The Comparative Effect of Trade Fair in the Sales of Fake and Adulterated Drugs in Nigeria (A Survey of Port Harcourt Consumers)

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Abstract
This research examines the comparative effect of trade fair in the sales of fake and adulterated tugs in Nigeria, a survey of Port Harcourt consumers. The aim of its research is to evaluate the health implications of fake and adulterated drugs in Rivers state during trade fair. Over the years, the problem of fake arid adulterated drugs has proved a daunting task to handle in Nigeria, despite the efforts of the Country National Drugs Law Enforcement Agency (NDLEA). The population is the study comprises of all drug consumers in Port Harcourt which is unknown, therefore the researcher limited the study to three areas in Port Harcourt (Diobu, Ogbunabali, and Oroworokwu) using non-probability sampling method in order to arrive at a sample size of 165. The research adopted the descriptive survey method for the design as well as questionnaire. The tested hypothesis in chapter four used the Pearson product moment correlation coefficient method. The major findings reveal that, there is a significant relationship between the comparative effect of trade fair and the sales of fake and adulterated drugs. It is recommended that government should ensure massive enlightenment of the public because it is a great way of educating them on the effect and differences between genuine and fake drugs.

1. INTRODUCTION

As the world's population keep increasing more people are suffering from ailments and therefore required drugs, fake advantage of the situation to exhibit and sell out fake and adulterated drugs in trade fair as an avenue that produces quick money. Whether harmless or not, fake and adulterated drugs are 100% illegal. (Akunyili, D.N. 2010).

Exhibition of products in the trade fair, is a vital tool in promoting, creating customer awareness about new product and existing ones and also improving brand loyalty including Pharmaceutical Product (drugs) both good, fake and adulterated one's.

Fake and adulterated drugs may include product with the correct ingredients but fake packaging, with wrong ingredients without active ingredient or with insufficient active ingredients not only expired drugs.

Therefore, preventing this problem is a primary duty of every responsible nation in order to save the lives of her People.

2. REVIEW OF RELATED LITERATURE:
THEORETICAL FRAMEWORK:

Mercantilist Trade Theory: Mercantilist provided ideas on trade fairs, the doctrine was made up of many features and it was highly nationalistic and considered the welfare of a nation as of prime importance. According to the theory, the most important way for a nation to become rich and powerful is to exhibit its products and export more than its import; some of the mercantilist is jean Baptist Colbert and Thomas Hobbes.

It was understood that, the most important was in how a country could be rich was by acquiring precious metals such as gold. This was achieved by ensuring that the volume of products produced is in large quantity.

Forwards the end of 18th century, the economic policies of mercantilist came under strong attack. David Hume criticized the favorable trade balance as being short run phenomenon which could be eliminated automatically over time. The other nation is likely to relate.

Mercantilist was also attacked for their static view of the world economy. Adam Smith also criticized the nation that the world wealth is fixed with the advantages of specialization and division of labour. With specialization and division of labour, the general level of productivity within a country will increase.

Despite the criticism faced by the foundation of mercantilist, the effect is still alive till day; new mercantilism now emphasized employment rather than holding some gold. They also postulates that exports are beneficial as job are provided domestically. Import are considered bad as jobs are taken away and transferred to the foreign workers. To the new mercantilist, trade is a zero sum activity which a country must loose for the other to gain and there is no acknowledgment that trade can provide benefits to all country.

3.   CONCEPTUAL FRAMEWORK:

Promotion methods vary depending on the native of the product handled, promotion could take the form of personal or non- personal positive, in all instance the objective is to create awareness and thus provoke inquisitiveness and demand for the product consequently, literature, on sales promotion could be studied for review of literature on trade fair, especially where the literature on the latter is lacking. Gerald Earls et al (1989) argued that no promotional activity plan can be carried out in isolation. He pointed out that only promotion involves everything (including all that we do in trade fairs) and that only if the services elements are together, of the right level, well final conversion to purchase (sales occur). And this stand in agreement with that of Professor Onyebuagu as quoted in the opening paragraph above.

