurice Adefalou:** Since its inception in 1953, the WCO has served as a center of customs expertise: it currently includes 186 member countries, 54 of which are in Africa, and oversees 96% of international trade. It is funded by annual contributions from its members, supplemented by occasional donations. The primary role of the WCO is to facilitate legitimate trade. And to do so, it must prevent illegal trade. However, it has no coercive power: its mission is to train, support, and share information.

### How does the WCO contribute to the fight against fake medicines?

**M. A.:** The "Fraud Combat" sub-directorate of the WCO oversees the "Intellectual Property Rights, Health and Safety" program, which focuses on the fight against counterfeiting, specifically targeting fake medicines. Since 2020, we have developed a new strategy against this growing threat, based on five pillars: networking; cooperation; capacity building; risk management and data analysis; and cross-cutting issues, which include e-commerce and the destruction of fake medicines. On these various issues, we regularly collaborate with other entities, such as the OPALS Foundation.

As a coordinator, and because it has access to numerous international data, the WCO publishes an annual report on illicit trafficking worldwide. In 2023, customs made 4,434 seizures of fake medicines, amounting to 158 million items or 338 tons of products. A third of these seizures involved urogenital agents, an increase of 113%.

*The "STOP" and "STOP 2" operations resulted in the seizure of about 800 million pieces of illicit goods. These are the largest cooperation operations ever launched.*

### Can you give a concrete example of the WCO's action?

**M. A.:** One of our priorities is to strengthen the capacities of customs agents. An example of this is at the start of the Covid-19 pandemic. We saw an exponential increase in fake medicines. Therefore, we had to quickly train teams. In the spring of 2020, we developed a 2-hour online training module. It explains how to target fake medicines and what to do during and after a seizure.

The WCO also coordinates field operations, both regional and global, to implement simultaneous controls. During the Covid crisis, we launched our "STOP" operation. From May to June 2020, under the coordination of the WCO, 99 countries worked together to seize 307 million fraudulent items, 97% of which were in Africa, mainly in West and Central Africa.

Encouraged by these results, we launched a second coordinated operation, "STOP 2," against fake vaccines, involving 160 countries. We organized webinars with Pfizer, Moderna and AstraZeneca to help customs officers recognize legitimate vaccines, especially their packaging. The operation ran from 2020 to 2022. The "STOP" and "STOP 2" operations resulted in the seizure of about 800 million pieces of illicit goods. These are the largest cooperation operations ever launched.

Generally, when we learn of a resurgence of a fake medicine in West Africa, we alert the affected states about these imports. Various countries will then inspect containers in an intensive and coordinated manner, always under the supervision of the WCO.

### In your view, what additional measures should Africa mobilize in the fight?

**M. A.:** Two approaches seem essential to me. First, we must improve the accessibility of medicines: strengthening the legal supply chain deters counterfeiting. We need to build new infrastructure to bring citizens closer to pharmacies, which are often kilometers away. At the same time, states must better reimburse medicine purchases. The other crucial lever is political will. We must act against this black market that causes deaths. I am proud to be from Benin, a country that has signed the Medicrime Convention and is committed to this fight by strengthening controls and penalization. Previously, buying medicines on the street was easy. Today, an illicit vendor ends up in prison, which is rarely the case across the Continent.



## MEDICRIME:

# Continental union serving health and safety



Pascale  
VANNEAUX

### Former MEDICRIME Advisor to the Minister of Health of Guinea

Attached to the high command of the Guinean gendarmerie, Pascale Vanneaux is a special advisor to the Medicrime brigade in Guinea. Directly involved in the deployment of the initiative for nearly 15 years, she traces the evolution of the fight against fake medicines jointly conducted by European and African authorities.

### What was your role in strengthening adherence to the Medicrime Convention?

**Pascale Vanneaux:** I have been working with Guinea since 1999, upon the creation of the NGO France Guinea Cooperation. In 2003, I initiated the "Guinea - Rhône-Alpes Medical Days." It was in this context that I began to actively engage in the fight against fake medicines, in partnership with the Guinean government. The 2011 edition allowed me to learn about the creation of the Medicrime Convention of the Council of Europe, which criminalizes the sale of counterfeit and falsified medicines. The Inspector General of the Ministry of Health and I then approached the Guinean authorities, who agreed to carry out the necessary actions for the country's accession to the scheme.

### How did you support Guinea, and then other African countries, in its deployment?

**P. V.:** I was appointed Medicrime advisor by the Minister of Health of Guinea in 2011. In this capacity, I went several times to the Council of Europe to carry out all the procedures for Guinea's accession to Medicrime. The country was the first in Africa to sign the convention, which came into effect on January 1, 2016. In December 2018, the high commander of the national gendarmerie and director of military justice created the Medicrime brigade. I was then appointed special advisor to the "brigade for the repression of illicit medical products harmful to health."

