Multinational Oil Companies in Nigeria and Corporate Social Responsibility in the HIV/AIDS Response in Host Communities

Forthcoming: Local Environment

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1 This working paper also appears in the Development Bank of Nigeria Working Paper Series.
Research Department

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January 2019

Abstract
We assess the impact of corporate social responsibility (CSR) of multinational oil companies (MOCs) on HIV/AIDS prevalence in Nigeria’s oil producing communities. One thousand, two hundred households were sampled across the rural communities of Niger Delta. Using logit model, the main result indicates that General Memorandum of Understandings (GMoUs) have not significantly impacted on factors behind the spread of HIV/AIDS in rural communities. This implies that the impact of the disease on MOCs business, employees and their families, contractors, business partners and the oil communities has not inclined downward. The findings suggest that CSR offers an opportunity for MOCs to help address HIV/AIDS prevalence through a business case for stakeholders’ health in the region. It calls for MOCs to improve GMoUs health intervention on sensitization campaigns, funding testing and counselling centers, subsidizing anti-retroviral drugs, prevention of mother-to-child transmission, rehabilitation of orphaned and vulnerable children and other cares for people living with AIDS.

Keywords: corporate social responsibility; multinational oil companies; HIV/AIDS initiatives; logit model; Niger Delta.

JEL Classification: J43; O40; O55; Q10

1. Introduction
HIV/AIDS is one of the most serious health problems worldwide, with an estimated 35 million adults and 3.2 million children living with the virus in 2014 (UNAIDS, 2014). According to African Development Report (2015), HIV/AIDS is one of the leading causes of death in sub-Saharan Africa. In Nigeria, the number of people living with HIV/AIDS as at 2014 is estimated to 3.4 million, making it the country that has the third largest number of people living with the virus in the world (NSCP, 2015). The Niger Delta region of Nigeria, where oil is mainly extracted, and multinational oil companies (MOCs) maintain a significant presence has an average prevalence rate of 5.3 percent, compared to the national average of 5 percent, and nearly half of the regions
States (Akwa Ibom, Cross River, Delta and Rivers) have either the same or higher prevalence rates as the national average (FMOH, 2014). The influx of people into the region seems to have increased the pressure on behavioural, economic, socio-cultural and biological factors that tend to influence the spread of HIV/AIDS in the Niger Delta; they come seeking opportunities from oil production (NACA, 2002). Although, many of the migrants end up in the cities, a large population goes into the rural areas. Some fill the gap left by the movement of local people into the cities; they become farmers, fishers, hunters, harvesters of fuel wood and other non-timber forest products, quarry operators and artisans in other trades (UNDP, 2006). Girls and women who have various items but suffer commercial shortfalls readily become victims of predators or voluntarily resort to commercial sex (Uduji and Okolo-Obasi, 2018b). Some of the young rural women that their husbands have migrated to the industrial cities of Port Harcourt, Warri and Eket in search for employment often yield to the pressure from clients to have unprotected sex (Uduji and Okolo-Obasi, 2018b). It is a common practice for hospitals in rural Niger Delta to refuse treatment to people with HIV/AIDS; health workers often decline to treat such patients or treat them unsatisfactorily (Uduji et al., 2018a; Uduji and Okolo-Obasi, 2018c; Uduji et al., 2018b).

Meanwhile, the MOCs in Nigeria via corporate social responsibilities (CSR) programmes have committed substantial resources over the years in helping to improve healthcare in local communities where they operate and even beyond (SPDC, 2013). They support programmes and partnerships to address among others, diseases and epidemics such as HIV/AIDS, Malaria and Tuberculosis (Chevron, 2014). The MOCs have continued to dedicate their capabilities and resources, including people, to support initiatives that improve healthcare delivery in the Niger Delta region. Global Memorandum of Understandings (GMoUs) which represent the new way of working with communities were signed between clusters of communities, MOCs and state governments, creating a unique public — private model to promote economic and social stability. Through the GMoUs, the communities eventually assumed responsibility and accountability for how to use the funding provided by the MOCs and for implementing the programmes selected. MOCs stay involved by participating on local committees and boards that review and approve programmes and by providing annual programme funding (Chevron, 2017).

Notwithstanding the plethora of CSR activities of MOCs in the Niger Delta and other parts of Nigeria, scholars such as Idemudia (2010), Chilaka and Nwaneke (2016), Ekhator (2014), Eweje (2007), Frynas (2009), Edoho (2008), Akpan (2006), Tuodolo (2009), Uduji and Okolo-Obasi (2017), Uduji et al. (2018) and others have argued that the CSR process in Nigeria is not far reaching or deeply entrenched. Thus, it has been contended that some of these CSR initiatives are not carried out on a coherent basis and not always sustained (Amaeshi et al., 2006). Arguably, despite the adoption of various health interventions programmes to improve healthcare in local communities, the sentinel survey rated the zone as having the second highest prevalence of HIV/AIDS after the North-Central geo-political zone (NASCP, 2015). On the other side of the
debate, Ite (2007), Lompo and Trani (2013), Renouard and Lado (2012) support CSR initiatives, and argued that GMoUs have contributed to the area of local community initiatives in the Niger Delta region. Following the foregoing debate, we hypothesize that CSR of MOCs have not significantly reduced the prevalence of HIV/AIDS in the oil-producing communities of Nigeria. Thus, this paper contributes to the public — private partnership debate in HIV/AIDS response from the CSR perspective of MOCs in two areas that have received much attention in the literature.

i. What is the level of multinational oil companies CSR interventions in HIV/AIDS prevalence in the Niger Delta region of Nigeria?

ii. Do GMoUs interventions of multinational oil companies reduce HIV/AIDS prevalence in rural communities of Niger Delta region in Nigeria?

The positioning of this research departs from contemporary African health literature which has focused on, inter alia: nexuses between malaria prevalence, indoor residual spraying and insecticide treated net usage (Picone et al, 2017); maternal immunization and birth weight (Tambi and Atemnkeng, 2018); the cost effectiveness of family planning services (Ssewanyana and Kasirye, 2018; Mugo and Muriithi, 2018); the association between child immunization and child mortality (Adeoti and Oni, 2018); linkages between household well-being, parental care and infant health (Dramani and Laye, 2018; Kasiwa, 2018); determinants of birth weight, neonatal and under-five mortality (Kaba et al, 2018; Machio, 2018) and persistence in child malnutrition (Kumchulesi, 2018).

The further contents of the paper can be adumbrated as follows. Section 2 briefly considers the issues of HIV/AIDS prevalence in Nigeria. Section 3 presents some stylized facts on the African/Nigerian conceptualization of CSR. Section 4 examines the new way of working with communities called the Global Memorandum of Understanding (GMoU). Section 5 describes the methodology. Section 6 provides the main findings and discourse. Finally, section 7 concludes with policy implications.

