



Counterfeit drugs epidemic in Nigeria: Consumers' who can save you?

Donald Ozemenbhoya Ewanlen¹ & A. A. Aigbiremolen²

¹ Department of Entrepreneurship and Marketing, Federal University, Otuoke

² Department of Community Medicine, Irrua Specialist Teaching Hospital, Irrua

Email: ¹ ewandon4@gmail.com

Abstract

Contingent upon the pivotal roles of medical products in the enhancement of peoples' health, unscrupulous business men have embrace trade in counterfeit drugs. Against this backdrop, this paper examines the nature of counterfeit drugs trade, explore the consequences of the illicit trade on consumers, identify the participants in drugs trade, ascertain the roles of government agencies in protecting consumers and explain consumers' self- protection actions. The study adopts a qualitative research design. Papers reviewed were sourced from NAFDAC and WHO websites as well as Google Scholars and Elsevier among other search engines. The study found a high prevalence of counterfeit drugs in Nigeria. Regrettably, the unrelenting supply of counterfeit drugs has done incalculable damage. Specifically, trade in counterfeit drugs deprave drugs manufacturers and consumers of hard-earned income, as well as constitute health hazards. The paper concludes that trade in counterfeit drugs is detrimental to the individuals, health care service delivery and the entire society. In the light of high prevalence of informal drug sellers, this paper recommends among others that government should set up a regulatory agency saddled with the responsibilities of registering and monitoring the activities of these informal drug sellers.

Keywords: Consumer Activism, Consumers Protection, Counterfeit Products, Social Marketing, Nigeria

Introduction

Abraham Maslow seminal work recognize health and safety as a basic necessity of man. Business owners in recognition of this fact, establish corporations with the object of manufacture and distribution of drugs. Literature acknowledge that drugs

manufacturing is largely highly technological. The truth of the matter is that technology is driven by innovation and creativity. Experience has shown that product imitation closely resonates with creativity. Operationally, product imitation often serves

as the spring board for fake or counterfeit products. World Health Organisation (2002) conceive counterfeit drugs as intentionally and fraudulently mislabeled products. This fraudulent alteration are always with respect to product source and identity. In fact, these intentional alterations could also be in the form of trademarks infringement, misrepresentation or passing off. Despite the untold consequences of fake products manufacture and consumption on the society, it is sad to identify medical and pharmaceutical products among the array of counterfeit products. It is equally disheartening to observe some businessmen continuous engagement in the illicit trade unmindful of the consequences of their unethical conducts.

Sad enough, trade in counterfeit drugs is a thriving global business. This fact is premised on the realization that incidence of counterfeit trade is not geographically restricted. In fact, evidence shows that counterfeit drugs consist of a high proportion of the US drug market. As a matter of fact, the United States customs and border protection officials (2021) report that the global trade in counterfeits is over 500 billion dollars annually.

Regrettably, trade in counterfeit drugs are expected to be of greater proportion in developing countries. In Nigeria, trade in counterfeit drugs thrive as a result of the high demand for the treatment of life-threatening diseases. Ironically, anti-malarials, antibiotics, antihypertensives, anti-diabetic agents and life style drugs consist of the most predominant class of counterfeit drugs (Adigwe et al, 2022). Due to the crucial role these drugs play in the survival of Nigerians as well as the declining life expectancy of citizens, medical experts and

societal researchers consider it expedient to examine all issues associated with trade in the manufacture, distribution, and use of counterfeit drugs. Specifically, Obeki (2015) sought to ascertain the perceived risks implicated in the patronage of drugs delivery outlets in Edo and Delta states.

Similarly, Olaniran, *et al* (2023) study investigated the roles of NAFDAC in the incidence of fake and counterfeit drugs in Nigeria. Despite, the efforts of government regulatory agencies, it is sad to note an unacceptable high prevalence of counterfeit drugs in Nigeria. This study is largely motivated by the high prevalence of counterfeit drugs in Nigeria market and the apparent helplessness of consumers. This paper is poised to unveil the nature and the consequences of counterfeit drugs trade, identify the major participants in the illicit drug trade, ascertain the roles of government agencies in protecting the consumers and explain consumers' actions indicative of self-protection.

Nature and Consequences of Counterfeit Drugs Trade

Nigeria has an estimated population of over 200 million people (National Population Commission, 2024). Majority of the populace are multi-dimensionally poor. This characteristic makes Nigeria a popular destination for counterfeit and pirated goods. The truth is that these counterfeit drugs originate from both local and foreign manufacturers. Interestingly, the source of these counterfeit drugs has been traced to largely imported pharmaceutical products.