Therefore, considering some literatures on trade fair as generally as an umbrella and then literatures on trade fair as particular activity with sales promotion. Ishag Suliman in his article tittled "Tools of Promoting sales/services" described trade fairs as 'exhibition'. He argued that exhibition is one of the most aspects of sales promotion pointing out that trade exhibition is a tools used by marketers or sales promoters to display the product to the public consumers at a particular time and place.

Fidel Onyeneke and Nneanna Oji saw trade fair as avenue for promoting sales generally. Thus observation is a continuation of our earlier stand that trade fair is synonymous with the view of Professor Onyebuagu - Writing on types of promotional methods, the marketing Professor. Adduced that in all instances, whether personal or non-personal selling the objectives is to create awareness and thus provoke inquisitiveness and demand for the product.

Adinka et al (1996) opined that sales promotion is that something extra that an arouse interest create a buying desire, and spark immediate reaction from customers, middlemen or company's sales force. They went further to say that it (sales promotion) is the name that is applied to special kind of sales accelerating activities not necessarily classified as advertising personal selling or publicity and concluded that sales promotion is considered as special selling effort.

Gerald Earls and Patrick Forsyth (1989) put it direct and said that sales promotion is an inducement aimed at directly persuading a specified target audience to achieve on or more

defined objectives. They concluded that it is a method of persuading people to take a course of action, while without that persuading they well not normally take.

Charles W. Lamb et al make a clear link between sales promotion and trade fair or sales exhibition when they said that sales promotion also includes display and exhibition. They motioned some of the mechanisms used as free samples purchase context, product demonstration and that all those method induce consumers to make spontaneous purchase. They defined promotion as a communication by marketers that inform, persuade and remind potential buyers of product, to influence opinion and elicit response. But this definition seemed to state the objective rather than definition of sales promotion. However, Norman Goyoru et al

(1986) shared and expended theses view when they said that promotional strategy is the process of developing and maintaining a communication with that utilized company resources to their full potential in a way that is competitively attractive to the target markets which contribution to the company's short-run and long- run marketing goals and organizational goals.

Ezekiel Okereke Aric, (1993) described trade fair as on way of promoting industrial activities. This view, no doubt as a broader meaning of trade fair and suggest the function rather than the meaning. A onetime governor of River State, Dr. Peter Odili though not a marketer, described trade fair as an occasion for exhibit of goods and services and a form for producing and manufacturing national at different levels of technological developing to compare skills and models for industrial growths and global economic expansion.

Indeed, trade fair are gradually making the world to have an Ammon market; inter marriage of cultures and values and increasingly foreign ahead to remove destination obstacles in marketing. Nwodo believes that trade fair is and occasion which offers participants and exhibitors an opportunity to explore new market, establish new trade link and foster better understanding and friendship among people regardless of race creed or nationality.

Adinka et al saw trade fairs from company' viewpoint and asserted that trade fair are form of promotional device that enables competitors companies to show and demonstrate their product to both middlemen and ultimate consumers.

They further stated that although orders can be taken, exhibitions are primarily designed to lay solid foundation for future sales, promotion of public relations and provide feedback for advertising relation. But the definition of trade fair as given by Sam

C. Nweake (1998) seems to be encompassing and more relevant to the research work or study.

He said that trade fair is a unique forum for cross fertilization of ideas, and veritable environment to market our products, enhance our innovational skills and to analyze the economic trends for our individual cooperates and national goals. Adinka et al had these in mind when they said in trade fair, exhibition are given an opportunity to know more about the competitors product and strategies, and at the same time, the competitors learn the exhibitors strategies.

4. RESEARCH METHODOLOGY:

The focus here is on the analysis of the data collected through appropriate statistics tools of the study such as tables and percentages. From the analysis of the questionnaire distribution and returned, it is necessary to recall that out of the total number of 165 copies of the questionnaire distributed, 150 copies were completed while 15 copies of the questionnaire were not returned.

HYPOTHESIS:

H_{01}: There is no health implication in the sales of fake and adulterated drugs during trade fair.

H_{02}: There is no economic benefit of trade fair on sales of fake and adulterated drugs.