Since then, I have continuously promoted the Convention to various African countries. I have traveled to Burkina Faso, Benin, Côte d'Ivoire, Niger, Togo, Chad and others to meet all the relevant authorities (health, police, gendarmerie, customs, justice, etc.) and establish a report on the issue of trafficking in counterfeit and falsified medicines. At the request of the Malian authorities, I also went to Mali to accompany the country in the steps leading to its accession to Medicrime on 29 June 2021.

### What are the main objectives and tools of Medicrime?

**P. V.:** Born from a parliamentary proposal and signed in 2011 after years of negotiations between government experts, the Medicrime Convention is a comprehensive instrument that fills a gap in international law. It is set to become the world's most powerful weapon against the counterfeiting of medical products, ensuring better protection of populations and saving lives through collaboration among various stakeholders engaged in this combat – namely health, customs and judicial authorities.

One of the essential contributions of the Medicrime Convention is the codification of a specific lexicon, which establishes a basis for international criminal law favoring national and international cooperation with a view to uniform repression and criminalization of offenses. It also contributes to the structuring of solid procedures for detection, data collection, monitoring, tracking, reporting, as well as informing the authorities, stakeholders and the population.

### What are the results in Guinea?

**P. V.:** Thanks to the Medicrime Convention, many seizures and incinerations of fake medicines are carried out. Here are some examples: 200 containers stopped at the port of Conakry in 2022 and 18 others in 2023, before incineration; 129 boxes seized and a sweep of clandestine pharmacies, coupled with a hunt for pharmaceutical products unfit for consumption, in October 2023. The actions carried out by Guinea are multiplying despite the serious threats facing the actors in the fight against fake medicines, all of them committed men and women who regularly undergo training to strengthen their skills. This willingness sends a strong signal to other countries and encourages them to persevere despite the difficulties encountered. It is worth noting that for \$1,000 invested

in drug trafficking, the profit amounts to \$20,000, whereas for \$1,000 invested in fake medicines, the profit amounts to \$500,000. Opposing this "lucrative", and too often risk-free trade for traffickers, is a real public health and internal security issue for all African nations.

*The Medicrime Convention is a comprehensive instrument that fills a gap in international law. It is set to become the world's most powerful weapon against fake medical products, ensuring better protection of populations and saving lives through collaboration among various stakeholders in the fight, namely health, customs, and judicial authorities.*

### What contribution can the Medicrime convention make in these countries?

**P. V.:** A vast majority of these countries are afflicted by the proliferation of fake medicines. In the absence of legislation adapted to this public health scourge, nothing counters a movement that greatly facilitates the financing of criminal networks and destabilizes the central power in countries often plagued by political instability. Documented by organizations such as the United Nations Office on Drugs and Crime (UNODC), Interpol or the OECD, the strategic and operational link between counterfeiting and criminal activities is not new. To quote the words of an EU-Africa summit: the market for fake products is a growing source of funding for organized criminal groups, including terrorist groups. Fake medicine is akin to a weapon of mass destruction, and countries need the Medicrime Convention to effectively combat international offenses that know no jurisdictional limits.

# Operation PANGEA



Perry  
NG

**Officer Seconded  
to INTERPOL**

Perry Ng leads the coordination of an annual global operation called Pangea, the largest international initiative to combat fake medicines sold online.

Perry Ng is a criminal intelligence officer for INTERPOL's program on Illicit Goods and Global Health. Based in Singapore, at the INTERPOL Global Complex for Innovation, he leads Operation Pangea and promotes international cooperation to fight pharmaceutical-related crime. This program aims to dismantle organized criminal groups that profit from trafficking in illicit products, by coordinating global and regional operations, enhancing police capabilities, developing skills and raising public awareness. All these pillars rely on cooperation between the police services of INTERPOL's 196 member countries. Perry Ng has 30 years of experience in law enforcement.

**Can you briefly describe what Operation Pangea involve?**

**Perry Ng:** Pangea is an international initiative coordinated by INTERPOL launched in 2008. Its main goal is to stop the online sale of fake and illicit health products by quickly removing them from circulation. The initiative also aims to raise public awareness about the risks associated with purchasing medicines from unregulated websites. Since its inception, Operation Pangea targets the online sales of illicit pharmaceuticals, including medicines and medical devices. It is the first international operation of its kind. Initially, only 8 INTERPOL member countries, along with the Permanent Forum on International Pharmaceutical Crime (PFIPC), participated in a one-day operation.

Over time, this initiative has gained global significance, and participating agencies from member countries have conducted coordinated strikes against illegal websites, such as physical inspections of goods at borders and shipping centers to identify the criminal networks involved.

Since then, many operational successes have been achieved through extensive cooperation between international and regional organizations, national law enforcement agencies and private entities.

