

ENVIRONMENTAL INFORMATION DISCLOSURE PRACTICES OF PHARMACEUTICAL MANUFACTURING COMPANIES AND CORPORATE RELATIONSHIP WITH HOST COMMUNITIES IN NIGERIA

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Abstract

The study was conducted to examine the influence of environmental information disclosure practices of pharmaceutical manufacturing companies on their corporate relationship with their host communities. Two research questions and two hypotheses guided the study. The population was 20 accountants from selected pharmaceutical manufacturing companies and 30 members of the communities. The instrument for data collection was a structured questionnaire developed by the researcher. The reliability of the instrument was done using Cronbach alpha reliability computation and yielded an index of 0.81. All the copies of the instrument were correctly filled and rationed. Mean and standard deviation were used in analyzing the responses to the research questions while t-test was used in analyzing the hypothesis. The findings revealed that effective environmental information disclosure practices by pharmaceutical manufacturing companies will improve their relationship with their host communities. It was recommended among others that pharmaceutical companies should be encouraged to be disclosing their environmental information as at when due using different regulations.

Keywords: Environment Accounting, Environmental Information, Environmental Information Disclosure Practices and Corporate relationship.

Introduction

In recent time, the need for industrialization and global economic development has contributed to the emergence of many companies. As one of the companies, pharmaceutical manufacturing companies are now engaged in different activities which affect the environment. Ijeoma (2015) rightly observed that the activities of these companies are contributing to continuous environmental degradation. To account for the cost of reducing the effects of these environmental challenges, environmental accounting becomes imperative. The integration of

environmental accounting as a branch of accounting is a pursuit of sustainable development as an object of economic development. With this, companies can account for their environmental activities and their effects on the host community.

Environmental accounting is an approach in accounting that is employed by business organizations to assist them in taking the environment into consideration (Armaya, 2011). Ngwakwe (2008) explained that environmental accounting serves as an instrument that is used by business organizations to comprehend their position in the society as well as its influences on societal behavior and alterations on the state of physical, social and economic environments. Data contained in environmental accounting are not only used internally by business organizations but are disclosed publicly to other stakeholders through environmental disclosure report. Environmental information disclosures as one of the key elements of environmental accounting therefore equips interested users (including pharmaceutical companies) with the knowledge of the position of the organization on environmental issues.

Environmental information disclosure by pharmaceutical companies helps them to communicate social and environmental effects of their actions to the interested users in the society. It revolves around making pharmaceutical companies to always reflect social and environmental issues in their financial statements (Onyali, Okafor and Egolum, 2014). Belal (2001) noted that companies (pharmaceutical companies inclusive) can use environmental information disclosure practice to focus on disclosing the cost of environmental liabilities and other significant environmental cases hereby providing needed environmental information to relevant stakeholders. Environmental information disclosure practices cut across different areas of an organization's activities. Such areas as identified by Uwuigbe (2011) include comprehensive report on all social projects and activities embarked upon by an organization for their host environment and efforts on protection of the environment from environmental waste. Hence environmental information disclosure practices of an organization should incorporate both the cost and effect of pharmaceutical companies' activities in their environment (Kamal, 2015).

According to Uwuigbe (2011), effective environmental information disclosure contributes in creating positive corporate image of the company and as well helps to furnish relevant stakeholders and other interested users with needed information. Kamal (2015) disclosed that effective environmental information disclosure practices will help in addressing public concerns about environmental activities of companies existing in their society.

