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Drug Shortages in Nigeria During Covid – 19: Navigating Efforts and Challenges

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ABSTRACT

The COVID-19 pandemic revealed far-reaching weaknesses in Nigeria's drug supply chain in the pharmaceutical sector, with emphasis on the importation of most drugs from India and China. The lockdown worldwide and production interference had a particularly devastating effect on the supply of life-saving medication, resulting in shortages of such drugs and their counterfeiting local production of drugs, which was blocked by inefficiency in regulation, weak research and development, and multinational pressure, could not keep up with demand. Efforts to reverse these problems, such as increasing the tariffs on foreign medicines and promoting local production, have made some progress but face systemic obstacles. The pandemic underscored the need for a more sustainable and autonomous pharmaceutical sector, with increased regulatory enforcement, research investment, public-private partnership, and implementation of robust national drug policies. These steps are essential to guaranteeing long-term "Ensuring the availability of medicines that are reliable, effective, and within financial reach." for Nigerians in both crisis and non-crisis situations.

Keywords: Covid 19, Drug Shortages, Pharmaceutical Supply Chain, Regulatory Framework, Local Drug Production

1. Introduction

Corona virus disease (Covid 19 caused by SARS-CoV-2 virus 9 severe acute respiratory syndrome coronavirus 2), is a contagious illness that led to a global pandemic, significantly disrupting societies and economies worldwide. Beyond its impact on financial markets and businesses, COVID-19 has affected the global economy by hindering production in key Coronavirus disease (COVID-19), caused by the SARS-CoV-2 virus (severe acute respiratory countries that serve as major producers of consumer and intermediate goods, and raw materials, causing supply chain and market disruption.[2] There has been an evident fall in the production and exports of raw material and finished goods (drugs) in most countries due to the outbreak of the pandemic, which automatically compelled the economies of the affected countries to lock down. These made a lot of difference in the ease with which consumers were able to access these drugs for curing acute or acute-on-chronic illness or managing chronic disease. As most of the developing countries are in their nascent stage of drug discovery, they rely on the importation of pharmaceuticals, machinery, and medicines themselves from other countries, especially China and India. [3]

Nigeria's medical requirements are largely met by other nations. Nigeria and many other African nations import about 70.0% of their medications from China and India. [4] Because they have the power to save lives and enhance health, medicines are critical. Additionally, they encourage engagement in health services and trust. They can be pricey, and they have a specified quality that makes them different from other consumer goods. Nigeria is now experiencing a shortage of many vital medications, with antiretroviral medication being the most vulnerable. [5]

Drug insecurity in Nigeria was argued In January 2019, the chairman of the Pharmaceutical Manufacturers Group of the Manufacturers Association of Nigeria (PMG-MAN) remarked that the federal government, should boost local manufacture of vital pharmaceuticals from the current 40 per percent to 75 per percent, he urged to reduce dependence on imported medicines and boost local production, he advocated for a minimum investment of 300 billion Naira in the pharmaceutical sector. In alignment with this objective and recommendations from the Pharmaceutical Society of Nigeria (PSN), the federal government took steps to support domestic manufacturing by raising import duties on essential medicines by 20%."

Nigeria's national drug strategy was established in 1990 to address issues arising from inadequate Challenges in drug supply and distribution include weak regulatory and administrative frameworks, insufficient funding for supply chain operations, heavy dependence on imported pharmaceutical ingredients and products, inadequate storage and transport systems, poor procurement procedures, and the involvement of unqualified individuals in the sourcing, distribution, and sale of medicines and inefficiency in drug supply Onlookers viewed the execution of this policy as a favourable move. There has been some proven progress since it was implemented and used for over a decade.

But there is still much to be done across a range of areas, such as institutionalising and committing rational drug use at all levels of care, adopting an efficient drug procurement system, establishing an effectively organised drug distribution system, streamlining drug legislation and harmonisation, regulating drug advertising and promotion efficiently, and undertaking drug research and development [7–8]. The revised policy presents a valuable opportunity to introduce innovative strategies, reinforce achievements in key areas, and improve performance where gaps still exist. With careful execution as detailed in the implementation plan, it is expected to ensure sustained access for Nigerians to high-quality, effective, and safe medications. that goes with it [8].

2. Overview of Drug Supply Chain in Nigeria

Regulatory Framework and Oversight

Nigeria's main regulatory body responsible for drug approval and market access is the National Agency for Food and Drug Administration and Control (NAFDAC). It was originally founded through Decree No. 15 in 1993 and was subsequently amended by a later Act. Cap N.1 LFN 2004, NAFDAC is tasked with regulating and supervising the importation, exportation, manufacturing, and advertisement of pharmaceutical the regulation of the distribution, marketing, and utilization of food items, pharmaceuticals, cosmetics, medical equipment, packaged drinking water, and chemical substances. The ACT makes the agency responsible for drug distribution, sale, usage, and security. [9]

Domestic Manufacturing

Nigeria has 130 pharma manufacturing licenses and is struggling to compete with Asian and Western multinational firms. GlaxoSmithKline is one of the European market giants that has monopolized the industry with Proprietary medicines primarily marketed to the private healthcare sector, with an emphasis on vaccines, antiviral agents, and insulin therapies and antihypertensive.

