Evaluating Consumers' Protective Measures Against Unethical Marketing Of Medical Drugs In Nigeria.

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ABSTRACT: The study appraised the measures adopted by consumers to protect themselves against the unethical marketing of medical drugs in Nigeria, particularly the South Eastern States. The study was a survey design. Stratified, simple random, convenience and judgmental sampling procedures were adopted. One research question and a hypothesis guided the study. The target population was 5621 respondents, involving 3444 healthcare professionals, (doctors, pharmacists, nurses), 1641 drug consumers, 390 licensed drug firms and 146 senior staff of the regulatory agencies in Abia, Anambra, Ebonyi, Enugu and Imo States. Five University Teaching Hospitals constituted the study canters. A sample of 985 respondents was derived. Primary and secondary sources of data were accessed. Pilot study was conducted. The research instrument was validated and the reliability estimated using Cronbach's Alpha technique. The reliability coefficient was 0.971; indicating high degree of internal consistency of the instrument .The mean (x) and criterion mean scores were used to answer the research question. Z-test statistical technique was applied in testing the hypothesis at 0.05 level of significance and 4 degrees of freedom. The findings revealed that consumers do not significantly adopt measures to shield themselves from counterfeit medications. Recommendations were made.

KEYWORDS: Protective Measures, Unethical Marketing, Medical Drugs, Drug Consumers, Counterfeit Medications.

I. BACKGROUND OF THE STUDY.

Medical drugs are chemical substances used in restoring abnormal physical states, modifying organic malfunctions, treating or preventing disease disorders in the human body or in animals (Okoye, 2005: 44). When the drugs can hardly perform the functions of mitigation and prevention of disease disorders, they are counterfeits and pose serious risks to public health. The movement of the drugs from the manufacturer's warehouses to the consumers (patients) involves a network of intermediaries scattered across geographies. As the drugs leave the warehouses, manufacturers have little or no knowledge of how and where their drugs are ultimately dispensed. The nature of the distribution channel makes it vulnerable for substitution of counterfeit drugs. The drug distribution channel comprises open markets, patent medicine stores, community pharmacies, private and public hospitals.

The small and loosely regulated wholesalers and retailers especially, the State licensed or registered firms scattered all over Nigeria, constitute the major threat to the drug distribution channel. A good chunk of the drug distribution network is controlled by this secondary market, engaged in unethical marketing practices of selling counterfeit drugs, drugs that have degenerated due to poor storage and handling, drugs with wrong packaging / unapproved labels, drugs with fake NAFDAC numbers and drugs in unregistered pack sizes. Repackaging has also generated serious abuse to the entire drug distribution channel with constant inflow of counterfeit drugs. The genuine manufacturers normally pack drugs in institutionalized bottles or containers. Most retailers empty the original bottles and sort the tablets into smaller lots, filling the small bottles with the drugs and re-labeling the new bottles with the original labels. Substitution of unwholesome drugs takes place in the process. Labels of cheap drugs are exchanged with labels of costly drugs (Erhun, 2001:23). Expired drugs are re-validated to bear future dates and wild drug performance /off—label claims, dishonest/misleading advertising abound.

The sale of drugs through auction sites, stand-alone e-commerce sites and e- mail solicitations using internet has exposed consumers to counterfeit medications. Drug counterfeiters prefer the on-line procedures due to the relative ease of deceiving consumers (OECD, 2007:14). They target drugs with high profit margins, taking into account, the risk of detection, the potential penalties, the size of the market to be exploited and the technological and distribution challenges associated with the undertaking (OECD, 2007 :11) Most counterfeit drugs are marketed as genuine drugs carrying holograms and other imprints (Okoghenun, 2010: 5).

