



# EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Research Article
ISSN 3294-3211
EJPMR

# NATIONAL DRUG DISTRIBUTION IN NIGERIA; IMPLICATIONS FOR THE GOALS OF NATIONAL DRUG POLICY

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Article Received on 02/11/2015

Article Revised on 26/11/2015

Article Accepted on 17/12/2015

#### **ABSTRACT**

The place of effective and efficient drug supply and availability in sound health care delivery is invaluable. Nigeria, with an estimated population of 170 million people is a fast growing economy in Africa but faced with poor health and economic indices. A streamlined drug distribution system is in no doubt very vital in health care delivery sustainability. This article described the drug distribution system in Nigeria to provide information for planning, effective reengineering and streamlining of the present distribution system. The present drug distribution system in Nigeria is chaotic, porous and a serious threat to the National Drug Policy (NDP). Open drug markets abound with charlatans operating freely across the value chain. Out-of-Stock syndrome is very common in government hospitals. Drug management information systems are comatose. This situation continues to undermine the objectives of the NDP and takes its toll on the National Health Policy.

**KEYWORDS:** Drug distribution, public health, policy, logistics, essential drugs, Nigeria.

#### INTRODUCTION

Nigeria remains the biggest pharmaceutical manufacturing country in West Africa, accounting for more than 65% of local manufacture of medicines relevant to the people and diseases of the nation and West African sub-region. Some of the product lines include antimalarials, antiretrovirals, analgesics, herbal preparations, and medicines for sickle cell disease. The maiden National Drug Policy (NDP) for Nigeria was launched in 1990 to curb the myriads of challenges militating against the inadequacies in drug availability, supply, and distribution. These challenges include ineffective and poor drug administration and control, inadequate funding of drug supply and drug control activities. High dependence on foreign sources for finished drug products, pharmaceutical raw materials, reagents and equipment, inadequate storage facilities, poor transportation and distribution of drugs were inclusive. Other limitations include poor selection and procurement practices, involvement of unqualified persons in procurement, distribution, and sale of drugs, poor performance of drug suppliers to public health care institutions and lack of political will to provide safe, efficacious, and good quality drugs to meet the health needs of her teaming population. This article described the drug distribution system in Nigeria to generate information for planning, improvement on the present status, effective reengineering, and streamlining of the present drug distribution system.[1,8]

### Drug distribution framework at a glance

The goal of the national guideline on drug distribution is to establish a well ordered drug distribution system in Nigeria. It aimed at ensuring efficient and effective drug supply management at the public and private sectors, and ensuring that all drugs in the national drug distribution system are safe, efficacious, effective, affordable, and of good quality. It seeks to encourage access to quality and affordable drugs at all levels of health care delivery and eliminate the activities of charlatans. This framework has been set in motion through the establishment of States Drug Distribution Centers (SDDCs) by the state governments, introduction of the Mega Drug Distribution Centers (MDDCs) by the private sectors, provision of wholesale and retail outlets by the private sector. Noncompliance attracts professional disciplinary measures as provided by the regulatory bodies: Pharmacist Council of Nigeria (PCN) and the National Agency for Food and Drug Administration and Control (NAFDAC) laws. The original National Drug Distribution Guidelines limited choices of prospective wholesalers to State Drug Distribution Centers, and Mega Drug Distribution Centers. The new concept of Coordinated Wholesale Centers is an addition and improvement on the wholesalers and offers a better opportunity for improved and dynamic drug distribution and a good strategy to control sharp practices and close down all thriving open drug markets in the country. A standard distribution system should have the five major elements namely: system design with good geographical and population

coverage, sound information system for tracking, effective system control, and good storage, and handling facilities at all strategic points. Others include efficient delivery and good human resources development. This structure minimizes leakages while maintaining a streamlined structure, good condition of drugs, constant supply, and provides reliable information for forecasting. The effectiveness and efficiency of drug distribution lies on good system design, efficiency, effective management, and standard logistic management information system (LMIS). [1,2,3,4,5,21]