Erhun, (2001) affirms that the main source of fake drugs in Nigeria are India, China, Pakistan, Egypt and Indonesia. In fact,

majority of these drugs are smuggled into Nigeria through the porous West Africa borders. Another potential source of counterfeit drugs is the internet pharmacies. Sad enough, these internet pharmacies often falsely portray themselves as Canadian, to enhance their consumer acceptance (Chika, *et al*, 2011). Other drivers of trade in counterfeit drugs include corruption, greed, weak regulatory institutions and unwholesome competition. Furthermore, drugs shortage has been identified as a veritable avenue for counterfeit drugs. In the bid to meet the supply gaps unpatriotic business men have embraced the unwholesome practice of drugs counterfeiting. It is also true that a long and convoluted supply chain facilitate counterfeits.

The hostile and harsh economic operating environment in Nigeria is another contributory factor to the ever-enlarging counterfeit drug market in Nigeria. Experience has shown the recent GSK and Sanofi exit from Nigeria (Punch Newspaper, November 2024.) has made legitimate medical products even more scarce and expensive. In fact, essential drugs scarcity would definitely serve as a fertile ground for counterfeit drugs business to thrive.

Undoubtedly, transactions in counterfeit drugs thrive as a result of consumers' ignorance. In fact, consumers' ignorance is exhibited in their inability to identify fake and substandard products. In the same vein, trade in counterfeit drugs is largely driven by poverty. Indeed, poverty propel consumers to search for cheaper alternatives to expensive but genuine products. Ironically, these twin challenges serve as a bait for the consumption of fake and substandard drugs in Sub-Sahara Africa.

Interestingly, open market trade in counterfeit drugs is a common practice in Nigeria. Sad

enough, these open drug markets are strategically located in Onitsha Head Bridge, Anambra state, Idum-Ota market, Lagos state and Kano main market, Kano state (Adigwe *et al*, 2022). It is an acknowledged fact that counterfeit drug trade is complex globally.

As a result of this complexity, eradicating substandard and falsified drugs from the marketplace demand that Nigeria must deal with it frontally from a global perspective. This suggests that Nigeria must intentionally filter and properly regulate the global supply chain of its medical products. Ironically, Nigeria is infamous for its monumental degrees of exploitations and total disregard for the rights, health, and welfare of consumers. Nigeria is a nation in which fake labels are attached to local goods, expiry dates are routinely erased. It is also common in Nigeria for talcum powder to be found in antibiotic capsules and sawdust find its way into recently opened beverage tins (Sagey as in Monye, 2005).

As a result of the upsurge in counterfeit drugs, the National Primary Healthcare Development Agency under the Federal Ministry of Health in 2022 sought to estimate the rate of counterfeit drugs. The study found that counterfeit prevalence rate is about 71% while NAFDAC, acknowledge it to be about 11%(NAFDAC, 2023). As a result of the high preponderance of counterfeit drugs in Nigeria, concern citizens now consider it a social menace. Beyond government rhetoric of combating the social menace, all hands must be on the desk to curb this hydra headed social malaise. As a matter of fact, the severity and the numerous incidences of counterfeit drugs in Nigeria assumes an epidemic proportion. The extent of this epidemic is that it presents

enormous public health challenges to national drugs regulatory agencies worldwide.

Without doubt, consumption and purchase of counterfeit drugs have economic and social consequences. These costs could be direct and indirect. Aside from the direct financial costs of treatment, there are opportunity costs incurred by patients who miss work for additional doctors' visits or become too sick to work. Prominent among these direct costs are additional treatment cost and the indirect social cost consists among others consumers' loss of confidence in the health care delivery system and government.

This loss of confidence could further compel the consumers to search for alternative solutions to their medical requirements. This disillusionment probably accounts for the citizens' resort to seeking spiritual solutions to essentially medical situations. The prevalence of counterfeit in the drugs supply chain has become frustrating to medical practitioners to the extent that it has become a clog in the wheel of efficient health care service delivery.

Participants in the Counterfeit Drugs Business

According to Chinwendu (2008), drugs business in Nigeria is largely populated by drug manufacturers, drug merchants, drug professionals, informal drug sellers, consumers and the drug controllers. Interestingly, these players are known for their unique roles in drugs delivery and administration in Nigeria. The foregoing, examines the unique roles of the members of drugs delivery system in Nigeria.