**What is your perspective on online trafficking?**

**P. N.:** Since the Covid-19 pandemic, fake medicines have become easily accessible and available online via e-commerce platforms, but also through social media, marketplaces, independent websites and even text messaging apps like WhatsApp – not to mention the dark web, which makes the fight even more complicated.

The main challenge is to identify the actors involved and trace the money. Experience has taught us that it's pointless to shut down one site because another will just pop up the next day. Therefore, Operation Pangea does not play a cat-and-mouse game, but instead seeks to identify the responsible parties and disrupt their financial networks.

*Experience has taught us that it's pointless to shut down one site because another will just pop up the next day.*

**What advantages does the Internet provide for your mission?**

**P. N.:** Raising awareness is embedded in the DNA of Operation Pangea, and using social media is a quick way to reach a broad audience. As a police officer, I find it positive to be able to communicate through these new media, even though they can also serve as channels for trafficking fake medicines. But the question of access remains: you need to be connected to be informed, which is not the case for everyone, especially in some African countries where Internet access remains limited.

**What are the specific challenges in the African continent?**

**P. N.:** It depends on the operational context of the country and region. However, criminal groups primarily continue to use "traditional" transportation routes, often taking advantage of recurring staff shortages within national law enforcement agencies and difficulties in monitoring borders.

The operational environment and responses required depend on the local geopolitical and technological context. One thing is clear: effective action against counterfeit and falsified medicines relies on the collection of reliable intelligence and close cooperation between national agencies, including law enforcement, customs authorities, and health regulators. Strengthening frameworks – often too lenient – is also crucial. In this regard, the various stakeholders have a vested interest in working together to establish the most effective legislation suited to each country's operational landscape.

**Operation Pangea in numbers:**

- Over 105 million units of illicit products (tablets, vials, sachets, bottles...) have been removed from circulation since 2008.
- More than 3,000 arrests.



# Private sector commitment: SANOFI



## Why is it important for Sanofi to engage in the fight against fake medicines?

**Michel Sebah:** Pharmaceutical crime affects all regions of the world and all industrial sectors, with serious and far-reaching consequences. Falsified medicines and illicit trade harm public health, damage the global economy, and contribute to environmental pollution. Today, online commerce has become the primary threat to our sector, with the proliferation of illegal online pharmacies facilitating the sale of falsified products and fraudulent offers. Our commitment to combating these threats is part of our social responsibility.

Michel  
SEBAH

**Global Product and  
Patient Protection Head  
Corporate Security**

This global healthcare company, founded in 1973, operates in over 100 countries and is active in various fields, providing therapeutic solutions and vaccines to millions of people world-wide. Michel Sebah outlines the actions taken by Sanofi to combat counterfeiting and improve access to essential medicines across the African continent.

*Today, online commerce has become the primary threat to our sector, with the proliferation of illegal online pharmacies facilitating the sale of falsified products and fraudulent offers.*

## What are Sanofi's commitments in this area?

**M. S.:** Our commitment is based on a holistic approach to the issue. It revolves around:

- Protecting our products: ensure security at every stage of the product lifecycle. To achieve this, we involve all internal stakeholders as well as all external commercial partners responsible for the manufacturing, distribution, and promotion of our products in our new operational model.
- Protecting patients: conduct detection and investigation operations both online and on the ground.

Our strategy is based on a governance that combines the vision of a centralized, multifunctional organization with the on-the-ground efficacy of a dedicated decentralized network in each geographical region. If a suspect case is detected, a sample can be analyzed by our laboratory to determine if there has been falsification or product diversion. Authorities are then alerted within 10 business days, in accordance with WHO recommendations and societal criteria. Further investigations may be conducted if necessary.

## Sanofi's Central Laboratory for Counterfeit Analysis (LCAC):

Established in 2008, this laboratory is dedicated to analyzing falsified products. Based in Tours, it consists of a team of about 15 experts. Its mission is to examine suspect samples using cutting-edge techniques. Since its creation, the laboratory has performed chemical analysis of tablets and capsules. Today, its expertise has expanded to include biological analysis, addressing the growing trend of falsification in injectables and other innovative products. The laboratory also inspects packaging for signs of falsification, analyzing batch numbers and expiration dates for inconsistencies, as well as variables such as color and printing quality.

When a case of falsification is confirmed, the legal department assesses whether there is sufficient evidence to initiate proceedings and file a criminal complaint in accordance with local legislation. It also examines the grounds for legal action, such as public health concerns or intellectual property violations.

At a local level, we work closely with customs authorities, law enforcement, and scientific laboratories.

Finally, to raise public awareness in Africa, we partnered with the publishing house Bayard in 2018 to release a comic book highlighting the dangers of street medicines.

## What initiatives does Sanofi implement to facilitate access to medicines in Africa?

**M. S.:** Sanofi's Global Health Unit (GHU) works to address health challenges through a socially responsible and solidarity-based economic model that is autonomous and non-profit.