#### Milestones and policy framework

One of the major challenges of the pharmaceutical sector and health care delivery system in Nigeria is the uncoordinated drug distribution system, which is not in line with good drug supply management, which the National Drug Policy stipulates. Consequently, the government established the presidential committee on the pharmaceutical sector reform (PCPSR) and charged it among others with the responsibility to develop strategies toward the institutionalization of a well-ordered drug distribution system in Nigeria. This committee developed the National Drug Distribution Guidelines (NDDG) to provide guidance for drug distribution in Nigeria. According to the guidelines, the states are to establish the State Drug Distribution Centers (SDDCS), which will be supervised by a standing committee while the private sector is to establish Mega Drug Distribution Centers (MDDCS) to be sited in the six geopolitical zones before they can be registered as MDDCS. The Federal Ministry of Health (FMOH) published the second edition of the National Drug Distribution Guideline in 2012 against the backdrop of irrational and unethical drug supply practices plaguing the system. Implementation of the guidelines started on July 1, 2015. Overall, the guideline seeks "to establish a well-ordered drug distribution system for Nigeria". The clamor is not without basis as the current system of drug distribution in Nigeria is chaotic. Drugs are peddled by virtually anyone who cares at every corner. The consequences of which are weighty and destructive to the health care delivery system in the nation, and her economy. The most notable fallout of the chaotic and unorganized drug distribution system is the unrestricted circulation of fake, substandard, and adulterated pharmaceutical products. Like most other issues, we do not have statistics that will adequately describe the extent of faking or the proportion of fake products in circulation. We have had figures from different sources, which stated that 70%, 50%, or 15% of total drugs circulating in Nigeria are fake. However, this figure fluctuates between 15% and 70%, the activities of the National Agency for Food and Drug Administration and Control (NAFDAC) notwithstanding. Our concern will not be the veracity or otherwise of these figures, but the fact that we have a problem and it is our joint responsibility to solve it. The fake drug incidence or prevalence should be zero!<sup>[6,7,8]</sup> The national drug policy was formulated with laudable goals and objectives which

intended to address the unsatisfactory situation. Its adoption was seen as a positive development by observers. After over two decade of its adoption and implementation, some modest progress has been recorded. These include the publication of an Essential Drugs List (EDL), and a National Drug Formulary (NDF), the establishment of a statutory agency with the responsibility for drug administration and control, and introduction of drug registration procedures. However, much more still need to be done in many areas, such as the realization of self-sufficiency in local production of essential drugs, establishment of an effective drug procurement system, evolving a well-ordered drug distribution system, harmonization, and update of drug legislation. Other measures include the effective control of drug advertisement and promotion, entrenchment of, and commitment to rational use of drugs at all levels of health care, and promoting drug research. Revision of the policy presents an excellent opportunity for formulating new strategies for consolidating achievements in areas where progress have been made, and addressing those areas that call for positive actions. Implementation of the revised policy as laid out in the accompanying implementation plan will make the Nigerian people to have sustainable access to safe, efficacious, and quality drugs. The distribution network through this process will be streamlined, and sanitized from the activities of unscrupulous elements. Presently, drug supply to the public is through the Central Medical Stores (CMS), which contributes to the Out-of-Stock syndrome in government hospitals. Some scholars believe that privatization of the entire system with strong management and resource control will leverage on the present outcomes. The World Health Organization (WHO) stated that 80% of countries of the world have bad drug procurement and distribution system and they are predominantly developing countries. [9,10,11,12]

# Drug policy and the state of drug distribution; getting the system right

The strategies to implement the National Drug Policy shall focus on effective drug management processes, such as rational drug selection, proper quantification of drug needs at all levels of the health care delivery system and effective procurement practices. Others include assurance of quality of drugs at all levels through sound quality control and quality assurance mechanisms, appropriate storage, proper costing and effective distribution of drugs, promotion of local drug manufacture, appropriate legislation, product registration, research and development, human resources development, monitoring and evaluation. The strategies shall emphasize proper accountability and rational use of drugs by health care workers and consumers. In view of the fact that these activities are purely technical. government at all levels: the federal, state, and local governments shall be required to employ professionals and other relevant and skilled personnel to ensure satisfactory implementation of the policy. Pharmacy as a profession in Africa and in particular Nigeria has

evolved much faster over the last two decades than previously experienced. In 1989, the National University Commission (NUC) in Nigeria approved minimum standards of five-year training curriculum for Pharmacy. However, the six to seven years Pharm D Program remains the current global best standard for sustainable training of people who will handle a critical aspect of a nation's health care delivery system. The survival of any profession hinges on eking out a solution-niche for any situation that presents as a challenge to its immediate surroundings. Global crunches have had their toll on the evolutionary phase of multinational pharmaceutical industries, giving rise to major mergers. Pharmacists in Nigeria, need to rise up to the latest challenges of specialization and residency in different practice settings, developing new strategic regulations, controlling illegal drug markets and drug counterfeiting, industrial raw material production and development, quality control, good manufacturing practices, public health promotion, disease control, health education campaigns development of new competency-based curricula in schools of pharmacy. The government should provide the necessary legislations and enabling environment for these services to thrive. The pharmacy curriculum has been expanded to meet up with the challenges from the clinical and industrial angles. One of such move is the introduction of the Doctor of Pharmacy Program (Pharm. D) initiated by the University of Benin, Benin City, Nigeria. It is presently a six years program to better equip the pharmacists with the challenges of the twenty first century and position them in line with global best practice. Appropriate quality assurance measure of performance at short, medium, and long term should be instituted in all the sectors and at all level. The Pharmacists Council of Nigeria, (PCN) Decree 91 of 1992 that repealed the Pharmacists Act of 1964 should be strictly followed and enforced. [7,13,14,20]