Drug Manufacturers: Interestingly, drug manufacture is a thriving business globally. Industry practice reveal that drugs can either be

manufactured locally or imported. The capacity of the local firms to manufacture essential drugs determine to a large extent the amount of drug import. Another notable trend in drug manufacture is the existence of generic and branded drugs. A generic drug is a drug manufactured by a company who is not the original innovator. In fact, another firm can have the same active ingredients as a trade mark. This branded version of the generic brand is often less expensive. According to WHO (2000), there are licit or illicit drug manufacturers. Products from illicit drug manufacturers are prohibited. In fact, production is unauthorized to the extent that such products are not for sale.

Raufu (2003) observe that drug manufacture is not restricted to large facilities, rather drug can be conveniently produced in cottage industry or residential premises. It will be reasonable to assert these peculiar trade practices are some of the most plausible avenues for unpatriotic individuals to take advantage to make brisk business through counterfeit drug manufacture. Despite the prevalence of counterfeit drugs in Nigeria, medical experts are of the opinion that not all drugs in Nigeria are fake just as not all fake drugs are foreign manufacture.

Drug Merchants: A cursory look at the drug market reveals that majority of the participants are importers, wholesalers or retailers. Raufu (2003) reports that about 70% of drug in Nigeria are imported. India is reputed to be the highest suppliers of drug to Nigeria. It is the general belief that some unpatriotic drug importers connive with some Indian manufacturers to produce fake and substandard drugs. These drugs in most cases

are produced at cheaper rate and with less active ingredients. Ironically, these products are distributed unnoticed by the regulatory agency. The essence of this unethical practice is profit maximization. Raufu (2003) report that Indian government in sympathy with Nigeria, sent a list of firms that engage in unscrupulous business practices to NAFDAC for delisting. Characteristic of its reactive posture, NAFDAC reportedly banned 19 Indian and Chinese corporations confirmed to be manufacturers of fake drugs. Sad enough, these products were labelled “for export only”. This is however contrary to Akunyili (2005) assertion that any drug that is not sold in the country of manufacture shall not be allowed in Nigeria market,

Drug professionals: Pharmacists are the commonly recognized professionals in the drug trade. The Pharmaceutical Society of Nigeria, is the professional body responsible for the regulation of the practice of pharmacy in Nigeria. As a profession whose primary concern is drug administration and control, the pharmacists are expected to play a significant role in the identification of counterfeit drugs in the market place. It is against this background that the public expect the pharmacists to play a pivotal role in reducing the prevalence of counterfeit drugs in Nigeria. In accordance with these public expectations, the Pharmaceutical society of Nigeria initiated several measures to ensure that the Nigeria drug market is free from fake and substandard drugs. Prominent among such initiative is the promotion of legislations that prohibit the sales and manufacture of counterfeit drugs. Also, the society has enacted laws that regulate and sanction erring members that contravene the professions code of conducts (Raufu,2003).

Interestingly, the practice of pharmacy in Nigeria is without restriction. In fact, Pharmacy practice abound in public and private sectors of the economy. Consequent upon pharmacy ubiquity in practice as well as their professional ethnos, it is expected that counterfeit drugs prevalence in Nigeria should be minimal.

Informal Drug Sellers: The informal drug sellers are people that sell medicines in an unregulated manner. These sellers are non-professionals that have little or limited knowledge of pharmacy. In fact, they lack thorough training in pharmacy. These informal drug sellers are ubiquitous in nature. Interestingly, these drug sellers operate in shops, kiosks, open markets, general stores. Hitherto, they were commonly seen in mass transit vehicles. In fact, they can operate as itinerant hawkers. In particular, the patient medicine stores commonly referred to as “chemist” has emerge as a prominent member of the drug delivery chain in Nigeria. The operators of these ‘chemists’ are drug merchants with or without medical background. These “chemists’ own drug stores at the local market stalls, on the streets, oftentimes at strategic neighborhood locations.

Experience shows that the informal drug selling outlets thrive as a result of outlets accessibility and affordability of products among several others. These informal drug sellers venture into the drug trade for profit motive. This singular motive most probably serves as the driver for the continuous circulation of fake and substandard drugs. Furthermore, arising from the fact these informal drug sellers are not professionals, their modus operandi is suggestive of the fact

they could encourage trade in counterfeit drugs. Obeki (2015) study of the drug market in Edo and Delta states found that majority of the common drugs that these informal drug sellers' stocks are either expired or counterfeit. Specifically, Goodman (2007) found that these informal drug sellers store and handle drugs in inappropriate manners. The study further reports such inappropriate action reduces the potency of drugs. Ultimately, the activities of these informal drug sellers are inimical to effective health care delivery system.