However, it is worrisome that despite the needs for environmental information disclosure, many companies are not responsive to the environmental information needs of the stakeholders and members of the host communities. In essence there has been an upsurge on environmental degradation which emanates from insensitivity and disregard of activities of increasing number of pharmaceutical manufacturing companies to the host community. This has become a recurring decimal and as well one of the major sources of environmental degradation leading to different environmental challenges. Environmental degradation contributes negatively to the operations of the host communities and companies. No wonder many youth from different host communities usually seem to be aggressive against companies whose environmental activities are not effectively disclosed. Members of the host community and the society are usually kept in the dark as many pharmaceutical companies fail to show details of their environmental activities in their financial statements. This however could be

seen as one of the attendant causes of crisis between companies (pharmaceutical companies inclusive) and their host communities. Adekoya and Ekpeyong (2009) observed that though environmental information disclosures have been mainstreamed into business management, it is still less visible as many firms usually fail to disclose their environmental information.

On the other hand, many pharmaceutical manufacturing companies depend on local natural environment for their raw materials. Continuous harvesting of the natural environment usually poses many challenges to the agricultural needs of the host communities. Without equipping stakeholders with necessary information, the decision making process as it relates to provision of agricultural products will be weakened, thereby contributing to dwindling of the agricultural products of the community. Though some pharmaceutical companies constantly engage in different activities that mitigates the effects of their environmental activities on the environment. Despite how well such activities and programmes might be, if they are not effectively disclosed, the host communities will perceive the company as non-responsive to their environmental needs.

Therefore to curb the increasing rate of environmental disasters, there is an urgent need for companies to become responsive to the environmental concerns of stakeholders. Bearing in mind that the activities of different companies are contributing to environmental degradation which is detrimental to economic growth and development, environmental accounting should be a priority. In this regard, it becomes imperative for accountants who are regarded as the custodians of economic growth and development to take environmental issues more seriously. Thus the study seeks to investigate the influence of environmental information disclosure practices on corporate relationship between pharmaceutical firms and their host communities. Specifically, the study seeks to investigate:

- i. The constituents of environmental information disclosure practices of pharmaceutical companies in Nigeria.
- ii. How environmental information disclosures influences corporate relationship between pharmaceutical companies and their host communities.

Hypotheses

The following null hypotheses were formulated for the study.

- i. There is no significant difference between the mean rating of male and female respondents on the constituents of environmental information disclosure practices of pharmaceutical companies.
- ii. There is no significant difference between the mean rating of accountants and members of the host communities on the influence of environmental information disclosure on corporate relationship between pharmaceutical companies and host communities.

Review of Related Literature

Conceptual Review:

These concepts were x-rayed for the study. Environmental Information Disclosure Practices, Constituents Influence and Corporate Relationship.

The Global Reporting Initiative (GRI):

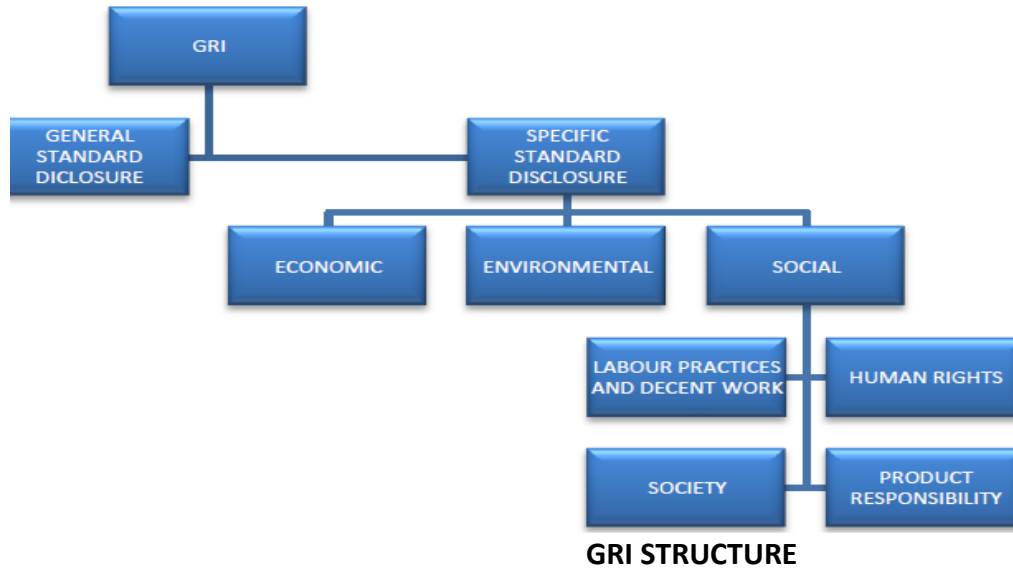
The Global Reporting Initiative (GRI) was established in 1997 by Coalition (CERES) - for Environmentally Responsible Economies in partnership with United Nations Environment