NAFDAC had intercepted a drug whose original brand did not have hologram but the counterfeit had hologram and consumers were buying the counterfeit in place of the genuine drug (Oloja, et al, 2011: 16). "Today, there is no guarantee of buying safe medicines. Counterfeit medicines are a form of terrorism against human health. It doesn't matter whether a pill contains sugar or poison. If the safety is compromised, so is our health (Adamou, 2009). When a drug manufacturer mixes chalk for analgesic, antipyretic or antibiotic, it is being dangerously, murderously and unpardonably irresponsible (Adirika, 2006:58). Drugs subject to counterfeiting include medicines for treatment of cancer, HIV, malaria, osteoporosis, diabetes, hypertension, cholesterol, cardiovascular disease, obesity, infections, alzheimer, prostate diseases, erectile dysfunction, asthma and fungal infections, antibiotics, anti-psychotic products, steroids, anti-inflammatory tablets, pain killers, cough medicines, hormones, vitamins, treatment for hair and weight loss (OECD, 2007:12). These counterfeit drugs wind up in the bloodstreams of the unsuspecting patients . Some consumers unwittingly purchase them, thinking they are genuine products and are deceived. While other consumers knowingly buy lower-priced counterfeit drugs for reasons of affordability and high costs of genuine drugs. Thousands of consumers have been poisoned. When the quality, safety and efficacy of medical drugs are compromised, the health of the citizens is under threat. The Federal Government of Nigeria established the regulatory agencies, viz, National Agency for Food and Drugs Administration and Control (NAFDAC), Pharmacists Council of Nigeria (PCN) and Consumer Protection Council (CPC) to dictate how drug firms produce, promote, price and distribute their products. In spite of the stringent regulatory policies, there is preponderance of counterfeit drugs in Nigeria (Erhun, et al,2001:32). The measures adopted by the consumers to protect themselves against the counterfeit medications provided the stimuli for this study.

1.1 Statement of the problem

Because, the drug counterfeiters are attracted to the high profits to be made and relatively light penalties associated with detection, they infiltrate the distribution channel with counterfeit drugs. Consumers are exposed to elevated health and safety risks as they consume the counterfeit drugs. Public health problems like liver damage, kidney and heart failures, disabilities, injuries and even death, have been closely associated with consumption of counterfeit drugs (Akunyili, 2010:36). Up to 2000 children per day die in Africa as a result of taking counterfeit malaria medications (Rago, 2009). There is strong positive correlation between counterfeit drugs and high failure rate in malaria treatment and control (Chukwuemeka, et al, 2011:132). The consumers bear the burden of persistence health disorders that are difficult to treat due to the emergence of resistant strains of malaria parasites and other microorganisms induced by previous use of the counterfeit drugs (Akunyili, 2010:36). The purpose of drug therapy is to ensure constant drug level in the body and the efficacies of drugs depend on the composition of the essential ingredients. Any alteration of concentration or absence of active ingredients of drugs poses great danger to public health. The use of counterfeit drugs exposes the consumers to latrogenic diseases like hepatic toxicity which results in biliary obstruction, renal damage and malformation of the fetus in pregnant women, among others (Kozier, et al, 1991:1254). Akunyili (2010:36) remarked that the evil of counterfeit medicines is worse than the combined scourge of malaria, HIV/AIDS, armed robbery and illicit drugs and violates the right to life of consumers. The consumers, being the victims of the unethical marketing of medical drugs, their actions or inactions clearly determine the sustainability of the inhuman business. The differences in prices of genuine and counterfeit drugs determine the size of the market. There is virtually no demand for counterfeit drugs if they are priced at the same level as genuine drugs but demand could be significant if the counterfeits are sold at a substantial discount (OECD. 2007:10).A critical success factor in the business of the unethical marketing of medical drugs is the consumer. The question now is, to what extent have the drug consumers taken the responsibility to adopt protective measures against the unethical marketing of medical drugs in Nigeria, particularly the South Eastern States? The study aimed at addressing this question, among others.

1.2. Objective of the Study.

The study has the broad objective of assessing the measures adopted by drug consumers to protect themselves against the unethical marketing of medical drugs in Nigeria, particularly the South Eastern States. The specific objective is to determine the extent to which the consumers adopt measures to shield themselves from counterfeit medications.

1.3. Research Question.

To what extent do the drug consumers adopt protective measures against counterfeit medications?

1.4. Delimitation of the Study

The study centers included five University Teaching Hospitals in the South Eastern States of Nigeria, namely; Abia State University Teaching Hospital, (ABSUTH), Abia State; Ebonyi State University Teaching Hospital,(EBSUTH),Ebonyi State; Imo State University Teaching Hospital, (IMSUTH), Imo State; Nnamdi

Azikiwe University Teaching Hospital, (NAUTH), Anambra State; University of Nigeria Teaching Hospital,(UNTH), Enugu State. The South-East Offices of the National Agency for Food and Drugs Administration and Control (NAFDAC), Pharmacists Council of Nigeria (PCN) and Consumer Protection Council (CPC) were accessed. The study covered a period of ten years, ranging from 2001 to 2011.