2. Issues of HIV/AIDS Prevalence in Nigeria

The estimated population of Nigeria in 2014 was about 177, 188, 352; about two-thirds of this population resides in the rural area (FMOH, 2014). The first case of HIV/AIDS in Nigeria was reported in 1986 with the diagnosis of a 13 year — old female hawker, and since then the prevalence has increased from 1.8 percent in 1990 to 5.3 percent in 2014 (NACA, 2015). The major route of transmission of the disease in the country is through sexual transmission (accounting for about 80 percent of HIV infections); about 42 percent of the infections occur among people that are low risk heterosexuals; directly Most—at—Risk-Populations (MARPs) alone contribute about 23 percent of new HIV infections, and their partners contribute 40 percent of new infections (NSCP, 2015).
According to WHO (2007), the risk factors and drivers of the HIV epidemic in Nigeria include early sexual debut, low condom use, transaction sex multiple sexual partners, low perception of risk, transfusion of poorly screened blood, poor injection safety etc. The national response for HIV/AIDS is largely donor-funded, with Nigeria’s contribution comprising of 25 percent of HIV funds; although funding for HIV has increased from 415 million (in 2009) to 577 million dollars (in 2002), the proportion spent on prevention remains low (12.5 percent) in 2012, and out-of-pocket expenditure for HIV services are considerably high (FMOH, 2014).

In Niger Delta region, the prevalence of HIV/AIDS is among the highest in the country (Figure 1), and higher than the national average for Nigeria as a whole (FMOH, 2014). The 2003 sentinel
survey rated the region as having the second highest prevalence (5.8 percent), after the North-Central (7 percent) in the country (Figure 4). The result is alarming, especially when compared to the other regions in Nigeria, such as the South-West at 2.3 percent and the North-West at 4.2 percent (NASCP, 2015).

According to Udoh (2013), the dominant form of transmission of HIV in Niger Delta region is through heterosexual sex; and the prevalence rates are higher for women (aged 15-24) than for men. The gender patterns signify that traditional practices such as polygamy, the holding of concubine make women more vulnerable (Udoh et al, 2009). According to Udonwa et al (2004), the impact of HIV/AIDS has been particularly severe in the Niger Delta rural communities, as the disease wreaks greater havoc where there is poverty, social inequity and general political marginalization. Udoh et al (2008) noted that inadequate health systems in the region prevent the management of the epidemic; the weakening of livelihoods and the social fabric in areas prone to oil exploration creates additional problems in terms of care and support; and the limited access to anti-retroviral therapy.
The factors promoting the spread of HIV/AIDS in developing countries have been broadly categorized as behavioural, economic, socio-cultural and biological, although there are significant overlaps in causes and effects (NACA, 2015; NASCP, 2015). Quite a number of other studies have analyzed the public-private partnership and corporate social responsibility in the HIV response, structural drivers, interventions and approaches in developing countries. They include: Chattu (2015), Amusan (2015), Macassa et al (2017), Fig (2005), Brandao et al (2013), Abreu et al (2005), Nayak (2015), Tekere (2011), Nwauche and Akani (2006), Peterson and David (2010), Heise and Charlotte (2013), Anyanwu (2014), World Bank (2007), Parkhurst (2013), etc. However, the extant literature leaves a gap in HIV/AIDS initiatives from the CSR perspective of MOCs in Nigeria’s Niger Delta. This study further differs from extant literature by explicitly noting the relationship between CSR of MOCs and HIV/AIDS initiatives in rural areas of oil-producing communities in Nigeria.

Figure 4. HIV/AIDS Prevalence by States in Nigeria.
3. **African/Nigerian Conceptualization of CSR**

The challenge for CSR in Africa seems to have been framed by a vision that was distilled in 2000 into the millennium development goals of a world with less poverty, hunger and disease, greater survival prospects for mothers and infants, better educated children, equal opportunities for women, and a healthier environment (UN, 2006). In an African context, Philip (2006) argued that in Africa, the motivation for CSR in African countries comes from the institutional failure of the government, unlike in Western countries, where government pressure on multinational corporations has gone a long way in shaping CSR initiatives. Amaeshi *et al* (2006) have argued that the Nigerian conception of CSR is remarkably different from the Western version and should be aimed towards addressing the peculiarity of the socio-economic development challenges of the country, such as poverty alleviation, healthcare provision, infrastructural development, education, and should be informed by socio-cultural influences like communalism and charity; that CSR in Nigeria might not necessarily reflect the popular Western standard/expectations of CSR, such as consumer protection, fair trade, green marketing, climate change concerns and socially responsible investment. Philanthropic initiatives as CSR by companies are prevalent in Africa (Muthuri *et al*, 2012; Uduji and Okolo-Obasi, 2018a). Thus in Africa, the absence of government in providing amenities for its citizens accentuates the role of multinationals in CSR; while philanthropy is not regarded as CSR in Western countries (Frynas, 2009). Muthuri (2012), relying on the extant literature on CSR in Africa, posited that the CSR issues prevalent in Africa include poverty reduction, community development, education and training, economic and enterprise development, health and HIV/AIDS, environment, sports, human rights, corruption and governance and accountability. Thus, this paper conceptualizes CSR from the African perspective.

In Africa/Nigeria however, philanthropy goes beyond simple charitable giving. HIV/AIDS is a case in point, where the response by business is essentially philanthropic (HIV/AIDS not being an occupational disease. Hence, this paper explains the outcome of the quantitative result from Visser (2006) analogy of CSR which suggests that the relative priorities of CSR in Africa are likely to be different from the classic, American ordering. Visser explored the nature of CSR in an African context. The exploration of CSR in Africa was used to challenge the accuracy and relevance of Carroll (1991) CSR Pyramid. Visser proposed that Carrolls CSR Pyramid may not be the best model for understanding CSR in general, and particularly in Africa. However, the finding remains speculative and provocative and would therefore benefit from further empirical research.

4. **Global Memorandum of Understanding (GMoU) in Nigeria**

In Nigeria, each year, the MOCs invest in social projects and programmes in communities primarily in the Niger Delta (Ite, 2004; Uduji and Okolo-Obasi, 2018a). The initial investments were in agricultural development programmes in the early sixties and have grown over the years
to include health care, roads and civil infrastructure, water projects, small business and education, which could benefit the oil producing communities (Philips, 2006; Uduji and Okolo-Obasi, 2018b). Over the years, the MOCs have constantly improved on how they engaged with local communities to deliver these projects. In 2006, the MOCs introduced a new way of working with communities called the Memorandum of Understanding (GMoU), which represent an important shift in CSR approach, placing emphasis on more transparent and accountable processes, regular communication with the grassroots, sustainability and conflict prevention (SPDC, 2013).

According to Aaron (2012), a GMoU is a written statement between the MOCs and a group (or cluster) of several communities in the Niger Delta region. Clusters are based on local government or clan/historical affinity lines as advised by the relevant state government. The governing structures are well defined, with a 10-person Community Trust, a Cluster Development Board (CDB) and a steering committee chaired by the State Government (SPDC, 2013). The CDB functions as the main supervisory and administrative organ, ensuring implementation of projects and setting out plans and programmes. It is the main decision-making committee, and the GMoU enables representatives of state and local governments, MOCs, non-profit organizations (such as development NGOs) to come together under the auspices of the CDB as the governing body (Alfred, 2013).