Its goal is to provide access to a broad portfolio of medicines in 40 countries where unmet medical needs are particularly significant. To achieve this, it has launched "Impact," a unique non-profit brand offering 30 essential medicines produced by Sanofi, some of which are classified as essential by the WHO. These medicines cover a wide range of therapeutic areas, including diabetes, cardiovascular diseases, tuberculosis, malaria, and cancer.

Through its "Impact" fund, GHU also supports and finances startups and local innovators that can deliver scalable solutions for sustainable healthcare in underserved regions.

# Private sector commitment: UPSA laboratories



Laure  
LECHERTIER

**Director of Market Access,  
Communication, Public Affairs  
and CSR at UPSA Global**

A member of the French National Academy of Pharmacy, Laure Lechertier has been Director of Market Access, Communication, Public Affairs and CSR at UPSA Global since 2019. Founded in 1935, this French pharmaceutical laboratory operates in over 60 countries and manufactures its products exclusively in Lot-et-Garonne, France. Each year it produces over 350 million boxes of medicine, including two flagship paracetamol brands, Efferalgan and Dafalgan, used to treat pain and fever. Laure Lechertier details UPSA's efforts to combat counterfeiting and facilitate access to its products in Africa.

## **Why is it important for UPSA to engage in the fight against fake medicines in Africa?**

**Laure Lechertier:** We have been a key player in pain and fever management in Africa since the 1950s. UPSA is a medium-sized company driven by the goal of reconciling economic prosperity and social progress. As a pharmaceutical manufacturer, we bear a significant responsibility: beyond producing and marketing medicines, we are committed, as a responsible healthcare player, to ensuring their fair distribution and proper use. We innovate from a social perspective through concrete actions that improve access to care.

In Africa, we are focused on a major public health issue by combating street medicines, which encompass two problems: counterfeit products (without active ingredients or with insufficient quantity, impurities, or toxic substances), and medicines diverted from the legal distribution network, often poorly stored and degraded. Their impact on health is severe, causing more than 100,000 deaths per year in Africa.

## **What actions does UPSA take in this regard?**

**L. L.:** We primarily rely on partnerships with public authorities. In 2019, in Côte d'Ivoire, we led a major awareness campaign on street medicines in collaboration with the Ministry of Health and Public Hygiene, including an audio spot on RFI. The objective was to highlight the expertise of health professionals, the only individuals authorized to dispense safe and quality medicines. In 2021, we addressed the same issue in Ivorian schools, through an educational cartoon and the support of teachers trained by AIMAS (Ivorian Agency for Social Marketing). Educating children allows us to reach families and initiate behavioral changes.

At the same time, we take action through private partnerships, such as the one we have had since 2019 with the Bordeaux startup Meditect. Meditect has developed an innovative digital traceability solution to secure the pharmaceutical distribution chain, which we have deployed in Côte d'Ivoire, Senegal, and Cameroon. Each of our medicine boxes intended for Africa now carries a unique serial number. At the end of the supply chain, if a pharmacist makes this application available to his patients, they can verify the authenticity of their medicine by simply scanning the box and accessing key information such as the patient leaflet.

We also met with the French Ministry of Foreign Affairs to advance this public health cause through economic diplomacy. This issue should be considered a national priority for every African country.

## **What initiatives does the laboratory undertake to facilitate access to medicines in Africa?**

**L. L.:** The first lever is pricing policy. While the sale of our medicines is regulated in Africa, they are not reimbursed. Improving accessibility requires affordable pricing. We also ensure the proper use of our products, thanks to pharmacists.

The second lever is to ensure continuous access to high-quality, safe, and effective medicines. We maintain full control of our production chain, as all our medicines are manufactured in France, and we secure long-term supply of raw materials. This agility allows us to rapidly launch a production campaign in response to surges in demand—a strategy that protected us from shortages during Covid.

Additionally, we regularly donate medicine to the NGO Tulipe, in cases of surplus production or identified emergencies. This French pharmaceutical organization collects medicines and then distributes them to crisis-affected countries, including many in Africa.

*Raising awareness among children helps reach families and drive behavioral change.*



# Private sector commitment: CFAO's actions



**In Africa, where access to quality medicines remains limited and the proliferation of falsified medicines poses a major public health challenge, CFAO and its health division, CFAO Healthcare, are committed on two fronts. On one hand, through their daily operations, they ensure the supply, transportation, and distribution of quality medicines that meet the highest pharmaceutical standards. On the other hand, they support complementary initiatives such as the development of local actors, the financing of organizations and projects dedicated to combating fake medicines, and the implementation of awareness and prevention campaigns for both employees and local communities.**

## **GUARANTEEING ACCESS TO QUALITY MEDICINES**

Through its core mission, CFAO Healthcare, the healthcare division of CFAO group, acts as a frontline defense against fake medicines, ensuring that populations have access to high-quality medicines. Present in 24 African countries, the division relies on its network of local subsidiaries and partners to maintain the security and integrity of its supply chain.