1.5. Hypotheses Formulation

At 0.05 significance level and 4 degrees of freedom the following hypotheses were formulated and tested: HO: The drug consumers do not significantly adopt protective measures against unethical marketing of medical drugs. $H_{I:}$ The drug consumers significantly adopt protective measures against unethical marketing of medical drugs.

II. REVIEW OF RELATED LITERATURE

The theoretical framework of Brodeur (2009) which integrated morality, legislative and ethical policies into Lowi's (1972) social regulatory theory, provided the dimension of social regulatory policy for this study. Social regulatory policy is defined as the exercise of legal authority to modify or replace community values, moral practices and norms of interpersonal conduct with new standards of behavior (Talalovich et al, 1988:1). Morality concerns behavior which involves judgments, actions and attitudes based on rationally concerned and effectively established norms (Steel, et al, 1983:49 cited in Kozier, et al, 1991:125). It emphasizes what is right and wrong in conduct, character, attitude and what individuals must do to live together in society. An individual's perception of the requirements for living together and the attendant response to them constitute his moral behavior. Morality policy is hetroregulation and it is assumed that an external authority, God, regulates behavior.

The moral virtues of the regulatory agents and drug producers include fidelity to public good, duty of amity, respect for citizens' lives and proficiency in social architecture and prudence. Legislative policy is hetroregulation. In drug regulation, government sets legal requirements relative to drugs and specifies what activities that must be undertaken before and after a drug is placed in the market. Legal provisions are essential for attaining regulatory goals. The regulatory agencies must be granted legal authority to perform regulatory functions and impose sanctions when violations occur. The legal framework is extended to cover Good Manufacturing Practice (GMP), import controls, inspection of distribution channels, control of drug promotion including packaging requirements, information on labels and inserts, methods of analysis, prohibition of certain categories of pharmaceutical products from advertising, among others. Various penalties are imposed to ensure ethical compliance. Ethics refers to the moral principles and values which guide the activities of an individual, group or community. An ethics is "what ought to be" (Kozier, et al, 1991:125). Unethics therefore implies "what ought not to be". Ethical policy is autoregulation and the internal regulation produced by interactions between individuals. Ethics refers to the moral sensibility that guides marketing choices and activities (Bovée, et al, 1992:56).

There are two dimensions to marketing ethics, namely ethical dilemmas and ethical lapses. Ethical dilemmas are unresolved questions of ethical judgment in which there is validity to both sides of the question. The two sides of ethical equation are defensible. Ethical dilemmas are not easy to resolve and always involve trading off one group's rights or interests for those of another. Ethical lapses are clear-cut cases of unethical behavior (Bovée, et al, 1992:64). It is not always easy to draw a clear-line between normal marketing practices and unethical behavior (Kotler, et al, 2009:678). However, certain business practices are clearly unethical and include quality or safety defects, deception and fraud-exaggerated product size and performance claims, false and deceptive advertising, omission of information on side effects of products, label tampering / inaccurate labeling, copying the style of packaging in an attempt to mislead consumers, counterfeit product/ brand piracy, reduction of essential ingredients in the product, among others (Kotler et al, 2009:678;Bovée et al, 1992:54-60; Osuagwu, 2004:5). Ethical marketing behaviors or actions must conform to acceptable social norms concerning beneficial and harmful actions in exchange transactions and relationships.

The key terms of the ethical language are values, rights, duties, rules and relationship (Chukwu, 2007:34). Osuagwu (2004:5) lamented that unethical marketing practices have affected the quality of Nigerian made products and services, specially food and pharmaceuticals. The spectrum of ethical standard in the marketing of medical drugs demands that consumer's health, welfare and certainly their lives come first before financial gains or profits. Ethics of exchange demands that the exchange relationship must be beneficial to both buyers and sellers. The legal concept of caveat emptor (i.e., let the buyer beware) that dominated the 1950s

virtually went into extinction with the emergence of Consumer Bill of Rights, namely; right to the satisfaction of basic needs, right to safety, right to be informed, right to choose, right to be heard, right to redress,

right to consumer education, right to healthy and sustainable environment. These rights entitled the consumer to selection of safe products, to information about them and to the forum in which they can complain about products or simply ask questions. The right to safety presumes that the drug consumer acts proactively and takes appropriate measures to safeguard his life from the unethical marketing practices of the drug firms. The extent to which the consumers comply with the protective procedures is the focus of this study.