## Drug distribution in Nigeria

The drug distribution network in Nigeria is in a state of chaos and consists of open drug markets, and the activities of patent and proprietary medicine vendors (PMV), community pharmacies, private and public hospitals, importer, distributors and wholesalers, and pharmaceutical manufacturers. Handling of medicines is very poor. They are displayed in direct sunlight and such conditions that could facilitate degradation deterioration of the active ingredients. The holders of patent and proprietary medicine vendors licenses diagnose, prescribe, dispense, and treat all manner of self-limiting conditions with little or no formal education or training. They rely predominantly on experiences gained on the job over the years through apprenticeship. Over-the-Counter (OTC) drugs are the only drugs authorized by law to be dispensed by the PMV but generally, they sell all types of drugs as determined by their financial capabilities including ethical preparations. Considering the knowledge base of these vendors, whose minimum academic requirement to obtain a license is the first school-leaving certificate i.e. the basic education

certificate, they are not in a good position to handle ethical preparations. Such services are statutorily reserved for community pharmacies registered with the Pharmacists Council of Nigeria who are lawfully mandated to render such services that borders on human lives. A superintendent Pharmacist, who is registered and licensed, oversees a community pharmacy outlet anytime it is opened for service to the public. There are many unregistered community pharmacies thriving, and many which operate without the services of a registered pharmacist while some operate on "register-and-go" basis meaning that even though pharmacists register them, they hardly stay at the premises to attend to patients who need their services. In such premises, drugs are purchased from doubtful sources coupled with the attendant dangers to the health of the public. [5,15,16, 17] Drugs are sold inside buses, on the streets and on the roadsides, majority of which are fake, substandard, and adulterated.

# The new drug distribution guideline and responsibilities

The drug distribution guidelines have erected pillars and clearly delineated channels of distribution with roles and responsibilities. The manufacturers and importers occupy the apex of the ladder. Their role is to make drugs available and sell only to Mega Drug Distribution Centers (MDDC), State Drug Distribution Centers (SDDC), and National Health Programs. The next Level below this position is occupied by the MDDC and SDDC. While the MDDC is private sector-driven, the SDDC is meant to service the public sector at the state level. The SDDC will cater for all public health facilities in the state and is allowed to sell to National Health Programs (where indicated) and to wholesalers. The MDDC is allowed to sell to wholesalers only. Wholesalers occupy a pivotal position in the value chain. Purchases could be made from MDDC or SDDC but not from the manufacturers or importers. The wholesalers can sell to community pharmacies, public and primary healthcare facilities, and private health institutions. With this functions clearly spelt out, there is really no need for a wholesaler to engage in retailing as it is now. At the bottom of the distribution ladder, we have community pharmacies, public and private health institutions who sell directly to the consumers. The community pharmacies are allowed to sell to private health facilities. Other provisions that affect pharmacists directly include all drug retailing institutions and facilities. The Pharmacist Council of Nigeria (PCN) is mandated to register private hospitals, local government clinics and any facility that directly or indirectly make use of drugs, poisons, and related products. The law to register and operate community pharmacy outlets mandates only pharmacists. It is a clear departure from the previous system where anything goes. To be a superintendent pharmacist, one must have at least five years post qualification experience to qualify for retail and ten years for wholesale. The position and importance of pharmacists are clearly spelt-out in the new structure in

addition to the operations of the MDDC and the SDDC. The guidelines are being operated based on the existing PCN and NAFDAC laws. This is necessary to bring sanity to the system plagued by activities of charlatans and non-professionals in the sector. [5,17,18,19] The current guideline will change the concept of distributors from glorified retailers with limited resources and coverage to big organizations with solid asset base, wide coverage and state of the art logistic information technology and management systems. It will make distributors to be specialized and formidable with huge capital and technology to meet the ever increasing need for drugs and pharmaceuticals.

#### CONCLUSION

Drug supply system in Nigeria need systemic overhaul and streamlining to encourage laminar flow of quality and efficacious drugs from the manufacturers to the consumers at affordable price while eliminating the activities of charlatans in the value chain. Strict enforcement by the regulatory agencies with sustained Monitoring and Evaluation should be upheld at all level of drug supply chain, since poor monitoring and evaluation culture has been a major limitation to laudable programs in developing countries. This will eliminate circulation of fake and substandard products and the activities of illegal operators. It will be the panacea to a chaotic distribution system and facilitate sustained and improved actualization of the goals of National Drug Distribution Guideline and National Drug Policy (NDP). Attaining the goals of the NDP will remain a mirage without complete sanitization and streamlining of the national drug distribution system in a country with a teaming population and high demand for essential drugs. The dynamics of today's global drug distribution aims at reaching consumers easily while minimizing and eliminating the activities of weak and limited intermediaries, charlatans, and unskilled people in the value chain. Failure to achieve this will lead to comatose and chaotic distribution system that will take its toll on drug and health policies in any nation.

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