CFAO Healthcare covers the entire pharmaceutical value chain, from manufacturing medicines – in Morocco and Algeria – to distributing products through its wholesale network "Laborex", and dispensing medicines via its "Goodlife" pharmacy network in Kenya and Uganda.

Each step, from sourcing to delivery to pharmacy, is designed to prevent substitution or degrada-

tion of active ingredients, ensuring that patients receive safe and effective medicines.

With more than 3,800 employees, 500 partner laboratories, and 11,000 pharmacies receiving multiple deliveries per day, CFAO Healthcare manages 30,000 medical product references. The company relies on best-in-class traceability, adhering to the strictest international standards.

In 2024, the launch of its new logistics hub in Val-de-Reuil, Normandy (France), marked a significant milestone for CFAO Healthcare. With 45,000 m<sup>2</sup> of storage space and a capacity of 48,000 pallets, this hub is set to meet the growing healthcare needs of the African continent in the coming years.

Moreover, CFAO Healthcare also actively supports local medicine production, through its subsidiaries Propharmal in Algeria and Maphar in Morocco:

- Propharmal, operational since 2012, has a 12,000 m<sup>2</sup> production site with three workshops dedicated to liquid and dry forms.
- Maphar, a leader in the Moroccan market, runs a 25,000 m<sup>2</sup> WHO-certified facility, capable of producing up to 75 million boxes of medicines annually, including antimalarial treatments.

These subsidiaries are part of a global strategy to strengthen local infrastructures, support job creation across the Continent, and share high-level expertise.

## **INFORMING AND RAISING AWARENESS AMONG POPULATIONS**

Beyond its core business, CFAO Healthcare invests in initiatives aimed at strengthening local health systems and raising awareness among African populations about public health issues.

For over ten years, the Group has supported the Chirac Foundation and later established an active collaboration with its successor, the OPALS Foundation, which contributed to expanding the "Health by CFAO" program. Initially focused on HIV/AIDS, malaria, and diabetes, this program, designed for employees and their families, was expanded in 2024 with the support of the OPALS Foundation to include therapeutic adherence and access to quality medicines.

CFAO is also committed to public awareness campaigns. In Côte d'Ivoire, the "Pharmacy Saves Lives" initiative brought together pharmacies in Abidjan and Bouake, as well as students and health professionals. This program has raised awareness among a wide audience about the importance of prioritizing secure pharmaceutical distribution networks, reminding that purchasing medicines outside official channels poses serious risks.



# Digital: solutions for Africa?

**Digital tools are paving the way for new possibilities to secure the supply chain. While private sector players have already embraced these technologies to optimize their operations in Africa, economic and logistical challenges continue to hinder broader adoption.**

The rise of digital technology means easier traceability of medicines. In Europe and many other industrialized countries, this has led to the implementation of box-level serialization, facilitated by the use of Datamatrix codes, which store a large amount of data accessible through a simple scan. However, implementing a serialization system, even a less sophisticated one (such as a simple barcode), requires significant financial, human, and logistical investments – a challenge that remains complex for some African countries.

## PRIVATE SECTOR LEADERSHIP

A preliminary response comes from the private sector, which has established systems to ensure compliance with best practices and traceability at each step of the supply chain under its control. In French-speaking Africa, digital tracking thus ensures the quality of products up to the pharmacy doors. The interest in diversifying and strengthening digital tools, however, becomes apparent at the public sector level and in English-speaking countries, where traceability is more complex due to the number and diversity of stakeholders.

Various approaches are being deployed in this direction: GPS tracking and secure locks for delivery vehicles, or mobile apps to confirm the origin and legality of a package, which can be used by pharmacists wanting to verify their orders, and also by patients with treatments of uncertain origin (donations, street markets, etc.).

## PUSHING THE LIMITS

However, digital tracking has a downside in some territories: not all medicine supplier countries, notably India and China, impose a serialization requirement on manufacturers, thus negating any traceability efforts. A collective mobilization of all stakeholders (laboratories, depositories, wholesaler-distributors, health professionals, software-developers, health authorities, etc.) is nonetheless recommended to address the challenges related to the dissemination of digital solutions that can help fight against fake medicines.

# How Covid-19 demonstrated and strengthened the robustness of the distribution chain

## CASE STUDY

The coronavirus pandemic has both demonstrated and reinforced the robustness of official medicine and vaccine distribution networks in Africa.

In Africa, the Covid-19 pandemic<sup>1</sup> led to a significant growth in the market for fake medicines, but it also allowed official medicine distribution networks to prove their resilience – something which is particularly crucial for a continent that imports nearly 95% of its medicines. Public and private distributors – with significant support from non-governmental and intergovernmental organizations – were able to adapt to ensure satisfactory supply during a tumultuous period.