Programme (UNEP). GRI being an organization plays vital roles in the field of sustainable reporting. GRI have two reporting guideline versions issued over time, the first in 2000 and last in 2002 at the World Summit on Sustainable Development (SD) in Johannesburg South Africa. The guidelines issued became popular over time in the corporate sector and got an edge when it issued third generation of guidelines popularly known as G3 in the year 2006. Fourth set of GRI guidelines known as G4 was issued in 2013. GRI guidelines serve as generally accepted framework not only for reporting economic performance of the organization but also environmental and social performance of the organization. GRI has identified three levels of reporting according to the level of disclosures made by the concern in its report that is level A, level B and level C. Level A is the highest level of reporting.

GRI guidelines are very comprehensive in nature, and these are broadly divided into 2 phases. First phase deals with General Standard Disclosures – GSD and the second deals with specific standard disclosure. These disclosures entail general information regarding the company. According to G4 guidelines, Following are the contents of General Standard Disclosures:

- Strategy and analysis
- Organizational profile
- Stakeholders engagements
- Identified material aspects and boundaries
- Report profile
- Governance and
- And ethics and integrity
- Strategy and Analysis
- Organizational Profile
- Identified Material Aspects and Boundaries
- Stakeholder Engagemenile
- Governance
- Ethics and Integrity

G4 phase 11 deals with specific standard disclosure. Further these disclosures are divided into economic, environmental and social aspects. The economic aspect includes various factors like economic performance, market presence and procurement practices etc. followed by the concern. Environmental aspect includes various issues like consumption of material, water, energy, bio - diversity, level of emissions, compliance with rules and regulations, effluents treatment, transportation and environment assessment etc. Third aspect is social aspect, which is further divided into four sub categories that is labour practices, human rights, society and product responsibility.



Environmental Disclosure aspects as per GRI (compiled by Kumar, Roji and Dash 2017)

- Materials
- Energy
- Water
- Biodiversity
- Emissions
- Effluents and Waste
- Products and Services
- Compliance
- Transport
- Overall
- Supplier Environment Assessment
- Environmental Grievance Mechanism

Empirical Review

Yongliang Yang, Jin Wen and Yi Li (2020) analyzed the Impact of Environmental Information Disclosure on the Firm Value of Listed Manufacturing Firms: Evidence from China based on a panel dataset composed of the listed manufacturing firms in China during 2006–2016; the results show that EIDMT exerts a significant impact on the listed manufacturing firms' value. In consideration of the firm's ownership, EIDMT plays a more important role in the firm value of non-state-owned firms than state-owned firms. Furthermore, using a PSM–DID model for eastern, central, and western China, we find that EIDMT significantly affects the firm value in eastern and western China but has little impact on central China.

Andrades, Francisco Javier, Jorge, Manuel, Reyes, María, Yolanda, Calzado, Sancho, María (2021) studied sustainability disclosure by Spanish hospitals: an institutionalist approach. The results reveal that Spanish hospitals seem to use sustainability disclosures for different legitimizing purposes. In general, the results indicate that Spanish hospitals may be driven by symbolic rather than substantive actions to achieve legitimacy from stakeholders.

Originality/value Due to the lack of empirical research on the hospital sector, more research is required to improve understanding of why hospitals disclose sustainability information or not.