III. METHODOLOGY

The study used survey design and the target population was 5621, involving Healthcare Professionals(3444), Licensed Drug Firms (390), Drug Consumers (1641) and Regulatory Agencies (146). Stratified, simple random, convenience, judgmental sampling procedures were adopted. The sample size was determined using Yamane (1967 cited in Eboh, 2009:94) formula, i.e., $n = N/I + N(e)^2$, where, n=sample size, N=actual population, e =level of significance, I =constant. Using Bowley's proportional allocation statistical technique; nh = nNh / N, where, nh = the number of unit allocated to each category of respondents. Nh = the number of respondents in each category, n=the total sample size. N= total population, the sample size for each category of respondents was estimated .The sample size for this study was 985, made up of HCP (358); Drug Consumers (322), Licensed Drug firms (198) and Regulatory Agencies (107). Primary and secondary sources of data were accessed. Five point Likert Scale format, viz, Strongly Agree (5points), Agree (4points), Undecided (3points), Disagree (2points), Strongly Disagree (1point), was used with the aggregate mean score of 3.0.The mean, 3.0 was used as a criterion for accepting or rejecting the item statements of the questionnaire(Nwankwo,2011:244). The instrument was validated and the reliability estimated using Cronbach's Alpha technique. Pilot survey was carried out. Sixty respondents were administered with sixty copies of questionnaires. Each category of respondents was served with fifteen copies of questionnaires. The return rate was hundred percent. Five copies of the questionnaires were rejected due to inconsistencies and fifty five analyzed. The reliability coefficient was 0.971, indicating high degree of internal consistency of the research instrument (Gliem, et al, 2003:87). The hypothesis of the study was tested, using Z-test (two-tail) statistics, at 0.05 level of significance and four degrees of freedom (Lind, et al, 2005:367).

Presentation and Analysis of Data

The data obtained from the study were presented as shown below.

Age (years)	Regulatory	Licensed	Drug	Healthcare	Total	Percentage
	Agencies	Drug Firms	Consumers	Professionals		
Under 20	-	11	17	-	28	3.00
21-30	24	55	86	109	274	32.00
31-40	34	57	104	108	303	35.00
41-50	26	27	44	77	174	20.00
Above 50	12	25	32	18	87	10.00
Total	96	283	283	312	866	100.00

Tables 4.1. Age Distribution of Respondents.

Source: Field Survey, 2013.

From table 4.1, about 67.0 percent of the respondents were within the age bracket of 21 to 40 years, 20.0 percent within 41to 50 years, 10.0 percent above 50 years and only 3.0 percent were below 20 years. Majority of the respondents used for the study were within their active years of service.

Qualifications	Regulatory Agencies	Licensed Drug Firms	Drug Consumers	Healthcare Professionals	Total	Percentage
WASC/SSC/ GCE	_	124	57	10	191	22.0
OND/NCE/RN	-	11	34	69	114	13.2
HND/BSC/BA	76	35	127	102	340	39.3
MBBS	-	-	-	108	108	12.5
MSc, MBA, MPhil, PhD	20	5	65	23	113	13.0
Total	96	175	283	312	866	100.0

Table 4.2Educational Levels of Respondents.

Sources: Field Survey, 2013.

Table 4.2 showed that 39.3 percent of the respondents had first degree/Higher National Diploma certificates, 13 percent were holders of Ordinary National Diploma, National Certificate in Education/ Registered Nursing Certificates and Masters/Doctor of Philosophy degrees respectively. The medical doctors constituted 12.5 percent while 22 percent of the respondents had ordinary level school certificates. Majority of the holders of the West African School Certificates/ General Certificates of Education (124, representing 14.0 percent of the respondents) were proprietors of the licensed drug firms, indicating the dominance of non-professionals in drug business.