According to UNICEF<sup>2</sup>, Covid-19 has highlighted the importance of robust supply chains, as these “enable frontline health workers to access the medicines, healthcare products, and equipment they need to care for populations.” The humanitarian coordination mechanism Logistics Cluster reports that the supply chain accounts for 73% of the costs of humanitarian response.

The distribution of vaccines in Africa was exemplary in this regard. National Logistics Working Groups (NLWG), supported by UNICEF, effectively fulfilled the “supply and logistics” component of national vaccine rollout plans. They ensured the coordination of supply chains and the allocation of resources necessary for the storage and fair distribution of vaccines.

UNICEF is particularly pleased to have been able to help secure “the basic cold chain infrastructure for Covid-19 vaccines, thanks to investments made in recent years”, including the purchase of 150,000 medical refrigerators between 2017 and 2020.

Beyond its major health consequences, the pandemic has at least led to the strengthening of medicine distribution channels in Africa, notably through new investments in the cold chain, logistics management tools, and staff training.

Drawing on the lessons learned from the pandemic, the acceleration of local production of medicines and vaccines, through the opening of numerous factories, also aims to strengthen the resilience of these distribution chains. Africa CDC, the African Union’s Centre for Disease Control and Prevention, has mapped the Continent’s production capacity<sup>3</sup>. Its ambition is for local production to cover 60% of its vaccine needs by 2040.

In particular, private sector supply chains demonstrated their strength, resilience, and flexibility during this critical period, thanks to the solid, well-structured partnerships forged with pharmaceutical manufacturers and international air and sea carriers. The private sector made it possible to guarantee the availability of medicines on the Continent, and thus ensure the continuity of treatment, while public supply chains were being better organized with the help of technical and financial partners.

1 ‘Les chaînes d’approvisionnement sauvent des vies’ – ONU News – 22th february 2022

2 ‘Supply chains save lives’ – unicef.org – 2024

3 ‘Jean Kaseya : La fabrication locale de vaccins sera la deuxième indépendance de l’Afrique’ – Le Monde – June 2024



# The essential role of NGOs

NGOs often operate where public and private systems cannot always reach, occupying a unique position in providing access to healthcare and medicines. While traditional actors cover a significant part of local needs, they face limitations, especially in remote or conflict-affected areas.

Organizations like MSF (Doctors Without Borders), the Red Cross, Amref Health Africa and ALIMA thus play a crucial role. They provide essential care and medicines to millions of people by collaborating with local and international authorities. For instance, in 2023, MSF reported having mobilized 69,000 people, conducted more than 16 million outpatient consultations, distributed over 3 million measles vaccinations and admitted more than 1.3 million patients in 70 countries, with a significant portion in Sub-Saharan Africa<sup>1</sup>.

Although these actors benefit from neutrality that allows easier access to isolated populations, the individuals involved still face high risks and often put their lives in danger. According to the UN, from January to August 2024, 14 humanitarian workers were killed in West and Central Africa, 13 were injured and 23 were kidnapped<sup>2</sup>.

These organizations often respond to humanitarian crises or epidemics by mobilizing extensive logistical networks supported by private and public actors, ensuring high standards of quality for distributed medicines. For example, MEDS in Kenya plays a key role in supporting hundreds of public and private health facilities.

In the fight against fake medicines, these entities raise community awareness about the dangers of these products and train healthcare professionals to better detect them. Additionally, they collaborate with authorities to strengthen regulation and improve the traceability of pharmaceutical products.

These initiatives do not replace existing systems but sometimes precede them and tend to complement them. Their ability to operate in challenging contexts and their responsiveness make them essential actors in ensuring more equitable access to medicines.

<sup>1</sup> Bilan de l'année 2023, Médecins sans frontière (MSF) - June 2024

<sup>2</sup> World Humanitarian Day 2024: 'As attacks on aid workers continue in West and Central Africa continue in West and Central Africa, OCHA warns of the cost of inaction on the protection of civilians and the delivery of aid, protection of civilians and delivery' according to - The Office for the Coordination of Humanitarian Affairs (OCHA) - August 2024

## The essential role of NGOs: ALIMA case study



### ALIMA at a glance

ALIMA was founded in 2009 with the idea of creating a new model for emergency humanitarian aid: an alliance linking local healthcare workers, national NGOs and international research institutes. Its goal is to support and facilitate collaboration among field actors to provide sustainable solutions to crises and address the evolving challenges of humanitarian medicine.