Grigoris Gianarakis, Eleni Zafeiriou, Nikolaos Sariannidis and Kyriaki Efthalitsidou (2016) reviewed Determinants Of Dissemination Of Environmental information: an empirical survey. The survey was based on a sample of 92 multinational firms for the period 2009–2013. The methodology employed on our data is the panel data analysis with fixed effects. Findings show that, the environmental performance in terms of Emission Reduction Initiatives and the country's risk premium affects in a positive way the dissemination of environmental disclosures while the results regarding the stock analyst recommendation are controversial. Another important finding is that the firm's value is validated as an insignificant factor for the dissemination level of environmental information. The aforementioned results provide the corporate managers with a tool to attract environmentally friendly investors.

According to Uwaloma and Egbide (2016), making research on sample of 41 listed companies in Nigerian Stock Exchange for the period of 2015. Multiple regression analysis was employed to analyze the data. The study revealed that there is a significant negative relationship existed between firm's financial performance measured by RONW and the level of corporate social responsibility disclosures.

Omalioko Emeka L., Nweze, A. U, and Nwadiolor, E. O (2020) empirically investigated the effect of social and environmental disclosures on performance of non-financial firms in Nigeria. The findings generally indicate that corporate social and environmental disclosures have significantly influenced firms' performance at 5% significant level. Based on this, the study concludes that social and environmental disclosures have positively improved firms' performance over the years. The study however suggests that firms should have positive disposition towards social and environmentally friendly practices and also disclose more of this information in their annual reports as the level of these information disclosures have exerted significant influence on firms' performance over the years.

Pratten and Mashat (2014) found significant positive association between the level of environmental disclosures and performance of manufacturing firms in Canada. The study used OLS and measured social and environmental disclosure using the index of environmental disclosure and recommend for firms to comply with this disclosure as it has positively influence firm's performance over the years. Patten (2012) in his study on corporate social and environmental disclosures and profitability level of listed manufacturing firms in India adopted the variables of waste management disclosure and return on capital employed with the use simple regression model and found significant positive association between waste management disclosures and firms ROCE. The study however concludes that environmental information disclosure influences firms' performance. Kowaleski (2014) studied the effect of non-financial information on shareholders' investment decision making explored the statistical test tool of OLS, using the variable of ROA and environmental disclosures as index for non-financial information and found that the level of firms' environmental disclosures influences its performance. The study recommends for high level of this disclosure in corporate reporting for investors' consumption. This seems agreeable with the study of Gelb (2017) on environmental disclosures and corporate performance in Japan who found significant positive between the level of environmental disclosure of firms and performance measured by ROA.

This is in disagreement with the study of Makori and Jagong (2013) who explored the test tool of simple regression and found that environmental disclosure is negatively related to firm's performance measured by return on investment (ROI). Adjound and Amar (2015) on effect of non-financial information disclosures on performance of manufacturing firms in France explored the test tool of simple regression emphasizing on the environmental aspect of non-financial reporting and found significant positive association between the level of environmental disclosures and firms performance measured by ROA. The study concludes that environmental disclosures have positive impact on firm's performance. This also agrees with the study of Brockman (2015) who on the same vein established the statistical test tool of OLS and collected data from the annual reports and accounts of the selected listed manufacturing firms in Italy and found significant positive association between environmental disclosure and firms' performance measured by Net Assets per Share. The study concludes that environmental disclosures reflect useful information that may have financial effect on investment decisions. This is not in agreement with the priori expectations of Lang (2016) who found social and environmental disclosures negatively related with firm's performance over the years. The study explored the test tool of regression model and concludes that the level of firm's environmental disclosures cringes her performance. The study of Nahiba (2017) on non-financial disclosures and performance of manufacturing firms in India used the variable of environmental disclosures, corporate governance disclosure and firms Net Assets per Share. The study used regression model and found significant positive association between non-financial disclosures and firms' performance over the years.