**Figure 5.** Constituent Administrative States of the Niger Delta, Nigeria

Under the terms of the GMoUs, the communities decide the development project they want, while MOCs provide the secured funding for five years, ensuring that the communities have stable and reliable financing as they undertake the implementation of their community development plans (Ite, 2007; Uduji et al, 2018). By the end of 2012, MOCs had signed agreements with 33 GMoU clusters, covering 349 communities in Niger Delta (Figure 5), but had to face the challenge of how to determine the success or failure of the initiatives, either in terms of its effect on community development or its impact on corporate community relations. In 2013, to address this problem, MOCs launched the Shell Community Transformation and Development Index (SCOTDI) which represent an innovative framework that integrates and adopts a number of international principles into a composite index in a manner that is responsive to local context (Idemudia and Osayande, 2016), SCOTDI becomes the composite index for weighing, scoring and ranking the performance of GMoU cluster based on a five key criteria of transparency and accountability, inclusiveness and participation, governance and democracy, business climate and progress towards sustainability, which are consistent with international best practices in inclusive economic development. According to Idemudia and Osayande (2016), the SCOTDI five criteria constitute the criteria reference system that are similar to the criteria used by a resemblance study that undertook a social performance review of gold mine in Papua New Guinea (Macintyre et al, 2008). This study draws from SCOTDI in rating the impact of the GMoUs on HIV/AIDS intervention from the perspective of the rural household in Niger Delta communities.

5. Methodology
The study adopts quantitative methodology, as a contribution given the paucity of quantitative works in the region (Uduji and Okolo-Obasi, 2017; Uduji et al, 2018).

5.1. Study Area
The survey research technique was used with the aim of gathering cross-sectional information from a representative sample of the population. The survey is essentially cross-sectional in that it describes and interprets what exists at present in the region (Table 1).
## Table 1. Social Characteristics of Oil Producing Communities in Niger Delta, Nigeria as at 2017

<table>
<thead>
<tr>
<th>State</th>
<th>2006 Population</th>
<th>Size of the State in KM²</th>
<th>Major Ethnic Group</th>
<th>Violence Level</th>
<th>% Oil Production</th>
<th>Location of Oil</th>
<th>MOCs</th>
<th>Movement Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akwa Ibom</td>
<td>3,902,051</td>
<td>8,412 Km²</td>
<td>Ibibio, Anang and oron</td>
<td>Significant</td>
<td>45</td>
<td>Off shore</td>
<td>Exxon Mobile, Shell, Agip</td>
<td>MEND, IWAAD, Afigh, Ekid, Niger Delta Avengers</td>
</tr>
<tr>
<td>Abia</td>
<td>2,881,380</td>
<td>5,834 Km²</td>
<td>Igbo</td>
<td>Moderate</td>
<td>10</td>
<td>Off shore/On Shore</td>
<td>Shell, Agip, Total</td>
<td>IPOB, MASSOB, Niger Delta Avengers</td>
</tr>
<tr>
<td>Bayelsa</td>
<td>1,704,515</td>
<td>10,773 Km²</td>
<td>Ijaw, Nembe, Ogbia and Epie-Atissa</td>
<td>High</td>
<td>40</td>
<td>Off shore/On Shore</td>
<td>Exxon Mobile, Shell, Agip, Total</td>
<td>MEND, IYC, Delta Avengers</td>
</tr>
<tr>
<td>Cross River</td>
<td>2,892,988</td>
<td>13,564 Km²</td>
<td>Ibibio, Anang and oron, Yakkur Ogoja, Itigidi</td>
<td>Moderate</td>
<td>12</td>
<td>Off shore/On Shore</td>
<td>Shell, Agip, Total</td>
<td>MEND, IWAAD, Ekid Delta Avengers</td>
</tr>
<tr>
<td>Delta</td>
<td>4,112,445</td>
<td>16,842 Km²</td>
<td>Urhobo, Ijaw, Isoko, Itsekeri, and Anioma</td>
<td>High</td>
<td>38</td>
<td>Off shore/On Shore</td>
<td>Shell Chevron, Total</td>
<td>IYC, Itsekiri Youth Council, Urhobo Economic foundation, MEND, Niger Delta Avengers</td>
</tr>
<tr>
<td>Edo</td>
<td>3,233,366</td>
<td>14,825 Km²</td>
<td>Benin, Ishan, Akokoedo, Etsako, Ekan Owan</td>
<td>Low</td>
<td>18</td>
<td>Off shore/On Shore</td>
<td>Shell, Agip, Total</td>
<td>Egbesu, MEND, Niger Delta Avengers</td>
</tr>
<tr>
<td>Imo</td>
<td>3,927,563</td>
<td>5,100 Km²</td>
<td>Igbo, Ndoni</td>
<td>Moderate</td>
<td>10</td>
<td>Off shore/On Shore</td>
<td>Shell, Agip, Total</td>
<td>IPOB, MASSOB, Niger Delta Avengers</td>
</tr>
<tr>
<td>Ondo</td>
<td>3,460,877</td>
<td>12,432 Km²</td>
<td>Ijaw, Yoruba, Epie-Atissa</td>
<td>Moderate</td>
<td>10</td>
<td>Off shore/On Shore</td>
<td>Shell Chevron, Total</td>
<td>OPC, MEND, Niger Delta Avengers</td>
</tr>
<tr>
<td>Rivers</td>
<td>5,198,716</td>
<td>11,077</td>
<td>Ndoni, Ijaw &amp; Ilkwere, Ogoni</td>
<td>High</td>
<td>40</td>
<td>Off shore/On Shore</td>
<td>Shell Chevron, Total, Halliburton</td>
<td>MOSOP and MEND, Niger Delta Avengers</td>
</tr>
</tbody>
</table>

**Source:** Authors’ Compilation Based on Household Survey

### 5.2. Sample size
To make for good responses, a multi-stage sampling technique was used to select the research respondents. The sample size was determined using Taro Yamane (1964) for finite population (Equation 1).

\[
\frac{n}{1 + N(e)^2}, \quad \text{Equation 1}
\]

where \(n\) = the sample size
\(N\) = Estimated total or finite population of the study area
\(e\) = Level of significance (limit of tolerable error)
\(1\) = Unity (Constant)

The total estimated population of the study area is 31,313,901 persons (UNDP, 2006). The estimated population of the rural communities in the area is about 75 percent (23,485,426) of the total population. This study is focused on the rural household and the average household size in the Niger delta region is 7 persons (UNDP, 2006). Hence, the population of household of interest is approximated at 3,355,061. The study therefore, having a confidence level of 95 percent, margin of error of 5 percent, and a standard deviation of 0.05 percent, we determined a sample size as thus:

\[
\text{Sample size} = \frac{3,355,061}{1 + 3,355,061 \times (0.05)^2} = 400
\]

However, we purposefully multiplied the sample size by three to take the error to the lowest minimum. Hence, the total sample size analyzed in this study was 1,200 respondent households.

5.3. Sampling procedure
The selection of the sample involved multi-stage random samplings. In the first stage, a minimum of three local government areas (LGAs) were randomly selected from each of the nine states of the Niger Delta region. In the second stage, from each of the selected LGAs, three rural communities were randomly selected, giving us sixty rural communities. Finally, out of the selected rural communities, twenty rural households were randomly selected with the help of community leaders and village heads to make up the 1,200 respondents. The entire households have equal chance of being selected, but the first 20 available households were used for the study. The involvement of community heads and gate keepers is to ensure the safety of the field experts in this volatile region of Nigeria.