Consumers: Literature recognize consumers as the final members in the value chain of product delivery. Indeed, the consumers are the marketplace electorates. Like in every product delivery system, the consumers have emerged as crucial member of the drug trade activities. As the voters in the drug market, needs, affordability among several other factors influence consumers purchase decisions. Driven by the forces of need, affordability and ignorance, consumers are compelled to make marketplace decisions. Constrained by several reasons, consumers could buy fake and substandard drugs. The truth is that these unsuspecting and literally unprotected consumers are exposed to dangers arising from the purchase and consumption of counterfeit drugs trapped in the web of fake drugs supplies.

Drug Controllers: Globally, the primary aim of any drug regulatory agency is the protection and promotion of public health. Like in other countries, the enforcement directorate of Nigeria's NAFDAC, is saddled with the responsibility of enforcing the provisions of the counterfeit and fake drug decree. The provisions of this decree include but not limited

to the conduct of surveillance and investigate all suspected persons and corporations violating NAFDAC regulations, pay unscheduled visits to all the nation's points of entry and interrogate all suspects and raid drug hawkers and destroy all fake and spurious regulated products (Raufu,2003).

Consumer Protection Agencies in Nigeria

It is reasonably expected that consumers' protection agencies in their oversight functions in drugs delivery and administration should be ready to act as the government anti-counterfeit agencies. Hitherto, Nigeria was perceived as a country with little or no laws on consumers' protection. To the contrary, Monye (2005) remarked that there are too many consumer protection laws and numerous governmental agencies established to administer these laws. Regrettably, these laws are characterized by their tendency to cover same grounds and limited in scope. In fact, these laws come short on compensation or rights to recover damages from injuries of product usage. Dishearteningly, these laws are rather protective of the state albeit the producer to the neglect of the consumers.

A cursory review of some the agencies activities established to protect consumers from unscrupulous trade in Nigeria can be categorized as regulatory, legislative and judicial. Prominent among the agencies whose functions are regulatory among others are National Agency for Food and Drugs Administration and Control (NAFDAC) and Standard Organization of Nigeria (SON).

Regulatory Agencies

The foregoing explores the functions of some prominent regulatory agencies,

National Agency for Food Drugs Administration and Control (**NAFDAC**): In Nigeria, NAFDAC has emerged as the government agency saddled with the responsibility of regulating and controlling trade in drugs, food, cosmetic, and other related products. In simple terms, the goal of NAFDAC is to lead the campaign of eliminating substandard, adulterated and unsafe drugs, medical devices, foods and water in the country. Just like other countries, NAFDAC is poised to maximize its efforts at curbing the social menace of counterfeit drugs. Regrettably, some unpatriotic citizens are involved in the illegal manufacture, importation and distribution of substandard and falsified medicines.

In spite of the enormous challenges that the trade in counterfeit drugs poses, NAFDAC is strategically position to be able to significantly reduce the level of substandard and falsified medicines to its barest minimum. NAFDAC activities aimed at achieving these laudable goals are encapsulated in the enforcement of regulation and control of drugs imported into the country, ensuring good manufacturing practices, reduction in number of registered imported products while encouraging local manufacturing and pre-shipment provisional registration of imported medicines.

Other strategic NAFDAC initiatives are the agency deployment of cutting-edge monitoring technologies, Mobile Authentication Service among others. The agency place more premium on its laboratories functions with the intent of strengthening its oversight function of ascertaining the quality of pharmaceutical products. In the same vein, NAFDAC, is

aggressively involved in continuous post-marketing monitoring of quality of medicines. In compliance with international best practices, NAFDAC have adopted WHO's Rapid Alert System for the surveillance and monitoring of substandard and falsified medicinal products. Consequently, the agency publishes Public Alert Notices on its websites for health care providers.