Richard KOJAN

### Clinician and President of ALIMA

Richard Kojan presents the actions and commitments of this humanitarian medical organization, which provides assistance to the most vulnerable populations, particularly in Africa

### What role does ALIMA play in healthcare access in Africa?

**Richard Kojan:** ALIMA operates in a total of 15 countries across East, West and Central Africa.

We provide medical support in four key areas: pediatrics, gynecology and obstetrics, surgery and internal medicine. We are also focused on addressing three major cross-cutting themes: malnutrition and its complications, emerging infectious diseases such as Ebola or Marburg virus, and the protection of vulnerable individuals – particularly women and children exposed to acts of violence.

### How can an NGO help strengthen the pharmaceutical distribution system?

**R. K.:** By intervening in territories where conventional supply routes either do not exist or have collapsed. Conflict zones or areas affected by natural disasters become insecure, healthcare services are quickly destroyed and medical staff flee. ALIMA provides an initial response by determining the best ways to ensure access to healthcare and medicines while working in collaboration with the remaining local populations. We assess risks in real time through continuous monitoring and surveillance to guarantee the best possible care without endangering our teams.

### Looking ahead, what would it take for NGOs like ALIMA to become unnecessary?

**R. K.:** Money and sufficient available resources: a recurring budget allocated to healthcare through political decision-making. France and its social security system serve as a great model. We advocate for African governments to increase their healthcare budgets and develop funding mechanisms that support the creation of a form of social security for their populations – not only for health but also for education. The day this becomes a reality, organizations like ALIMA will have less of a reason to exist. Until then, we remain committed to our mission, doing our best to support vulnerable populations.

# An international mobilization initiated by the Chirac Foundation

Through the Cotonou Appeal and the “Street Medicine Kills” campaign, the Chirac Foundation – whose initiatives are now carried forward by the OPALS Foundation – has set an example of how to democratize information on fake medicines and intensify the fight against this trafficking at national and international levels. Let’s take a look back at a historic and influential campaign.

## A CALL TO ACTION

France was one of the first countries to denounce the tragedy of fake medicines and remains one of the most active nations, alongside the countries worst affected by this trade, in combating the deadly spread of fake medicines, particularly in Africa. This commitment materialized with the Cotonou Appeal, launched on October 12, 2009, by French President Jacques Chirac, with the support of several African heads of state. Led by the Chirac Foundation and the Beninese government, the initiative initially brought together eight African states (soon joined by others), numerous local political leaders and several international institutions. Their goal: to strengthen official pharmaceutical distribution networks and combat the manufacturing and trafficking of fake medicines. This initiative sparked a wave of mobilization, leading to the gradual strengthening of legal frameworks and enforcement actions, particularly in repressive measures against traffickers.

## A PUBLIC AWARENESS CAMPAIGN

In 2015, the Chirac Foundation wanted to focus on informing and educating the populations most affected by fake medicines. The objective was clear: to reduce the risks associated with purchasing and consuming potentially ineffective or toxic medicines. Thus, the “Street Medicine Kills” campaign was launched on September 14, 2015. It consisted of radio spots broadcast on RFI and television clips featuring nearly thirty African artists. These messages were aired by partner media outlets such as France 24, TV5 Monde, Trace TV, Canal+ Afrique, BBlack, and Ubiz News – a simple yet effective way to reach a wide and diverse audience.

## A MODEL TO BUILD UPON

Although it is difficult to quantify the exact impact of the campaign, one thing is certain: its deliberately alarming slogan left a lasting impression on millions of French-speaking Africans, and helped raise public awareness of the dangers of the illicit pharmaceutical market. This approach was later adopted and adapted by other organizations, sometimes taking a more positive tone by emphasizing the reliability of official medicine distribution networks. A notable example is the “Pharmacies Save Lives” campaign, launched by Copharmed in Côte d’Ivoire in 2016.

# 04

# Lessons and conclusions



# Our **lessons** and **conclusions**

**This chapter summarizes the analysis and testimonies presented throughout the paper. It identifies five strategic priorities to strengthen the security of medicine distribution networks, combat falsified pharmaceutical products and improve access to quality medicines for African populations.**

**The proposals outlined here are based on the operational experience of CFAO Healthcare and its cooperation with the OPALS Foundation, which has been involved in the fight against fake medicines for many years.**

**These priorities do not claim to provide miracle solutions but rather highlight practical and essential levers for action with the aim of encouraging broad mobilization in this fight for public health.**

## **1. STRENGTHEN PUBLIC AWARENESS, ESPECIALLY AMONG YOUNG PEOPLE**

**Observation:** The illicit trade in fake medicines and its severe health and economic consequences remain largely underestimated, even in Africa, where the black market is widespread and the population is highly exposed to falsified pharmaceutical products. Many people are unaware of the dangers of buying medicine outside the official distribution networks. There is widespread distrust of licensed pharmacies and health authorities, partly due to a lack of information about the availability of affordable generic medicines in legitimate establishments.