3.1 Presentation on Questionnaire Response Rate! Or Questionnaire Administration and Retrieval (Questionnaire Distributed, Returned and Not Returned)

Areas of Respondents	No. of Questionnaire Distributed	% Distributed	No. of Questionnaire Returned	% Returned	No. of Questionnaire not Returned	% not Returned
Mile 1 Diobu	65	39.4	60	40	5	33.3
Ogbunabali	50	30.3	45	30	5	33.3
Oruowurokwu	50	30.3	45	30	5	33.3
Total	**165**	**100**	**150**	**100**	**15**	**100**

3.2 ANALYSIS OF RESPONSE

Sex of the Respondents

Gender	No. Of Respondents	% Distribution
Male	80	53.3
Female	70	46.7
Total	**150**	**100**

Source: Field study 2017

3.2 Above shows that 80 (53.3%) of the respondents are Male while 70(46.7%) are Female. This shows that the number of male is more than the female gender.

3.3: AGE OF RESPONDENTS

Gender	No. Of Respondents	% Distribution
7oyrs-4oyrs	60	40
4oyrs -30yrs	60	40
30yrs -25yrs	30	20
Total	**150**	100

Source: Field study 2017

3.3 shows that 60 (40%) of the respondents fall within the age of 70(40yrs, 40-30yrs, while 30(20%) fall within the age of 30-25yrs.

3.4 DATA PRESENTATION AND ANALYSIS

S/N	QUESTIONS/STATEMENT	SA	A	SD	D	TOTAL
1	Trade fair has a lot of economic benefit	60	30	40	26	150
2	Fake an adulterated drugs have a lot of 50 negative effect on human health	50	45	30	25	150

3.5 TESTING OF HYPOTHESIS

Questions 1 and 3 are used by the researcher in testing the hypothesis in the study. Variable "x" represent strongly agree and agree (SA and A), variables "Y" represent strongly disagree and disagree (SD and D).

Ho_1: There are health implications in the sales of fake and adulterated drugs during trade fair.

Ho_2: There are no health implications in the sales of fake and adulterated drugs during trade fair.

CONTINGENCY TABLE

QUESTIONS/STATEMENT	SA	A	SD	D	TOTAL
Trade fair has a lot of economic benefit	60(40%)	30(20%)	40(26%)	20(13.3%)	150
Fake an adulterated drugs have a lot of negative effect on human health	50(33.3%)	45(30%)	30(20%)	25(16.7%)	150

Variables X	60	30	50	40	50	45	55	40
Variables Y	40	20	30	30	30	25	25	30

S/N	X	Y	XY	X^2	Y^2
1	60	40	2,400	3,600	1,600
2	50	30	1,500	2,500	900
	$\sum x= 370$	$\sum y = 230$	$\sum xy = 10,900$	$\sum x^2 = 17,750$	$\sum y^2 = 6,850$

$\sum x$ = 370
$\sum y$ = 230
$\sum xy$ = 10,900
$\sum x^2$ = 17,750
$\sum y^2$ = 6,850

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2) - (\sum)^2][n(\sum y^2) - (\sum y)^2]}}$$

$$r = \frac{8(10,900) - (370)(230)}{\sqrt{[8(17,175) - (370)^2][8(6,850) - (230)^2]}}$$

$$r = \frac{87,200 - 85,100}{\sqrt{(142,000 - 136,900)(54,800 - 52,900)}}$$

$$r = \frac{2,100}{\sqrt{(5,100)(1,900)}}$$

$$r = \frac{2,100}{\sqrt{9,690,000}}$$

$$r = \frac{2,100}{3,113}$$

$$r = \mathbf{0.67}$$

This shows that, there is a strong relationship between x variable and y variable.
The X represents independent variable while the Y represents dependent variable.
T-Test
Illustration
Step I: The use of Trail – Test
H_1: < 0
H_0: p - c
Step II: Degree of Freedom (df)

$$t = r\sqrt{\frac{n-2}{I - r2}}$$

Step III: Significant level at 95% confidence

Step IV: 0.5 = (n-2), (8-2) – df from the t-test critical value = 1.943

$$t = 0.67 \sqrt{\frac{8-2}{1-(0.67)2}}$$

$$t = 0.67 \sqrt{\frac{6}{1-04489}}$$

$$t = 0.67 \sqrt{\frac{6}{0.5511}}$$

$$t = 0.67 \sqrt{10.8873}$$

t = 0.67 x 3.30

$$t = \mathbf{2.211}$$

DECISION RULE

The rule states that (Hi) should be accepted while (Ho) should be rejected if the sample t-test correlation is greater than the critical value and opposite become the case.