The essence of these notices are to acquaint the public with the possible cases of substandard and falsified medicines in circulation. Furthermore, persistent public enlightenment of NAFDAC depict one of its activity in communicating with the general public. Among several activities NAFDAC work in close collaboration with several inter-professional bodies. Noteworthy is the mutual relationship between the agency and the pharmaceutical regulatory council, other professional bodies as well as with communities' leaders in their quest to ride the society of fake and substandard drugs. Regrettably, despite these laudable actions, Nigeria drugs market is largely populated with fake, substandard and counterfeit drugs. Several reasons might account for these palpable counterfeit drugs epidemic state. First, the agency management lack of political will to combat this illicit trade. Second, institutionalized corruption in Nigeria civil service and finally, the ease at which government officers can be compromised.

Standard Organization of Nigeria (SON):

The Standard Organization of Nigeria is a government agency solely responsible for the registration and regulation of standard marks and specifications for both local and imported products in Nigeria. This implies that SON

among others expect every manufacturer or seller to register its products with the organisation. In furtherance of the organizations' duties, SON is empowered to enter any premises and seize or destroy products that violate the SON Act. In fact, these powers are enforceable in magistrates' court.

Legislative agencies

Here the activities of the legislative arm of government in protecting consumers' rights are explored. Despite the havoc done by counterfeit drugs in Nigeria, there are no visible anti-counterfeiting bills that emanate from legislative houses passed to protect the people they sworn to serve and protect. Sad enough, there is not a single legislation that covers all classes of goods. To the general disbelief, the best legislation that ever exist is a creative application of the various laws that affect right holders in the fight against counterfeits. Therefore, attempts at combating anti-counterfeiting may involve civil, criminal court actions, regulatory/ administrative approach or a combination of these actions.

Notwithstanding, the absence of a single law dedicated to counterfeit trade in Nigeria there are several ancillary legal frameworks that could serve the purpose. Some of these legislations include among several others the Copyright Act (CAP C2, 2004), the Counterfeit and Fake Drugs and Unwholesome Processed Foods (Miscellaneous Provisions) Act (CAP C34, 2004); the Customs and Excise Management Act (CAP 45, 2004); the Cybercrime (Prohibit, Prevention, etc.) Act, 2015 and the Merchandise Marks Act (CAP M10, 2004). Others include Consumer Protection Council (CPC) Act (CAP C25); the Economic and

Financial Crime Commission (EFCC) Act (CAP E7, LFN 2004); the National Agency for Food and Drugs Administration and Control (NAFDAC) Act (CAP N1, 2004); and the Standards Organisation of Nigeria (SON) Act (CAP S9, 2004).

Judicial Pronouncement

The docility and ambivalence of the judiciary in the protection of consumers' right is so apparent. It is so evident that despite the high prevalence of counterfeit drugs and its attendant consequences there are little or none celebrated cases of convictions in matters associated with trade in drugs counterfeits. To the best of the researchers' knowledge the only known conviction for counterfeit drugs related offences is the case of "My Pikin" in Lagos state. "My Pikin" is a popular brand of paracetamol-based syrup. This syrup was meant for the treatment of sore gums in children. As a result of its administration, several children were reported dead. On investigation, the syrup was found to be contaminated with diethylene glycol, an engine coolant. Consequently, two persons were sentence to seven years in prison over the death of over 80 children that took the adulterated teething medicine (Obeki, 2015).

Consumers' Coping Strategies.

Due to the apparent failure of government and her agencies to guarantee the citizens' rights to safe drugs, consumers are left with no option than to devise and deploy strategies that could ensure the purchase and use of drugs that could at minimum ensure safety of life. Prominent among these strategies are,

Consumer activism: The concept consumer activism generally is concerned with individual or group actions taken to either promote or

protect consumers' interest and welfare. Literature recognize consumers' activism as a very potent force in the U.S. The outcome of consumers' actions often results in social change in the marketplace. Interestingly, Nigeria, unlike other developed nations have scanty non-governmental organizations with the sole mandate of consumer advocacy. In fact, these advocacy groups are reputed for their active involvement in raising consumer awareness, informally resolving consumers' issues while advocating for consumer welfare.

The truth of the matter is that globally, consumer activism has become an integral component of social change movements. Consumer activism share similar attributes with brand activism. Brand activism like consumer activism enables the consumers take a public stance on controversial issues to advocate for societal change. Indeed, consumers rate these actions favorably. The factors that shape consumers perception of these actions are hinged on measurability of actions, brand-cause fit, and consistency. Despite this limitation, consumers' activism are indicated in organized boycotts and social media campaigns. These actions are specifically initiated with the intent of dissuading consumers from the purchase of counterfeit drugs (Ijewere, 2005). Typical among such advocacy include among others consumers avoidance of online purchase of medical products.