**Our recommendation:** Awareness campaigns must start at a young age, in schools, to create a generational ripple effect. Mass media (TV, radio, newspapers) should be used as primary channels to inform the public about medicines and fake drugs. Social media must be used to reach younger audiences with targeted messages in diverse formats. Engaging influential public figures (athletes, musicians, actors) could help to amplify awareness efforts.

## **2. ENHANCE THE TRAINING OF PHARMACISTS AND FUTURE PHARMACISTS**

**Observation:** Pharmacists play a critical frontline role in dispensing medicine and advising patients. To effectively warn and educate patients about the dangers of fake medicine, pharmacists must be properly trained on the issue of pharmaceutical crime, its scope, as well as its health and economic implications.

**Our recommendation:** Strengthening pharmacist education is essential, whether through government policies, private sector initiatives or international partnerships. Well-trained pharmacists will serve as key messengers, helping to rebuild trust in official health institutions and guiding patients toward secure, regulated pharmaceutical distribution networks.





### 3. STRENGTHEN LEGAL FRAMEWORKS AND LAW ENFORCEMENT

**Observation:** Legislation against fake medicine trafficking varies significantly across African countries and is often insufficient or even non-existent. This regulatory gap increases the attractiveness of fake medicine trafficking, which is more profitable than drug trafficking and often less risky for criminals. The Guinean example shows that combining legislative action with field interventions and stricter penalties (including prison sentences) can be an effective deterrent against fake medicine networks.

**Our recommendation:** Strengthening and harmonizing African legislation to impose stricter penalties, and recognizing fake medicine trafficking as a serious crime would deter traffickers. Legal frameworks like the Medicrime Convention (Council of Europe) and the UNODC's Legislative Guide provide ready-to-use legal tools for governments to emulate. Expanding the use of these types of legal instruments would enable better international cooperation, particularly for cross-border coordination between law enforcement, customs authorities and health regulators to reduce the circulation of falsified medicine.

### 4. IMPLEMENT BETTER HEALTH COVERAGE AND FINANCIAL SUPPORT FOR MEDICINES

**Observation:** Government action against fake medicines should include expanding access to healthcare and essential medicines through solidarity-based collective financing. In many parts of the world, health coverage is often insufficient and limited, focusing only on essential treatments. Medical expenses remain a major cause of extreme poverty, particularly in Africa, where people often go without necessary care due to financial constraints.

**Our recommendation:** Universal health coverage should be a priority to direct all patients toward legal, regulated healthcare systems. Thereby drying up the illicit channels that thrive on poverty.

### 5. ENSURE ACCESS TO QUALITY MEDICINES AT FAIR AND AFFORDABLE PRICES

**Observation:** High costs for medicine are a primary reason why many Africans turn to street markets and illegal vendors. Financial barriers to medicine access lead to poor health outcomes, anxiety and increased economic strain on families. This vicious cycle must be broken to allow all patients to access safe, certified medicines in authorized and legitimate healthcare facilities.

**Our recommendation:** A collective effort involving all players in the medicine distribution chain, first and foremost manufacturers and wholesaler-distributors, is essential to streamline, clarify and secure the pharmaceutical supply chains in Africa. This involves limiting the proliferation of intermediaries, which mechanically drives up medicine prices and hampers effective oversight and control of the network.



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# About us



## About CFAO Healthcare

Pan-African leader in pharmaceutical distribution, CFAO Healthcare secures access to high-quality medicines for all African countries.

CFAO Healthcare supplies medicines and pharmaceutical products in 24 African countries and 6 French Overseas Territories. Product integrity is ensured throughout the logistical import logistics chain, from the storage site to the pharmacy, notably through the Laborex network, which delivers to more than 11,000 pharmacies daily in French-speaking Africa, English-speaking Africa and the French Overseas Territories.

CFAO Healthcare also manufactures licensed medicines in Morocco and Algeria and assembles and distributes generic medicine kits and medical consumables for Africa.

Its expertise is built on its complete control of the supply chain, in line with the highest quality and traceability standards, from production and import to the pharmacy and ultimately to the patient.

**With Africa For Africa**

[cfaohealthcare.com](http://cfaohealthcare.com)



## About the OPALS Foundation

The OPALS Foundation (Organisation PanAfricaine de Lutte pour la Santé) was established by merging the objectives and resources of the Chirac Foundation and the OPALS association to:

- Combat the scourge of fake medicines, fake vaccines and falsified medical devices;
- Expose fraudulent health products in all their forms;
- Improve access to high-quality healthcare for all.

The Foundation is dedicated to fighting health inequalities and relentlessly advocating for quality medicine for all, provided by qualified professionals using approved medicines, regulated vaccines and certified medical devices.

The OPALS Foundation is housed within the Foundation of the French Academy of Medicine (FAM).

[opals.asso.fr/faux-medicaments/](http://opals.asso.fr/faux-medicaments/)







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