5.4. Data collection
Data for the study were collected from primary sources using participatory rural appraisal (PRA) technique of semi-structured interview (SSI). The use of participatory research technique in collecting CSR impact data especially as it concerns the rural household is based on the fact that
it involves the people being studied, and their views on all the issues are paramount. The
designed SSI used for the study was divided into two sections. Section one of the instrument
elicited information on the socio-economic characteristics of respondent, while the second
section elicited information on the research objectives. This semi-structured interview
questionnaire was the major tool the study used for the household survey, and it was directly
administered by the researchers with the help of local research assistants. Data for this study was
collected between the months of October 2016 and March 2017. The use of local research
assistants was because of the inability of the researchers to speak the different languages and
dialects of the many ethnic groups of the Ijaws, Ogonis, Ikweres, Etches, Ekpeyes, Ogbas,
Engennes, Obolos, Isokos, Nembes, Okirikas, Kalabarasis, Urhobos, Iteskiris, Igbos, Ika-Igbos,
Ndonis, Orons, Ibenos, Yorubas, Ibibios, Anangs, Efiks, Bekwerras, Binis, Esans, Etsakas,
Owans, etc, in the sampled rural communities.

5.5. Analytical framework
Data collected from respondents in the field were subjected to a series of treatments. Both
descriptive and inferential statistics were used to analyse the data so as to answer the study
questions and test the hypothesis. To answer the first question, (i.e. What is the level of
multinational oil companies CSR interventions in HIV/AIDS prevalence in the Niger Delta
region of Nigeria?), descriptive statistics was used and the results are presented in tables,
figures and charts. The second question (i.e. Do GMOUs interventions of multinational oil
companies reduce HIV/AIDS prevalence in rural communities of Niger Delta region in
Nigeria?), was answered using inferential statistical tool. In answering the second question
and testing the hypothesis, a logit model of receipt and non-receipt of MOCs’s corporate
social responsibility intervention via the GMOU by rural household as functions of selected
socio-economic variables was estimated. For binominal response variables, the logistic link is
the natural logarithm of the odds ratios stated thus:

\[
\log \left( \frac{p_i}{1 - p_i} \right) = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \ldots + \beta_k x_{ik}
\]

Equation 2

Hence, the impact of multinational oil companys CSR activities via GMOU on HIV/AIDS
pandemic in the Niger Delta region in the rural household was estimated using the equation
below.

Logit (HA) = \( \beta_0 + \beta_1 \text{Gmou} + \beta_2 \text{Age} + \beta_3 \text{Gen} + \beta_4 \text{PriOcc} + \beta_5 \text{HHSize} + \beta_6 \text{Edu} + \beta_7 \text{HY} + \beta_8 \text{MS} + \beta_9 \text{YOHM} \)

Equation 3

Where:

HA = Health access (HIV/AIDS). This is access to healthcare in HIV/AIDS related areas
(access to drug, hospital facilities, medical personnel, screening, testing, information and
counseling, care of the OVCs).
GMoU = Multinational oil companies corporate social responsibility via GMOUs (total amount received by the rural household valued in Nigeria naira (NGN); actual variable considered here is the investment in combatting HIV/AIDS embarked upon by the MOCs via the GMOUs as acknowledged by the rural households). This evaluates the odd of a unit increase in the intervention of MOCs.

Age = Age of the household head
Gen = Sex of the household head
PriOcc = Primary occupation of the household head
HHSize = Household size of the respondent
Edu = Highest level of education of the household head
HHY = Income of the household head
MS = Marital status of the household head
YOHM = Income of other household members

*In this model, the main parameter of interest is $\beta_1$ in terms of sign and significance.

5.6. Explanatory Variables
Nine important covariates were included, and we estimated the odd ratios; amongst were - the corporate social responsibility (CSR) of the MOCs using, GMoUs. This is the main variable of the study interest; it is the total receipt of resources by the rural households from the MOCs under GMOUs. The interest of the study was to get the odd ratio of a unit increase of such receipt on the peoples’ access to HIV related health issue denoted by HA, which is the dependent variable. This study hypothesized that any increase in the MOCs’ investments in health sector to fight HIV/AIDS will yield a significant reduction in the spread of the scourge. Also included is the income of the respondents, specified as total income less receipts from the GMoUs, expressed in Nigeria naira (NGN). The study estimated the odd ratio of a unit increase in the income level of the households. Household size is another covariate that was included because it is believed to be an important factor in determining the rural people’ access to quality healthcare. Previous studies show that the lower the number of household members, the more easily they can afford healthcare (NACA, 2015; NASCP, 2015). Also of high importance covariate is the age of the respondent which is included as it plays a major role in the type of social activities that may expose people to the pandemic (UNAIDS, 2014). A primary occupation was included as it helps to actually understand the roles oil workers, sex workers and the likes play in the spread or control of HIV/AIDS. Another variable used is highest educational qualification of the respondent measured in total number of years spent in attending formal schooling. This plays a
6. Main Findings and Discussions
In ascertaining the level of multinational oil companies CSR interventions in HIV/AIDS prevalence in the Niger Delta region of Nigeria, the summary statistics of Table 3 show that the MOCs recognize that HIV/AIDS poses a significant threat to their business, employees and their families, contractors, business partners and the society as a whole in the Niger Delta. There is no doubt that MOCs have played some role in enhancing the social wellbeing of the communities, including combating the spread of the disease in the region through the support for various programmes and initiatives (Figure 6). Figure 8 also provides some evidence for Chevron (2014) report that in March 2014, MOCs announced an additional $1.7 million in their funding support for the community-based prevention of mother-to-child transmission of HIV (PMTCT) project, known as the PROMOT project in Bayelsa State. According to the report, this additional commitment raised MOCs investment for the PROMOT project to $5.3 million. Chilaka and Nwanneke (2016) observed that the project is implemented by Pact Nigeria in partnership with community based organizations (CBOs), to achieve the primary goal of educating and mobilizing the population in targeted communities to reduce mother-to-child transmission of HIV in Bayelsa State.

Table 2. Socio-Economic Characteristics of the Rural Household Head

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>644</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Females</td>
<td>556</td>
<td>46</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1200</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Primary Occupation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farming</td>
<td>474</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Trading</td>
<td>188</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Fishing</td>
<td>193</td>
<td>16</td>
<td>71</td>
</tr>
<tr>
<td>Government/Private Paid Employment</td>
<td>128</td>
<td>11</td>
<td>82</td>
</tr>
<tr>
<td>Hunting</td>
<td>120</td>
<td>10</td>
<td>92</td>
</tr>
<tr>
<td>Unemployed</td>
<td>97</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1200</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Age of Respondents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 20 years</td>
<td>35</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>21-30 years</td>
<td>135</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>31-40 years</td>
<td>205</td>
<td>17</td>
<td>31</td>
</tr>
<tr>
<td>41-50 years</td>
<td>379</td>
<td>32</td>
<td>63</td>
</tr>
<tr>
<td>51-60 years</td>
<td>307</td>
<td>26</td>
<td>88</td>
</tr>
</tbody>
</table>
According to Chevron (2017), the additional support facilitated the expansion of the reach of the PROMOT project to the local government areas in Bayelsa State. In September 2014, reports of Chevron (2014) show that 30,738 pregnant women had been tested for HIV and received their results; 117,898 people were reached with HIV prevention messages; 431 HIV-Positive pregnant women were known to be on anti-retroviral (ARV) prophylaxis; and 449 including community extension workers were trained on the latest state of the art of PMTCT approached and techniques; and 253 HIV-exposed infants tested for HIV at six weeks.