Guthrie, Cuganesan and Ward (2016) in their study on social and environmental reporting and its effect on performance of food and beverage firms in Australia note that quality social and environmental disclosure influences firm's performance. The study explored the use of dummy variable and applied the test tool of OLS and recommended that shareholders should look beyond the quantitative information in the companies report and its footnote. Much emphasis should also be placed also on qualitative information provided in the companies report for investment decision making. This is contrary to the studies of Amran and Siti-Nabiha (2017), in their study on corporate social reporting in Malaysia established simple regression model and found significant negative relationship between corporate social reporting and firms' performance. The study recommended on the relevance of quantitative information sufficed in the companies report this is disagrees with the study of Wibowo (2015) on effect of non-financial disclosures on performance of Italian listed Firms explored simple regression model who measured non-financial information using corporate social responsibility disclosure and found positive correlation between CSR disclosures towards financial performance. The study however concluded that CSR disclosure has improved firm's performance.

Barnali Chaklader, and Puja Aggarwal Gulati (2015) examined A Study of Corporate Environmental Disclosure Practices of Companies Doing Business in India and found that in all the four years, size and environmental certification are statistically significant at the 1 per cent level and are positively associated. This indicates that bigger-sized companies and the environmentally certified companies by an external agency disclose more environmental information. Environmental certification reduces the agency cost as it reduces the monitoring

cost since the firms voluntarily follow an external set of measured objectives. No other variable was found to be significant.

Methodology

The study adopted descriptive survey design. The population of the study comprised of 20 accountants from 10 selected pharmaceutical manufacturing companies in Nigeria and 30 members of the host communities of the companies. The entire population was used given rise to a population of 50 respondents. Two objectives of the study, research questions and hypothesis guided the study. The instrument for data collection was a four-point scale researcher adopted questionnaire with 18 items adopted in two clusters. The responses were patterned thus: Strongly Agree (SA) -4 points, Agree (A) -3 points, Disagree (D)- 2 points, Strongly Disagree (SD)- 1 point. The reliability of the instrument was ensured by trial testing it in six selected pharmaceutical manufacturing companies in Nigeria that were not used for the study and it yielded a reliability index of 0.81. Data collected were analyzed using mean and standard deviation to answer the research questions while t-test was used to test the hypothesis at 0.05 level of significance. Any mean rating of 2.50 and above was taken to mean score below 2.50 showed disagreements to the option.

Results

The findings of the study are presented below:

Research Question 1

What are the constituents of environmental information of pharmaceutical companies in Nigeria?

S/N	Environmental information consist of reports on the following	Mean	SD	Decision
1	Scholarship offered to members of host communities	3.30	0.58	Agree
2	Health and safety expenditures for members of host communities	2.67	0.64	Agree
3	Awards and social expenditure	3.76	0.70	Agree
4	Sponsored education programmes	3.35	0.83	Agree
5	Government partnered public health campaign	2.53	0.78	Agree
6	Infrastructural development for host communities	3.16	0.69	Agree
7	Companies donations to charity	3.03	0.85	Agree
8	Expenditure on ensuring safer products	2.81	0.76	Agree
9	Voluntary allocation of money for environmental protection	3.42	0.91	Agree
10	Efforts towards reduction of environmental waste	2.61	0.72	Agree

11	All companies environmental friendly performance	3.13	0.63	Agree
	Grand mean	2.98	0.64	

Table 1: mean responses of respondents on the constituents of environmental information of pharmaceutical manufacturing companies in Nigeria.

The result in table 1 shows that the respondents agree that all the items are environmental information expected to be contained in environmental information report of pharmaceutical companies as they had mean ratings above 2.50. However the grand mean of 2.98 which is above the 2.50 cut off point indicates that all the items in table 1 are usually contained in environmental information report.

Research Question 2

How does environmental information disclosure influence corporate relationship between pharmaceutical manufacturing companies and their host communities?