The t-test correlation sample shows that, there is a strong relationship between the independent variable x and dependent variable y. This is because the t-test which is 2.211 is greater than the critical value 1 .943 at 0.05 significance level, Degree of Freedom 6 and a'pha of 0.5 and 95% confidence.

TEST OF HYPOTHESIS 1 AND 2

H_{01}:   There are no economic benefits of trade fair in the sales of fake and adulterated drugs

H_{02}:   There are economic benefits of trade fair in the sales of fake and adulterated drugs.

S/N	X	Y	XY	X^2	Y^2
1	60	40	2,400	3,600	1,600
2	50	30	1,500	2,500	900
	$\sum x = 370$	$\sum y = 230$	$\sum xy = 10,900$	$\sum x^2 = 17,750$	$\sum y^2 = 6,850$

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2)-(\sum)^2][n(\sum y^2)-(\sum y)^2]}}$$

$$r = \frac{8(10,600)-(360)(230)}{\sqrt{[8(17,050)-(360)^2][8(7,100)-(230)^2]}}$$

$$r = \frac{84,800-82,800}{\sqrt{(136,400-129,600)(56,800-52,900)}}$$

$$r = \frac{2,000}{\sqrt{(6,800)(3,900)}}$$

$$r = \frac{2,100}{\sqrt{26,520,000}}$$

$$r = \frac{2,100}{5,149}$$

$$r = \mathbf{0.39}$$

$$t = r\sqrt{\frac{n-2}{1-r2}}$$

$$t = 0.39\sqrt{\frac{8-2}{1-(0.39)2}}$$

$$t = 0.39\sqrt{\frac{6}{1-0.152}}$$

$$t = 0.39\sqrt{\frac{6}{0.484}} = 7.075$$

$$t = 0.39 \times 7.075 = 2.759$$

$$t = \mathbf{2.759}$$

DECISION RULE

Accept (Hj) and reject (Ho) since the calculated value of t 2.759 > the critical value of 1.943 at 0.05 significance level, degree of freedom of (6), 0.5 alpha and 95% confidence.

This implies that there is a strong relationship between measures taken to combat and sales of fake and adulterated drugs in trade fair.

CONCLUSION:

The comparative effect of trade fair in the sales of fake and adulterated drugs in Port Harcourt metropolises increases the trend which has endangers many consumers health and caused damage to many homes.

Due to the complexity of the drug production and distribution system, there is no single techniques that can eliminate the public health threat posed by fake and is fundamental, involving a wide array of inter-agency actors form within corporation between international bodies and improved partnership with legitimate private supply chain to help reduce the prevalence of fake drugs in Nigeria.

Immediate action would include, increase awareness on the counterfeiting of drugs to the public, reduction in importation of 'drugs and increased local production of drugs which would make drugs cheaper and readily available.

RECOMMENDATION:

The following are the recommendations if implemented will had to a great success on the reduction of the sales of fake and adulterated drugs in the country.

1. The government should ensure massive public enlightenment because it is great way of educating the public on the effect of drugs, counterfeiting, greater emphasis should be in the rural areas where cannot and monitoring of the sources of the drugs in circulation is difficult. People should be informed about newer strategies to identify fake and adulterated drugs such as the use of SMS text messages to check the authencity of a particular pharmaceutical product.
2. There should be effective enforcement of the existing drugs laws in Nigeria. Also tougher penaltus should be given to drugs counterfeiters. This will definitely serve as deterrent to drug counterfeiting in the country.
3. Government is collaboration with NAFDAC, should stamp out corruption among the law enforcement agents. These officials should be monitored regularly and corrupt officials should be identified and be given punishment or dismissed.
4. Regular inspecting of shops and markets where medicines are sold. This should be done by NAFDAC from the army and police in market such as the open air drug market in Onitsha and Anambra State, where it is believed that the bulk of fake drugs distributed in Nigeria originate.
5. Incentive should be given to individual who provide useful information that leads to the conviction of drugs counterfeiters.

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