Product authentication: Product inspection and authentication is another veritable tool consumer have deployed to manage the risk associated with purchase of counterfeit drugs in Nigeria. Experience has shown that this

strategy relies on consumer's product knowledge and marketplace information. It is a common practice among consumers to engage in close examination of products packaging. The essence of such practice is to look out for suspicious signs in product labels. In fact, experience has shown that most counterfeit drugs possess salient features commonly noticeable in their products packages. One such common feature is broken seals. Furthermore, it is also a common practice among consumers to inquire about the products manufacturer, distributors, expiration date and products composition among others have emerge as major influencers in ascertaining drugs originality. To compliment these consumers efforts, NAFDAC as a regulatory agency have deploy its own strategy to ascertain the authenticity of drugs in Nigeria market. In fact, NAFDAC have deployed cutting-edge technologies to ascertaining the authenticity of drugs in the marketplace. Specifically, NAFDAC have deployed technologies that include but not limited to Truscan and Mobile Authentication Service. Apparently due to the high prevalence of counterfeit drugs in Nigeria, stakeholders in the drug supply chain are now compelled to double their product verification processes in order to ascertain its authenticity.

Resort to Herbal medication: Literature identified herbal medication as consumers escape route from the trap of purchase and consumption of counterfeit drugs. Experts are of the opinion that consumers resort to herbal medication is an informed decision to embrace alternative medicines for their health concerns. The proponents of alternative medicines are of the opinion that herbal medications are time tested medicines. Truth be told, globally herbal medicine is recognized as a critical component

of primary health care system. Consequently, the World Health Organization mandates member countries to conduct research into its use. Adigwe *et al* (2022) study found that consumers' adoption of herbal medication is largely on the increase in Nigeria. The scholars report that these herbal medications are now commonly seen in most pharmaceutical stores' shelves in well packaged, developed and with government registered numbers. Similarly, Maiyegun *et al* (2024) study the patterns of herbal medicine use in outpatient clinics in Northern Nigeria. The study found a very high prevalence rate among outpatients' adoption of herbal medications in the treatment of common diseases. The scholars specifically found 85% of the outpatients' patronage of herbal medications. As a matter of fact, literature report that the global prevalence of herbal medicine in 2018 was 88%. The truth of the matter is that herbal medications prevalence rate varies with culture. Interestingly, some scholars see consumers' patronage of herbal products from a cultural perspective. Specifically, Aina *et al* (2020) adduce cultural antecedence to consumers' use of herbal medications in south western Nigeria. It is a common belief among medical practitioners that tradition and lifestyle largely influence herbal medicine consumption. Other possible reasons for the high consumption of herbal medications are implicated in products affordability, availability and the belief of product safety. Sad enough, consumers' high propensity for herbal medications poses a serious challenge to health care delivery system in Nigeria. The consequence of this practice is such that majority of consumers are now psychologically attached to these substandard and fake drugs.

Prayers: Literature recognize the place of religious belief in consumers purchase decisions. This suggests that the religious inclination of consumers has emerge as a defining criterion in decision making. It is not uncommon to see adherents of certain religions offer prayers during purchase decisions. Ewanlen (2016) study of perceived risk handling strategies found that majority of Nigerians now consider prayers as a strategy to manage products performance and safety risks. It is therefore expected that Nigerians being a highly religious nation could seek for divine intervention in contending with the epidemic state that counterfeit drugs menace now constitutes.

Conclusion

The truth is that the prevalence of counterfeit drugs poses a serious health challenge. In fact, the continuous trade in counterfeit drugs is detrimental to the individual, nation and corporations. Specifically, trade in counterfeit drugs result in income loss to consumer, damage corporate reputation as well as dampens the spirit of innovation. Other possible consequences of counterfeit drugs use are implicated in increased patients' admissions, patients prolonged stay in the hospital, development of disease resistant restrains of virus/bacteria, treatment failures and untimely death.

Literature is unanimous in acknowledging the low level of consumers' protection in Nigeria. In fact, this low level of protection is adduced for the high level of counterfeit drugs prevalence in Nigeria. Furthermore, the high prevalence could among others be associated with consumer ignorance and apathy, lack of government commitment, media under reporting, inadequate enforcement and

insufficient publicity of government and non-governmental organizations activities in unearthing these unethical practices among manufacturers and importers of counterfeit pharmaceutical products.