**Level of Education**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>276</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>FSLC</td>
<td>593</td>
<td>49</td>
<td>72</td>
</tr>
<tr>
<td>WAEC/WASSCE</td>
<td>253</td>
<td>21</td>
<td>94</td>
</tr>
<tr>
<td>B.Sc and Equivalent and above</td>
<td>78</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1200</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Marital Status**

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>96</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Married</td>
<td>669</td>
<td>56</td>
<td>64</td>
</tr>
<tr>
<td>Widow</td>
<td>188</td>
<td>16</td>
<td>79</td>
</tr>
<tr>
<td>Divorced</td>
<td>121</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Separated</td>
<td>126</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1200</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Household Size**

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4 Person</td>
<td>239</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>5-9 Person</td>
<td>618</td>
<td>52</td>
<td>71</td>
</tr>
<tr>
<td>10-14 Person</td>
<td>201</td>
<td>17</td>
<td>88</td>
</tr>
<tr>
<td>15 Person and above</td>
<td>142</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1200</strong></td>
<td><strong>100</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

**Annual Income Level**

<table>
<thead>
<tr>
<th>Annual Income Level</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 - 50,000</td>
<td>62</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>51,000 - 100,000</td>
<td>175</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>101,000 - 150,000</td>
<td>360</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>151,000 - 200,000</td>
<td>202</td>
<td>17</td>
<td>67</td>
</tr>
<tr>
<td>201,000 - 250,000</td>
<td>173</td>
<td>14</td>
<td>81</td>
</tr>
<tr>
<td>251,000 - 300,000</td>
<td>156</td>
<td>13</td>
<td>94</td>
</tr>
<tr>
<td>Above 300,000</td>
<td>72</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1200</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source:** Authors’ Compilation Based on Household Survey
Figure 6. Type and Scope of CSR Embarked upon by the MOCs, in the Rural Communities of the Niger Delta

Source: Authors’ Compilation Based on Household Survey

From figure 6, we observe that about 23% of the CSR investment of the MOCs is in education, which include scholarship, bursary, laboratory, library and school building etc; only 3% of such CSR investment are invested in the intervention on HIV/AIDS; other health sector, skill acquisition and chiefaincy matters account for 16%, 12% and 10%, respectively. This shows that the MOCs are making attempts in combatting the epidemic.

However, Figure 11 suggests that CSR interventions of MOCs on factors behind the spread of HIV/AIDS prevalence in rural Niger Delta region remain insignificant. This is also supported by Figure 7 on receipt of HIV/AIDS interventions from the MOCs in rural communities.

Figure 7. Rate of Receipt of HIV/AIDS Intervention from the MOCs

Source: Authors’ Compilation Based on Household Survey

From figure 7, we observe that about 97% of the respondents receive nothing in the form of CSR from the MOCs in the form of HIV/AIDS intervention. This simply means that, it is either that
the interventions are not getting to the rural target, or that the much celebrated interventions are merely on papers only. To buttress the wide spread, Udo et al (2009) have argued that harmful traditional practices such as female genital mutilation (FGM), widowhood rites and body scarification add an extra dimension to the spread of HIV/AIDS in rural Niger Delta. The FGM custom, which is particularly practiced in rural areas of Ondo, Edo and Delta States, has caused serious consequences, including deaths from excessive bleeding, as well as spread of HIV/AIDS from the use of unsterilized equipment by the native healers in the region. The widowhood rites which is practiced in rural communities of Bayelsa, Rivers, Akwalbom and Cross River States tends to have put women at risk of high HIV/AIDS prevalence in the region by demanding that widows must shave their hair, and often done by older women using old and unsterilized blades. According to Udonwa et al (2004), traditional scarifications on the abdomen, chest and hand are still performed in rural communities of these states, and the use of unsterilized instruments often expose the villagers to high risk of HIV/AIDS spread in the region. The scarification custom is regularly done on several indigenes at once by traditional men and women who might have acquired the expertise over the years. Table 3 suggests the needs in HIV initiatives to improve funding testing and counseling centers in rural communities of the region.

Table 3. Percentage Rating of Multinational Oil Firms Intervention in HIV/AIDS Among the Rural Host Communities of Niger Delta Region.

<table>
<thead>
<tr>
<th></th>
<th>Total E&amp;P</th>
<th>Exxon/Mobil</th>
<th>Chevron</th>
<th>Shell</th>
<th>Agip</th>
<th>Halliburton</th>
<th>Average %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitization campaign</td>
<td>73</td>
<td>86</td>
<td>78</td>
<td>59</td>
<td>82</td>
<td>92</td>
<td>78%</td>
</tr>
<tr>
<td>Funding testing and counseling centers</td>
<td>22</td>
<td>12</td>
<td>8</td>
<td>19</td>
<td>13</td>
<td>8</td>
<td>14%</td>
</tr>
<tr>
<td>Subsidizing Anti-retroviral Drugs (ARD)</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>3%</td>
</tr>
<tr>
<td>Prevention of mother- to- child transmission (PMTCT)</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>4%</td>
</tr>
<tr>
<td>Rehabilitation of Orphaned and Vulnerable Children (OVC)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other cares for people living with AIDS</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Source:** Authors’ Compilation Based on Household Survey

From the Table 3, we discover the types of CSR investments the MOCs make in the area of HIV/AIDS interventions. In the same table 3 we also observed that out of the meagre 4% CSR investment of the MOC made in the area of HIV/AIDS interventions, about 78% are made on sensitization campaigns, while only 14% is made on testing and counselling. Only a small fraction of funds is spent on the provision and subsiding of ARD, making the total investment
only 3%, while PMTCT accounts for 4%; unfortunately little or no investment is made on the OVCs. This choice of interventions was aggregated per identified intervention area and presented in Figure 8. The traditional pressure for having children, especially male child after marriage in States like Abia, Imo, Delta and Rivers disposed rural women to demonstrate their fertility and become mothers through extra marital relationships when they perceive that their husbands would not be able to impregnate them. According to Nwuche and Akani (2006), the women want to save themselves from the community embarrassment and scorn upon the other women who are still childless. Table 3 suggests the needs in HIV initiatives to improve funding support for the community-based prevention of mother-to-child transmission of HIV (PMTCT) in rural communities of the region.