Rate	Regulatory Agencies	Licensed Drug Firms	Drug Consumers	Healthcare Professionals	Total	Percentage
Daily	21	45	136	58	260	30.0
Weekly	50	74	117	94	335	38.7
Monthly	25	46	30	132	233	26.9
Rarely	-	10	-	28	38	4.4
Total	96	175	283	312	866	100.0

Table 4.3. Consumption Rate of Medical Drugs.

Source: Field Survey, 2013.

Table 4.3, showed that the four categories of respondents were consumers of medical drugs. The weekly consumption rate was 38.7 percent, followed by daily (30.0 percent), and monthly (26.9 percent). Only 4.4 percent of the total number of respondents rarely used drugs. The findings implied that any respondent could be a victim of counterfeit medications.

Table 4.4.	Mean (X) scores of respondents on the drug consumers' adoption of protective measures against
	counterfeit medications.

Item	Statement	Agree. SA+A	Disagree U+D+SD	Total scores	Total no of respondents	Mean score	Result
1		0.62	1021	1004		0.10	
1	You are well protected in your preference for drugs with NAFDAC numbers than the unregistered drugs.	863	1031	1894	866	2.19	Not accepted
2	You always observe the drug packages closely and read instructions on the inserts before using the drugs.	2213	340	2553	866	2.95	Not accepted
3	You are familiar with the use of technological devices to detect counterfeit drugs at the point of purchase.	998	1173	2171	866	2.51	Not accepted
4	You are aware of your responsibility to report incidence of counterfeit drugs promptly to the regulatory agencies.	1182	933	2115	866	2.44	Not accepted
5	You are interested in relating with consumer associations to fight unethical marketing of medical drugs.	1142	1153	2295	866	2.65	Not accepted
6	Buying drugs only from licensed pharmacies and authorized chemists stores protects you from counterfeit drugs.	1644	1087	2731	866	3.15	Accepted
7	Due to cash limitation, you are ready to buy drugs from any source as long as the prices are cheap and affordable.	1647	1003	2650	866	3.06	Accepted
8	You are willing to lodge complaint with NAFDAC, CPC or PCN on adverse drug reactions you experience.	1760	960	2720	866	3.14	Accepted
	Total	11449	7680	19129	6928	22.09	
	Aggregate mean	1431	960	2391	866	2.76	Not Accepted

Source: Field Survey, 2013.

Table 4.4 showed that items 6, 7 and 8 had mean scores above 3.0. The consumers' preference for buying drugs only from licensed wholesalers and retailers would protect them from the dangers of counterfeit drugs. Consumers indicated their willingness to buy drugs from any source as long as the prices were cheap. High cost

of drug therefore influenced patronage of much cheaper counterfeit drugs. Drug consumers were willing to lodge complaints with the regulatory agencies on adverse drug reactions. The means scores of items 1 to 5 were below the criterion mean of 3.0. Consumers showed no preference for drugs with NAFDAC numbers since counterfeits also had NAFDAC numbers. Consumers were not interested in forming associations to fight unethical marketing of medical drugs. They were not familiar with the use of technological devices like MAS and Truscan to detect counterfeit drugs at the point of purchase. They neither observed the drug packages closely nor read the instructions on the inserts before using the drugs. The aggregate mean of 2.76 for the research question, showed that the drug consumers had not adopted, to a reasonable extent, protective measures against counterfeit medications.

Item	No. of Resp.	Scores of Resp.	Mean of Scores	Std. Dev of Scores	No of Resp.	Scores of Resp.	Mean of Scores	Std Dev of	Total No. of
	Agree (n_a)	Agree	$\frac{3cores}{X_a}$	SD _a	Disagree (nd)	Disagree	$\frac{X_d}{-}$	scores SD _d	Resp.
1	198	863	4.36	1.64	668	1031	1.54	2.75	866
2	638	2213	3.47	30.98	228	340	1.49	41.15	866
3	228	998	4.38	28.74	638	1173	1.84	8.44	866
4	270	1183	4.38	15.12	596	933	1.57	1.22	866
5	274	1142	4.17	17.49	592	1153	1.95	794	866
6	424	1644	3.88	10.36	442	1087	2.46	605	866
7	431	1647	3.82	10.42	435	1003	2.31	4.26	866
8	414	1760	4.25	16.19	452	960	2.12	0.00	866
Total	2877	11449	32.71	130.94	4051	7680	15.28	71.81	6928
Aggre gate mean	360	1431	4.09	16.37	506	960	1.91	8.98	866

Table 4.5. Analysis of Responses.