Domestic pharmaceutical companies Including firms such as Fidson Healthcare, May & Baker, Chi Pharmaceuticals, Evans Medical, and Swiss Pharma Nigeria mainly focus on producing generic drugs, while also partnering with multinational firms to distribute branded medicines through licensing deals and contract manufacturing arrangements.

Distribution

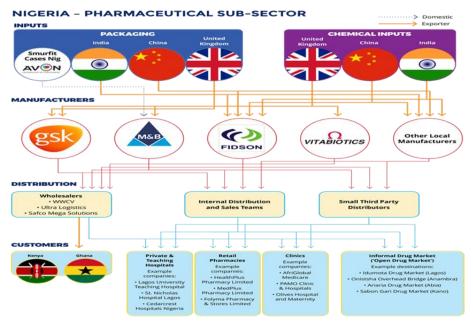
Nigeria is home to more than 5,795 licensed pharmaceutical vendors and distributors, with over 1,500 operating in Lagos alone. Major manufacturers often rely on established wholesalers and importers like Worldwide Commercial Ventures for product distribution. [10]

Import to Nigeria

A significant portion of pharmaceuticals in Nigeria are sourced from countries are India, America, China, France, as well as Germany. The importation of Active Pharmaceutical Ingredients (APIs) and excipients primarily comes from India and China.

Export from Nigeria

The drugs from Nigeria are exported to Benin, Thailand, Niger, Ghana and Israel (2023). [17]



3. Causes of Drug Shortage

There was a lack of medicines in Nigeria during the COVID-19 outbreak, stemmed from multiple causes, including global lockdowns, reduced production rates, unresolved regulatory challenges, limited public access to essential resources, insufficient stock reserves, insecurity, and underfunding of the healthcare sector. [11]

In addition to importing finished pharmaceutical products, wholesale and retail pharmacy businesses have expanded significantly across the country. At the same time, local drug manufacturing has also grown, driven by increasing demand for standardized raw materials, processing equipment, dosage formulation capabilities, and compliant production environments. [12,13] Additionally, multinational companies' domination of the world drug industry, having overcome most of their preliminary developmental challenges, has led to unequal competition between imported and locally developed goods. [14]

The necessity to standardise numerous herbal medicines making their way into Nigeria, along with the difficulty of the countries to effectively utilise the results of research of the migration of skilled basic and applied scientists to foreign laboratories has fueled a growing brain drain. Additionally, the government's limited capacity to curb the unlawful entry, production, and circulation of falsified, low-quality, and out-of-date pharmaceutical products. is hindered by fraudulent drug traders and corruption within regulatory bodies. Furthermore, insufficient support for research and development from both the government and private sector has significantly contributed to ongoing drug shortages in Nigeria. [15, 16]

4. Impact of Drug Shortage in Nigeria during Covid 19

Disruption of Healthcare Delivery

People with limited access to life- saving drugs for hypertension, diabetes, HIV/AIDS, and asthma struggled to ger their usual medications.[18]

Rise in Counterfeit Drugs

The shortage provided an opportunity for counterfeiters to take advantage of the situation, resulting in increasing distribution of poor- quality and counterfeit drugs.[19]

Pressure on Healthcare Workers

Health care workers often had to make tough decisions about who got minimal care.

Difficulty in coping with drug shortages further contributed to the underlying severe strain on health workers during the pandemic. [20]

Pharmaceutical Supply Chain Challenges

Nigeria's dependence on foreign-produced drugs, especially from India and China, was highlighted by global lockdowns that disrupted supply chains. Demand outstripped Nigeria's limited indigenous production capability, exposing flaws in the country's pharmaceutical system. [21]

5. Conclusion

The pandemic of COVID-19 exposed Nigeria's pharmaceutical supply chain to previously unknown vulnerabilities, exposing the risks of overreliance on foreign drugs. There has been a push for local drug production and promoting good drug policies, but even so, there are still mountainous challenges such as regulatory inefficiencies, poor research and development, poor infrastructure, and spurious drug proliferation. Improving local production of medicines, R&D expenditure, improving regulation enforcement, and promoting public-private partnerships are all needed to make the health system more self-sustaining and resilient. All these are important issues to be tackled not only to control future pandemics but also to have proper Availability of reliable, high-quality, and cost-effective medications. for all Nigerians.

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Conflict of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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