Contingent upon the detrimental effect of counterfeit drugs on the society, it behooves on the government to strengthen its oversight functions through effective regulation, legislation and adjudication on all issues that compromise consumers' health and welfare. This paper advocates that the time to stop this unwholesome tide is now.

Recommendations

Sequel to the findings of this study, the following recommendation are thereafter canvassed,

- 1) There should be deliberate and continuous consumers education. The content of this education should include among others should include consumers rights to demand for the strict enforcement of product liability, improvement on the safety consciousness from manufacturers, enhanced commitment of government regulatory agencies, provision of compensation to victims of defective products.
- 2) Drugs regulatory agencies should be effective in their oversight functions. Regulatory agencies apparent ineptitude should be discarded as a practice. The simple truth is that present day reality indicates that NAFDAC is in dire need of a holistic overhaul of its operational modalities. It is therefore expedient that the agency rekindles the zeal and zest that was associated with the Dora Akunyili's NAFDAC era.
- 3) Legislative houses should enact laws that are consumer- centric. In fact, these laws should be protective of the consumers of counterfeit drugs. These laws should contain relevant sections that emphasizes compensation for victims of counterfeits or fake and substandard drugs. It is expected that legislations that contain huge monetary compensation would further deter manufacturers and vendors of fake drugs.
- 4) The law enforcement agencies and the judiciary should be alive to their oversight responsibilities. Suspects of dealers in counterfeit drugs should be speedily prosecuted. Such suspects on conviction should be made to serve a reasonable jail term without an option of fine. It is expected such measure would serve as a deterrent to potential offenders.
- 5) Consumers should at all times patronize registered and reputable drug stores. However, when online shopping becomes inevitable, the consumers are advised to strictly watch out for telltale signs that are indicative of fake, substandard and counterfeit drugs.
- 6) Due to the crucial role of the informal drug sellers in drugs distribution in the country, the Federal government of Nigeria just as is the practice in Ghana and Tanzania should regulate the activities of the informal drugs sellers. The regulatory activities could include premises registration and provision of basic training in drugs handling among other related issues

References

- 1) Adigwe, O.P., Fatokun, O.T, Esievo, K & Ibrahim, J.(2022). Herbal medicine products sold in Nigeria: A pilot survey. *Journal of Complementary and Alternative Medical research*. DOI: 10.9734/jocamr/2022/v18i430356
- 2) Adigwe, O.P; Onavbavba, G;& Wilson, D.O(2022). Challenges associated with addressing counterfeit medicines in Nigeria: An exploration of Pharmacists' knowledge, practices, and perceptions. *Integrated Pharmacy Research and Practice* 11(November), 177–186.
- 3) Aina, O., Gautam, L., Simkhada, P, & Hall, S.(2020) Prevalence, determinants and knowledge about herbal medicine and non-hospital utilization in southwest Nigeria: A cross-sectional study. *British Medical Journal Open* 2020,10: e040769. Doi: 10.1136/bmjopen. 2020-040769.
- 4) Akinyandenu, O. (2013). Counterfeit drugs in Nigeria: A threat to public health. *African Journal of Pharmacy and Pharmacology* 7(36): 2571-2576.
- 5) Akunyili, D.N (2005) Counterfeit and substandard drugs, Nigeria's experience: Implications, Challenges, Actions and Recommendations. In Talk for NAFDAC at a Meeting for Key Interest Groups on Health, organized by The World Bank
- 6) Almuzaini T, Choonara I, & Sammons H. (2013) Substandard and counterfeit medicines: A systematic review of the literature. *British Medical Journal Open*;3:e002923.
- 7) Blackstone, E.A, Fuhr Jr, J.P & Poclask, S. (n.d.).The health and economic effects of counterfeit drugs
- 8) Chika, A., Bello, S.O. Jimoh, A.O. & Umar, M.T (2011). The menace of fake drugs: Consequences, causes and possible solutions. *Research Journal of Medical Sciences*.5(5)257-261.
- 9) Chinwendu, O. (2008). The fight against fake drugs by NAFDAC in Nigeria. 44th International Course in Health Development (ICHHD), KIT (Royal Tropical Institute) Development Policy & Practice/ Vrije Universiteit Amsterdam. September 24, 2007 – September 12, 2008.
- 10) Erhun W.O, Erhun M.O, & Babalola, O.O (2001) Drug regulation and control in Nigeria: The challenges of counterfeit drugs. *Journal of health and population in developing countries*, 4(2): 23-34.
- 11) Ewanlen, D.O. (2016). Perceived risk in the patronage of automobile maintenance outlets in Benin City. An unpublished Ph.D. Dissertation submitted to the Department of Business Administration, University of Benin, Benin City.
- 12) Goodman C, Brieger W, Unwin A, Mills A, Meek S, & Greer G (2007). Medicine sellers and malaria treatment in sub-Saharan Africa: What do they do and how can their practice be improved? *American Journal of tropical medicine and Hygiene* :203-218
- 13) Ijewere, A.A. (2005). Consumers' activism and protection in Edo and Delta States. An unpublished Ph.D. Dissertation submitted to the Department of Business Administration, University of Benin, Benin City.
- 14) Mackey T.K, & Liang B.A.(2011) The global counterfeit drug trade: patient safety and public health risks. *Journal of Pharmaceutical Science* 100:4571–9.
- 15) Maiyegun, A.A, Akangoziri, M.D., Grema, B.A, Mutalub, Y.B, Ibrahim, F.B. & Ibraheem, A.S. (2024). Patterns of herbal