Figure 8. Aggregated MOCs Intervention in HIV/AIDS in Rural Niger Delta

Source: Authors’ Compilation Based on Household Survey

A social problem generating serious concern in the Niger Delta in general has been the prevalence of sex workers patronized by oil company workers that take advantage of their perceived economic buoyancy by engaging in sexual intercourse with many of the rural girls, and often without protection. According to Udohnwa et al (2004), the work schedule of oil workers makes them prone to the risk of HIV/AIDS as most of them would stay away from their wives or regular sexual partners for up to one month or sometimes longer while engaged in exploratory and production activities; some workers on this schedule reportedly engage in sexually risky behavior after the one-month period of seclusion. Table 3 suggests the needs in HIV initiatives to promote condoms among oil workers and their rural community partners.
From Figure 9, we observe the rating of the impact of the pandemic by the respondent in a “tick as many as apply” question. The result shows that increase in funeral and health cost was accepted by 79% of the respondents as a major impact; 48% complained of widespread premature death, while 72% agree that spending on education has suffered, and is on the decline due to HIV burden. Also about 63% lament on loss of labour due to constant ill health, while 61% agree that it has depleted the rural peoples savings; about 54% lament on the issue of low productivity, while about 48% are concerned with the issue of OVCs. This further shows that lack of healthcare facilities and the inability of rural poor people to pay for healthcare services means that the medical needs from HIV/AIDS is difficult to meet in rural communities. According to Udoh (2013), about half of the women in the region cannot afford healthcare, compared to the national average of 30 percent; and not having health facilities makes it difficult for the rural poor to know their HIV/AIDS status, even when they are willing to be tested. The rural poverty tends to drive the poor to seek healthcare from the assorted healthcare agents who are usually quacks, including patent medicine sellers who often use infected needles for intravenous injections (Nwuche and Akani, 2006). This is combined with the traditional healers, who constitute a formidable sub-group among health care providers in the states of rural Niger Delta; often, they use unsterilized blades and knives for incisions on their clients, in order to protect people from diabolical attacks.

The impact of MOCs CSR on reduction of HIV/AIDS Prevalence in Niger Delta Region
To get the odd ratio and ascertain the impact on increased in the level of CSR of the MOC will make on the prevalence of HIV/AIDS, a logistic regression analysis was conducted. The odd ratio predict the impact of the explanatory variable which CSR is one of them on the health access of the rural communities, especially in the area of HIV/AIDS. Logit (HA) = 3.219 + .521Gmou + .126 Age + .114 PriOcc + .314 HHSize +.017Edu +.096 HHY + (.219) Gender + 047YOMH + 073Ms.
A test of the full model against a constant only model was statistically significant, indicating that the predictors as a set reliably distinguished between the “yes” and “no” impact of CSR (chi square = 45.210, p < .000 with df = 8). Nagelkerke’s $R^2$ of 0.814 indicated a strong relationship between prediction and grouping. Prediction success overall was 91 percent (93 percent for yes and 89 percent for the no). The Z- value for GMOU is 6.328, with an associated p-value of 0.003. Based on the set 5 percent significant level, the study concludes that CSRs of the MOCs under GMOU have not made a significant impact HIV/AIDS. However, the EXP (B) value of the Predictor — GMOU is 1.614, which implies that if the MOCs raise their CSR Program targeted to intervene in HIV/AIDS in rural Niger Delta by one unit, equivalent of 1 USD, the odds ratio is 1.6 times as large and therefore rural household are 1 times more likely to have access to health information and facilities, as it concerns HIV/AIDS pandemic control in rural Niger Delta.

Table 4. Projected Effects of GMOU Interventions on HIV/AIDS Intervention in the Rural Niger Delta Region

<table>
<thead>
<tr>
<th>Step 1(a)</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95.0% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td>Lower</td>
<td>Upper</td>
<td>Lower</td>
<td>Upper</td>
<td>Lower</td>
</tr>
<tr>
<td>Age</td>
<td>126</td>
<td>.009</td>
<td>3.205</td>
<td>1</td>
<td>.073</td>
<td>.983</td>
<td>.966</td>
</tr>
<tr>
<td>PriOcc</td>
<td>.114</td>
<td>.212</td>
<td>.033</td>
<td>1</td>
<td>.856</td>
<td>.962</td>
<td>.635</td>
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<tr>
<td>HHSize</td>
<td>.314</td>
<td>.021</td>
<td>.492</td>
<td>1</td>
<td>.483</td>
<td>.986</td>
<td>.947</td>
</tr>
<tr>
<td>Edu</td>
<td>.017</td>
<td>.021</td>
<td>.652</td>
<td>1</td>
<td>.419</td>
<td>1.017</td>
<td>.977</td>
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<tr>
<td>HHY</td>
<td>.096</td>
<td>.114</td>
<td>.715</td>
<td>1</td>
<td>.398</td>
<td>.908</td>
<td>.727</td>
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<tr>
<td>YOMH</td>
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<td>.115</td>
<td>.171</td>
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<td>.679</td>
<td>.954</td>
<td>.761</td>
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<tr>
<td>MS</td>
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<td>.135</td>
<td>.291</td>
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<td>.038</td>
<td>1.930</td>
<td>.713</td>
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<tr>
<td>Gender</td>
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<td>.312</td>
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<td>.456</td>
<td>.562</td>
<td>.435</td>
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<tr>
<td>GMOU</td>
<td>.521</td>
<td>.061</td>
<td>7.137</td>
<td>1</td>
<td>.003</td>
<td>1.614</td>
<td>1.045</td>
</tr>
<tr>
<td>Constant</td>
<td>3.219</td>
<td>.667</td>
<td>1.940</td>
<td>1</td>
<td>.164</td>
<td>4.331</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ Computation Based on Household Survey

a Variable(s) entered on step 1: Age, PriOcc, HHSize, Edu, HHY, YOMH, MS, GMOU, Gender.

This suggests that MOCs can take decisive early actions to control the spread of the HIV/AIDS disease by playing a more active role together with government and civil society in the region. This finding agrees with Chilaka and Nwaneke (2016) that businesses have an opportunity to exercise leadership in a way that would help the rural communities and make both business and moral sense. MOCs must know that AIDS has a direct impact on their business in Niger Delta, and the economic effects are observed in greater absenteeism and staff turnover, higher recruitment and training costs, and higher costs in medical care or insurance coverage, retirement funds or funeral fees (Figure 9).
HIV/AIDS not only affects the health of rural people, but also the oil workers and takes a toll on their savings, the resources of their families, and their productivity as they start spending more time taking care of the sick (Figure 9). This is where Visser (2006) challenged Carroll (1991), that in reality, the interconnections between Carrolls four levels are so blurred as to seem artificial or even irrelevant in an African context. Visser queried whether the issue of HIV/AIDS treatment is primarily an economic responsibility (given the medium to long-term effects on the workforce and economy), or philanthropic responsibility (HIV/AIDS is not an occupational disease, so surely treatment amounts to charity).

Table 4 suggests that CSR offers an opportunity for MOCs to help address HIV/AIDS prevalence through a business case for stakeholders’ health in Niger Delta. This can be achieved through GMoUs interventions in local communities. The findings call for improved MOCs CSR health intervention on more appropriate sensitization campaign, funding testing and counselling centers, subsidizing anti-retroviral drugs (ARD), prevention of mother-to-child transmission (PMTCT), rehabilitation of orphaned and vulnerable children (OVC) and other cares for people living with AIDS in rural oil-producing communities of Nigeria. However, reversing HIV/AIDS spread in Niger Delta – oil region of Nigeria would require an integrated approach that recognizes the many dimensions of the epidemic (figure 11). All stakeholders, including federal, state and local governments, Niger Delta Development Commission (NDDC), the private sector, civil society groups and international organizations, have roles to play under the strong leadership of the multinational oil companies in the host communities in Nigeria. The young rural people in the region would depend on MOCs effort to eliminate cultural norms, discrimination and promote equalities in participation in the CDBs of GMoUs, especially in healthcare projects that mostly affect the group.