Table 2: Mean responses on how environmental information disclosure influences corporate relationship between pharmaceutical manufacturing companies and their host communities,

S/N	Environmental information disclosure influences	Mean	SD	Decision
1.	Positive public perception about the corporate image of the companies	3.47	0.75	Agree
2	Protection of companies' assets by members of the community	3.16	0.86	Agree
3.	Positive interactions between companies and members of host communities	3.02	0.61	Agree
4.	War against vandalization of companies property	2.68	0.93	Agree
5.	Goodwill companies receive from the host communities	3.00	0.77	Agree
6.	Goodwill host communities receive from the companies	3.48	0.58	Agree
7.	Level of social relationship between companies and host communities	2.90	0.82	Agree
	Grand mean	3.11	0.74	

From the result in table 2, the respondents agreed with all the items as they have mean value above 2.50 which is the cutoff point. Therefore the respondents agreed that environmental information disclosure influences corporate relationship between pharmaceutical manufacturing companies and their host communities.

Hypothesis 1

Table 3: t-test analysis of responses on constituents of environmental information of pharmaceutical manufacturing companies

Grade	N	Mean	Standard deviation	DF	t-cal	t-crit
Male	16	2.50	1.74	48		
Female	34	2.25	0.73	48	1.17	2.01

The analysis of the results shown in table 3 shows that the t-calculated is less than the t-critical, therefore the null hypothesis is retained. This means that there is no significant difference on the responses of male and female respondents on the constituents of environmental information of pharmaceutical manufacturing companies.

Table 4: t-test analysis of responses on how environmental information disclosure influences relationship between pharmaceutical manufacturing companies and their host communities.

Status	N	Mean	Standard deviation	Df	t-cal	t-crit
Accountants	20	3.67	0.50	48		
Community members	30	2.08	0.65	48	0.66	2.01

The analysis of the results shown in table 4 shows that the t-calculated of 0.66 is less than the t-critical value of 2.01 at 0.05 level of significance. Thus, the null hypothesis that there is no statistically significant difference on the responses of the respondents on how environmental information disclosure influences corporate relationship between pharmaceutical manufacturing companies and their host communities is upheld.

Discussion

The findings from the results of the data analysis of items in table 1 shows all the items as contained therein are constituents of environmental information of pharmaceutical manufacturing companies with a grand mean of 2.98. This finding is in line with that of Uwuigbe (2011) who outlined that environmental information should contain information based on themes like health, energy, community project involvement among others. The findings agreed with Kamal (2015) that quantity of items in environmental information reports of companies include environmental management, education and training, waste management, environmental spending among others.

Research question 2 as contained in table 2, dwelt on how environmental information disclosure influences corporate relationship between pharmaceutical manufacturing companies and their host communities. The study revealed that effective environmental information disclosure has positive influence on the relationship between pharmaceutical manufacturing companies and host communities. This is in line with the view of Armaya (2011) asserted that environmental information disclosure to relevant stakeholders and other interested users of environmental accounting can be a sure way of equipping them with clear understanding of companies' activities. With such understanding their interest will then be on how to assist

companies in decision making which can curb the effects of their environmental activities on host communities.

Hypothesis analysis showed that the respondents did not differ significantly on their responses on how environmental information disclosure influences corporate relationship between pharmaceutical manufacturing companies and their host communities. The calculated t-value of 1.17 is below the critical t-value of 2.01 which implies that the null hypothesis is retained.

Conclusion and Recommendation

Based on the findings of the study, the study concludes that the constituent of environmental information includes information on education, environmental protection and infrastructural development expenditure. In order to improve the quality of corporate relationship between pharmaceutical manufacturing companies and host communities, it is imperative to always disclose environmental information.

The study therefore recommends that pharmaceutical companies should always prepare their environmental reports to capture areas of needs of the host communities and other environmental protection activities of the company. Also there should be stringent policies and penalties to encourage and guide companies on disclosure of environmental information as at when due.

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