Source: Field Survey, 2013.

The means and standard deviations of the responses on the drug consumers' adoption of protective measures against the unethical marketing of medical drugs in South Eastern States were presented in Table 4.5. The calculated Z-value shown in Table 4.6 was derived from Table 4.5.

Table 4.6. To	est of hypothesis.
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No of	Mean	Std	Degrees	Z-	Z-	Level of	Decision
resp. N	X	Deviation	of	calculated	critical	significance	
_		SD	freedom			-	
360	4.09	16.37					
			4	+1.73	+1.96	0.05	Accepted
506	1.91	8.98					1
	resp. N 360	resp. N X 360 4.09	resp. N X Deviation SD 360 4.09 16.37	resp. N X Deviation of freedom 360 4.09 16.37 4	resp. NXDeviation SDof freedomcalculated3604.0916.374+1.73	resp. NXDeviation SDof freedomcalculatedcritical3604.0916.374+1.73+1.96	resp. N \overline{X} Deviation SDof freedomcalculatedcriticalsignificance3604.0916.374+1.73+1.960.05

Source: Field Survey, 2013.

From table 4.6, the calculated Z-value (+1.73) was found in the region between -1.96 and + 1.96 (i.e. critical values of Z) at 4 degrees of freedom and 0.05 level of significance. In applying the decision rule, the calculated Z-value fell within the acceptance region, the null hypothesis, Ho, was not rejected. The additional insight into the decision provided by the p-value showed that the probability of finding Z-values as extreme as +1.73 was 0.5000-0.4582= 0.04836. The two-tailed p-value, 2(0.0418) = 0.0836, was greater than the significance level of 0.05 (i.e. P> 0.05). The alternate hypothesis, H₁, was rejected and the null hypothesis, Ho, was accepted, confirming that the drug consumers had not significantly adopted protective measures against the unethical marketing of medical drugs.

IV. DISCUSSION OF FINDINGS.

The quality, safety and efficacy of medical drugs marketed in the huge Nigerian drug market had become worrisome. According to the Director-General of NAFDAC, Dr Paul Orhii, the incidence of fake and

substandard drugs in Nigeria was sixteen percent in 2005 and by 2008, the figure increased to more than sixtyfour percent of fake and substandard anti-material drugs in circulation (Oloja, et al, 2001:16). Erhun (et al, 2001:23-24) revealed that the problem of counterfeit drugs in Nigeria was real and capable of undermining the healthcare delivery efforts of the Federal and State governments. Chukwuemeka (et al. 2011:130-132) stated that the health policies, especially the Roll Back Malaria programme have been negatively affected by the high incidence of counterfeit drugs. It was even estimated that only ten percent of Nigerians have access to essential and genuine drugs. The minimum qualification to obtain the Patent and Proprietary Medicine Vendors' license is First School Leaving Certificate. The non-professionals with virtually little or no education dominated the drug business as importers, wholesalers and retailers in the open drug markets. Erhun (et al, 2001:24) opined that the involvement of these unqualified persons in the procurement and distribution of medical drugs had its implications in drug regulation and control in Nigeria. These unqualified persons do not have much at stake in terms of conformity to professional standards and their business interests are motivated by the desire to get-richquick. The study involved mostly mature respondents within their active years of service (21 to 40 years). The findings revealed that the four categories of respondents were consumers of medical drugs and anyone could be a victim of counterfeit medications. The health outcomes of the preponderance of counterfeit, toxic and useless drugs in the markets and health centers manifest in drug resistance, treatment failure, adverse drug reactions, increased morbidity and mortality. The safety of public health demands that consumers adopt measures to protect themselves against counterfeit drugs. The study, however, revealed that consumers do not significantly adopt protective measures against the unethical marketing of medical drugs. They showed willingness to buy drugs from any source as long as their prices were cheap and affordable. Consumers acknowledged that buying drugs only from authorized pharmacies and chemists stores would protect them from the dangers of counterfeit drugs. But the high costs of genuine drugs in these authorized outlets created the opportunity for the consumers to consider cheaper drugs products alternatives. The study showed that consumers rarely observed drug packages closely or read instructions on the inserts before consuming the drugs. Consumer preference for drugs with NAFDAC numbers was worrisome. Some consumers have encountered counterfeit drugs that possessed NAFDAC numbers. NAFDAC numbers no longer guaranteed genuine drugs in the drug market. The consumers were not familiar with the use of technological devices like MAS and Tuscan to detect counterfeit drugs at the point of purchase. The apathy of the drug consumers in forming associations to fight the unethical marketing of medical drugs and report counterfeit drugs incidents promptly to the regulatory agencies had frustrated efforts, aimed at consumer protection. According to Wolpe (1988), every individual consumer in the society must see himself as a moral entrepreneur, saddled with the responsibility to challenge the marketing of counterfeit drugs. The fight against unethical marketing of medical drugs in the South Eastern States of Nigeria must therefore be dogged. Counterfeiters do not give up easily and have to be dislodged, roots and branches through a vote of no confidence from the drug consumers. The change of attitudes and behaviors of the consumers toward the unethical marketing of medical drugs would definitely facilitate a short life span of this inhuman business in the South Eastern States of Nigeria.