- medicine use in a general outpatient clinic in Nigeria: A Cross-sectional Study. *Asian Journal of Research in Medical and Pharmaceutical Sciences*. 12 (3): 28-38.
- 16) Monye, F. (2005). Laws of consumer protection. Ibadan: Spectrum Books Ltd
 - 17) MHRA (2008) Medicine and Medical Devices Regulation: what you need to know. Available at www.mhra.gov.uk.
 - 18) National Population Commission,(N.P.C. 2024) <https://www npc.org ng>.
 - 19) National Agency for food and Drug Administration and Control (NAFDAC) 2007 Available online at <http://www.nafdacnigeria.org/identified.html>.
 - 20) Obeki, S.O.(2015). Perceived risk in the patronage of pharmaceutical outlets in Edo and Delta States. An unpublished Ph.D. Dissertation submitted to the Department of Business Administration, University of Benin, Benin City.
 - 21) Okeke T.A, Uzochukwu, B., & Okafor, H. (2006). An in-depth study of patent medicine seller's perspectives on malaria in rural Nigeria community. *Malaria Journal* in Pubmed central 5: 97
 - 22) Olaniran, O.D; Sanni, F.O. & Yusuf, A.A. (2023). An investigation into NAFDAC intervention on the incidence of fake and counterfeit drugs in Nigeria, *Texila International Journal of Public Health*. Available online
 - 23) Olajide A.S.,Chidinnma O.C.,& Dennis, U.E.(2010). Comparative assessment of the quality control measurements of multisource amlodipine tablets marketed in Nigeria. *International Journal of Biomedical and Advance Research*. 1(4)
 - 24) OECD/European Union Intellectual Property Office (2020), "Counterfeit pharmaceuticals: scope and data", in *Trade in Counterfeit Pharmaceutical Products*, OECD Publishing, Paris.
 - 25) Punch Newspaper(November,2024). Pharmaceutical Giants De -invest in Nigeria. [www: punchnewspaper-online .news](http://www.punchnewspaper-online.news).
 - 26) Ratanawijitrasin S. & Wondemagegnehu E, (2002) Effective drug regulation- A multi-country study. A book published by World Health Organization.
 - 27) Raufu A. (2002) Influx of fake drugs to Nigeria worries health experts. *British Medical Journal*. 324 (7339):698
 - 28) Raufu A. (2003) India agrees to help Nigeria tackle the import of fake drugs. *British Medical Journal* 326(7401):1234
 - 29) Segre J, & Tran J (2008). What works: Care Shop Ghana (Improving access to essential drugs through conversion franchising). Available at www.nextbillion.net/resources/casestudies
 - 30) Taylor R.B, Shakoor, O, & Behrens R.H, et al.(2001) Pharmacopoeial quality of drugs supplied by Nigerian pharmacies. *Lancet* 357:1933–6.
 - 31) WHO (2007) Good governance for medicines. Curbing corruption in medicines regulation and supply. <http://www.who.int/medicines/policy/goodgovernance/home/en/index.html>
 - 32) WHO (2017b), *WHO Global Surveillance and Monitoring System for Substandard and Falsified Medical Products*, World Health Organization, Geneva, [www.who.int/medicines/regulation/ssffc/publications/GSMSreport EN.pdf? ua=1](http://www.who.int/medicines/regulation/ssffc/publications/GSMSreport_EN.pdf?ua=1).