It is our contention that the most effective strategies to curtail the spread of HIV/AIDS in oil host communities of Nigeria would be holistic, combining programmes to prevent opportunistic infections, manage existing cases and care for rural people living with HIV/AIDS. Strong policy advocacy among top-level policy makers of MOCs and opinion leaders must take place, along with grass root awareness campaign to discourage heterogeneous and unsafe sex prevalent in rural communities of the region. Hence, this paper agrees with Visser (2006) on the importance
of cultural context in the determination of appropriate CSR priorities and programmes, and the need for flexibility in approaches to CSR policy and practice by multinationals operating in Africa and globally. However, in extension and contribution, the study demonstrates that multinational oil companies have an enormous stake in the fight against HIV/AIDS, an epidemic that affects their workforce and host communities, if left unchecked, can rob them of their workers and markets in Nigeria. They stand to gain from supporting GMoUs intervention aimed at preventing HIV both at the workplace and in local communities and from taking early decisive actions while there are still opportunities to prevent a generalized epidemic in Niger Delta region.

7. Conclusion and Policy Implications
Thus far, we set out to assess the impact of a new CSR model of multinational oil companies (MOCs) on HIV/AIDS prevalence in the rural communities of the Niger Delta in Nigeria. The paper contributes to the public-private partnership debate in HIV/AIDS response from the CSR perspective of multinational oil companies in two areas that have received much attention in the literature.

i. What is the level of multinational oil companies CSR intervention in HIV/AIDS prevalence in the Niger Delta region of Nigeria?

ii. Do GMoUs interventions of multinational oil companies reduce HIV/AIDS prevalence in rural communities of Niger Delta region in Nigeria?

One thousand, two hundred respondent households were sampled across the rural communities of the Niger Delta region. Using logit model, results indicate that GMoUs interventions of MOCs on factors behind the spread of HIV/AIDS prevalence in rural Niger Delta communities remains insignificant. This implies that if left unchecked, the disease would steady its impact on MOCs business in the region, with economic effect on greater absenteeism and staff turnover of oil workers, higher recruitment and training costs in medical care or insurance coverage, retirement funds or funeral fees. A less obvious but equally important cost would be declining morale and productivity among oil workers and contractors, and would take toll on their savings, the resources of their families, and their efficiency as they start spending more time taking care of the sick. The findings suggest that CSR offers an opportunity for MOCs to help address HIV/AIDS prevalence through a business case for stakeholders’ health in the Niger Delta region, which could be achieved through GMoUs interventions in local communities. The findings call for MOCs to improve GMoUs Health interventions in Nigeria, especially in combating the spread of HIV/AIDS on more appropriate sensitization campaign (routine community conversations about HIV/AIDS in the village squares, traditional market places, on the way to farmlands), funding testing and counselling centers, subsidized anti-retroviral drugs (ARD), prevention of mother-to-child transmission (PMTCT), rehabilitation of orphaned and vulnerable children (OVC) and other cares for people living with AIDS in the oil-host communities. The issue of sustainable livelihoods, cultural norms and gender disparities that hinder most young rural
women for direct participation in GMoUs Healthcare delivery projects, except through their husbands or adult sons must be addressed.

It is worth mentioning that while this study contributes to extant literature on the role of oil from the perspective of CSR in HIV/AIDS prevalence in the Niger Delta region; it also provides essential policy direction on the relationship. However, complementing this study with case studies of corporate response to HIV/AIDS from other developing countries would be imperative for multinationals operating in Africa and globally.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

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The secondary data used for this study are the most recent data made available by the authority in-charge of handling HIV/AIDS matter in Nigeria and the relevant statistic authority- National Bureau of Statistics (NBS).

**DRAFT QUESTIONNAIRE FOR RURAL HOST COMMUNITIES IN NIGER DELTA**

**SECTION A: SOCIO-ECONOMIC CHARACTERISTICS**

State _________________________________ LGA ___________________________
City/Town__________________________________________________________________
Name of Respondent:_________________________________________________________

1. Sex of Respondent:  
   Male [ ]  Female [ ]

2. Age Bracket:
   a) Between 20 – 30 [ ]  b) Between 31 – 40 [ ]  c) Between 41 – 50 [ ]  
   d) Between 51 - 60 [ ]  e) Above 60 [ ]

3. Marital Status:  
   a) Married [ ]  b) Single [ ]  c) Separated [ ]  d) Widowed [ ]  e) Divorced [ ]

4. Number living in household at present (Household Size): ____________________________

5. Highest Educational Qualification of Respondent:  
   a) None [ ]  b) Primary [ ]  c) Secondary [ ]  d) Tertiary [ ]

6. Religion of the Respondent  
   a) Christianity [ ]  b) Islam [ ]  c) Traditional [ ]  d) others [ ]

7. Employment status of Respondent  
   a) Government Paid Employment [ ]  b) Private Paid Employment [ ]  
   c) Farming [ ]  d) Trading [ ]  e) Unemployed [ ]  
   d) Handicraft (e.g. brick-laying, carpentry, motor mechanics, bicycle repairing etc.) [ ]  
   e) Others [ ] Please Specify __________________

8. What is the employment status of your spouse (if you are married)  
   a) Government Paid Employment [ ]  b) Private Paid Employment [ ]  
   c) Farming [ ]  d) Trading [ ]  e) Handicraft (e.g. brick-laying, carpentry, motor mechanics, bicycle repairing etc.) [ ]  
   f) Unemployed [ ]  
   g) Others [ ] Please Specify __________________

9. If engaged in handicraft, what are the major handicrafts you are involved? (tick as many as applied)

<table>
<thead>
<tr>
<th>Handicraft</th>
<th>Fully involved</th>
<th>Partly involved</th>
<th>Not involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leather Work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textile Making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grass and Cane weaving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceramics work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Painting/Makeup art</td>
<td>Fibre - Making</td>
<td>Bead and Jewelry Making</td>
<td>Local Pottery</td>
</tr>
</tbody>
</table>

10. How long have you been engaged in this your current employment:
   a) 0- 10 Years [ ] b) 11- 20 Years [ ] c) 21 - 30 Years [ ] d) 31 - 40 Years [ ] e) Above 40 Years [ ]

11. What is your range of monthly income from your current employment?
   a) (0- 50,000) [ ] b) (51,000 – 100,000) [ ] c) (101,000 – 150,000) [ ] d) (151,000- 200,000) [ ]
   e) (201,000 – 250,000) [ ] f) (251,000 – 300,000) [ ] g) (301,000 - 350,000) [ ] h) 351,000- 400,000 [ ] i) Above 400,000 [ ]

12. Does any other person(s) in your household earn income?
   a) Yes [ ] b) No [ ]

13. If yes, what is the range of the monthly income from other household members put together?
   a) (0- 50,000) [ ] b) (51,000 – 100,000) [ ] c) (101,000 – 150,000) [ ] d) (151,000- 200,000) [ ]
   e) (201,000 – 250,000) [ ] f) (251,000 – 300,000) [ ] g) (301,000 - 350,000) [ ] h) 351,000- 400,000 [ ] i) Above 400,000 [ ]