V. CONCLUSION.

Consumer protection is a collective effort and its actualization demands collective inputs from not just the drug manufacturers or importers, regulatory agencies and the government but also the consumers. While the operations of the regulatory agencies aim at consumer protection, the consumers as victims of counterfeit medicines, had not significantly adopted protective measures to shield themselves against counterfeit medications. They must exert their rights to safety and redress. Either the consumer does not know how to seek redress and the channels to use or has resigned to apathy as usual. As such the drug firms have no motivation to strive for acceptable standards. The awareness level necessary to initiate behavior change in drug consumers has been at low elbow. The ignorance of the average Nigerian consumer is a strong factor undermining the adoption of protective measures. Many consumers easily fall victims of counterfeit drugs due to low level of literacy. With the increasing sophistication of drug counterfeiters, it is not an easy task to distinguish a genuine drug product and a counterfeit. Counterfeit medicines terrorize the health of consumers. The counterfeiters strive for the sustainability of the inhuman business for financial gains. The consumer has the responsibility to be alert to the quality and safety of the drug product he is purchasing, gather every information about it, complain about his post-purchase dissatisfaction and adverse drug reactions to the regulatory agencies and form associations to fight unethical marketing of medical drugs. The World Consumer Rights Day, March 15 of every year, is set aside to protest abuses and injuries to the consumer's rights. For a drug consumer to willingly buy unwholesome drugs for reasons of affordability is rather absurd and unpatriotic as the action itself negates the natural instinct for self preservation.

5.1. Recommendation

In view of the findings of the study, these recommendations were made to guide drug consumers adopt protective measures against unethical marketing of medical drugs.

- [1] Drug consumers should establish powerful consumer associations at National, State and Local Government Area levels, comprising public/civil servants, professional and trade associations, labor unions, students, to confront the increasing sophistications of the drug counterfeiters.
- [2] The Consumer Associations should embark on the education of members using well established communication networks to address the apathy of the drug consumers toward shielding themselves against counterfeit medications. The consumers should be aware of their rights to safety, to accurate drug information and their responsibility to report counterfeit drug incidents promptly to the association.
- [3] Public enlightenment workshops should be organized by the Consumers Associations to educate members on the use of technological devices to detect counterfeit drugs and sensitize them on the dangers inherent in their preference for cheaper drugs.
- [4] The stakeholders, viz, the regulatory agencies, pharmaceutical industry and consumer associations should come together to form cross-sector partnership forum, to develop common unified actions against the unethical marketing of medical drugs. The collective responsibility of the stakeholders would lead to transparency in the activities of the drug firms. The resultant effects of these concerted efforts would be the promotion of public and economic health of the nation.
- [5] Most of the drugs in the Nigerian drug market, including the counterfeits are imported. The Federal and State Governments should strive to reduce drug importation to the barest minimum by empowering the licensed drug firms financially to commence local production of drugs and make quality drugs available to consumers at affordable prices.

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