**SECTION B: KNOWLEDGE OF HIV/AIDS**

14. Have you heard about HIV/AIDS before?
   a) Yes [ ] b) No [ ]

15. Can you briefly tell us what you know about AIDS -----------------------------------------------

16. Do you know your status of HIV/AIDS
   a) Yes [ ] b) No [ ]

17. Have you seen any HIV/AIDS patient before now?
b) Yes [ ] b) No [ ]

18. Have you any relative that is suffering now or have suffered HIV/AIDs before.
   c) Yes [ ] b) No [ ]

19. Do you think that HIV/AIDs is a common disease now in your community?
   Yes [ ] b) No [ ] c Not sure [ ]

20. If yes, do you think that the presence of many oil company workers in community has a role to play in the spread of HIV/AIDs in your community?
   Yes [ ] b) No [ ] c Not sure [ ]

21. Do you or any member of your family have any friend or acquaintance that work with any of the oil companies in community?
   Yes [ ] b) No [ ] c Not sure [ ]

22. In this issue of HIV/AIDS, have your community ever received any form of support from any of the oil companies?
   d) Yes [ ] b) No [ ]

23. If yes, what is the nature of the support
   a) Infrastructural development [ ] b) Free testing and counseling [ ] c) Training of volunteers [ ] d) Subsidized drugs [ ] e) intervention in prevention of mother to child transmission (PMTCT) e) Awareness creation [ ] f) distribution of free condoms [ ]
   g) others _________________________

24. You as a person, have you ever received any form of support from any of the oil companies in respect to HIV/AIDS prevention and or treatment?
   e) Yes [ ] b) No [ ]

25. If yes to 23, what is the range monetary value you can attach to the support?
   a) (1000 - 50,000) [ ] b) (51,000 – 100,000) [ ] c) (101,000 – 150,000) [ ] d) (151,000-200,000) [ ]
   e) (201,000 – 250,000) [ ] f) (251,000 – 300,000) [ ] g) (301,000- 350,000) [ ] h) 351,000-400,000 [ ] i) Above 400,000 [ ]

SECTION C: KNOWLEDGE AND PARTICIPATION IN GMOUs

26. Are you aware of the GMoUs of the Multi-national oil companies?
   a) Yes [ ] b) No [ ]

27. If yes, from 1-12 (1 the most important) rate the activities of the MOCs in the following area

<table>
<thead>
<tr>
<th>Activities</th>
<th>Rate 1 - 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing and Roads</td>
<td></td>
</tr>
<tr>
<td>Other Health Services</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Fishing</td>
<td></td>
</tr>
<tr>
<td>Fighting HIV/AIDS</td>
<td></td>
</tr>
</tbody>
</table>
Agriculture and rural Farming
Skill Acquisition
Rural Electrification
Policy Advocacy
Eco Cultural tourism
Chieftaincy Matter
Direct Youth Employment

28. from the GMOUs is there anything the oil companies supposed to do to the host communities concerning HIV/AIDS
   Yes [ ] No [ ] c) No idea [ ]

29. If yes, to 28 above, can you tell us more about that? -------------------------------------------------------
   ----------------------------------------------------------------------------------------------------------
   ----------------------------------------------------------------------------------------------------------

30. Do you think that there is any impact the oil companies are making to curb this menace of HIV/AIDS
   Yes [ ] No [ ] c) No idea [ ]

31. When a member of the Household is sick, how is (s)he treated?
   a) By a qualified doctor in a hospital [ ] b) We buy drugs in a drugstore (chemist) [ ]
   c) We see a traditional medical expert [ ] d) We treat him/her ourselves [ ] e) We just pray [ ]
   f) We do nothing [ ] g) We take other actions
   (Please specify)__________________

32. How and where do you get the Household drinking water?
   a) Tap [ ] b) Stream [ ] c) River [ ] d) Borehole [ ] e) Hand dug Well [ ] e) Rain Water
   [ ] Other (Please specify)_____________________________

33. Educational qualifications of members of the household?

<table>
<thead>
<tr>
<th>Level of schooling</th>
<th>No in Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>No schooling</td>
<td></td>
</tr>
<tr>
<td>Primary education</td>
<td></td>
</tr>
<tr>
<td>Junior secondary education</td>
<td></td>
</tr>
<tr>
<td>Senior secondary education</td>
<td></td>
</tr>
<tr>
<td>College of Education/Polytechnic</td>
<td></td>
</tr>
<tr>
<td>First Degree (University)</td>
<td></td>
</tr>
<tr>
<td>Postgraduate Qualifications (PGD, MSc, PhD, etc.)</td>
<td></td>
</tr>
<tr>
<td>Other (Special, Islamic, etc.) Education</td>
<td></td>
</tr>
</tbody>
</table>

34. Do you have any project(s) in education (School Building, Library, Scholarship etc.?) in your community sponsored under any GMOU?
   a) Yes [ ] b) No [ ]

35. If yes, how has it affected the development of education in your community?
   a) It has provided more opportunities to the less privileged [ ]
   b) it has widened the inequality gap [ ]
   c) it has increased the level of literacy in the community[ ]
36. Do you have any health project(s) (hospitals, maternities, HIV test centre etc.) sponsored under GMoU in your community?

37. a) Yes [ ] b) No [ ] c) No Idea

38. If yes, how has it affected the development in your community?

   a) It has provided more access to health care facilities [ ]
   b) It has reduced the incidence of infant mortality [ ]
   c) It has reduced the incidence of maternal mortality [ ]
   d) Has made no impact [ ]

39. Do you have any water project(s) (Boreholes, Taps etc.) sponsored under GMoU in your community?

40. If yes, how has it affected the development in your community?

   a) It has provided more access to clean water [ ]
   b) It has reduced the incidence of water borne diseases [ ]
   c) It has increased labour man-hour by reducing the amount time spent going to stream [ ]
   d) It enhances the breeding of mosquitoes [ ]
   e) It has not made any impact [ ]

41. Name any other project sponsored under GMOUs in your community

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

42. At what state is each of the projects?

<table>
<thead>
<tr>
<th>Project</th>
<th>Completed and in use</th>
<th>Completed but not yet in use</th>
<th>Nearly Completion</th>
<th>Just Started</th>
<th>Just Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing and Roads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Services</td>
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<td></td>
</tr>
<tr>
<td>Education</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Rural Electrification
Policy Advocacy
Eco Cultural tourism
Chieftaincy Matter
Direct Youth Employment

43 In your opinion, what is the impact of such project on development of your community?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

44 In your view, what do you think the impact of GMOU overall is with respect to HIV/AIDS Menace?
   a) Positive [ ]  b) Negative

45 If Positive, in what ways do you think it help?
   a) It protects the youth from the deadly disease [ ]
   b) It takes proper care of the orphaned and vulnerable children youth [ ]
   c) It has helped to keep the victims healthy with subsidized drugs
   d) it has prevented transmission from pregnant mothers to children
   e) Others (please specify)___________________________________________

46 How will rate these criterions of the CDBs in your community (Rate appropriately from 1% - 100%)

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td></td>
</tr>
<tr>
<td>Inclusiveness</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td></td>
</tr>
<tr>
<td>Continuity</td>
<td></td>
</tr>
<tr>
<td>Outcome</td>
<td></td>
</tr>
</tbody>
</table>

We thank you most sincerely for your time and support in completing this questionnaire.
Name of Enumerator: ________________________________________________________
Signature: _______________________________ Date: _____________________________