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DEFORESTATION AND CHALLENGES OF TRADITIONAL HEALTH CARE IN SAPELE LOCAL GOVERNMENT AREA, DELTA STATE, NIGERIA

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Abstract
Deforestation which lunched Nigeria into world capitalist system depleted the forest which indigenous people rely on for maintaining health. Although, it is widely perceived that grinding poverty exposed the forest to depletion, careful examination revealed that, the disintegration of traditional beliefs and practices heightened unsustainable utilization of the forest. Consequently, numerous diseases and illnesses increased as (73%) of the people became alienated from their forest and related practices which maintain health. Thus, the study examined the impact of deforestation and challenges of traditional health care in Nigeria. Explanations of variables anchored on environmental health model which analysed the relevance of the forest to human health. A total of 300 participants which include household heads, titled chiefs, forest custodian, traditional medicine practitioners and modern health care personnel's were co-opted for the study. Questionnaire, in-depth interviews, observation, and key informants were used in generating data. Qualitative data were analysed by verbatim extraction of responses. Quantitative data was analysed with probit regression model with the statistical package for the social sciences. ($x=1.51$; $P<0.05$) shows that depletion of forests impact negatively on the people's health. Depletion forest affected indigenous preventive and curative health care services. Depletion also displaced traditional health practitioners.

Key words: Health, Deforestation, Environment, Ritual and Adaptation

Introduction

Archaeological evidence indicates that the use of medicinal plants in caring for self dates back to the Paleolithic age of about 60,000 years ago (Enabor 1992 and Ichiro 2012). Herbs used for traditional herbal treatment of illnesses were harvested from archaeological sites (Cathy 1996). From ancient time till the middle century, many households and traditional medicine practitioners (TMPs) in Nigeria practiced traditional herbal medicine as some aspects of primary health care services (Owumi 1989). Notably, early 19^{th} century marked a turning point of increase in the knowledge and use of medicinal plants from the forest. Today, the use of herbs for the prevention and cure of diseases is intercepted by unsustainable industrial scale deforestation (Owumi 1989). Due to lack of sustainable deforestation, TMPs lost raw materials and the serene environment under which they provided traditional health care. Medicinal herbs that were useful for health care are destroyed. Thus, destruction of the forests depleted the useful raw materials. Consequently traditional medicine practitioners whose major raw materials are forest derivatives became displaced from their occupation-indigenous health care practices. This

negative development subject TMPs and their dependents to grinding hardship (Dregne 1996).

Statement of the Problem

For short term economic benefits, the forest and its resources were ceded for exploitation. The exploitation depleted the forest (Okunomo and Achoja, 2010). The depletion occasioned scarcity of resources. This scarcity dislocated TMPs from their age long practices. With the dislocation of TMPs, treatment options narrowed down. Consequently, cost of health care increased. Thus, larger percentages of the population who cannot afford modern health care services manage chronic health problems to the point that it becomes acute. This increased the prevalent rates of disease, illness and mortality rate in the community (Oladele Alade and Omobuwajo. 2011). These series of changes heightened the hardship that now faces the people. Responses revealed that, deforestation exposed agricultural lands and forest resources to destruction. The exploitation of forest resources without deliberate attempts for afforestation depleted forest resources that was beneficial in providing health care services for the people (Omobuwajo Alade and Sowemimo 2008). This has affected erstwhile indigenous method of maintaining health within the community. Alteration in the forest predisposed the people towards becoming vulnerable to spirituals afflictions. With these changes, the erstwhile harmonious relationships are strained. Interaction in the community became estranged. As major actors of deforestation folded up due to depletion of raw materials (resources), hardship and health problems increased.

Based on the above challenges, the study examined the implications of deforestation on traditional herbal care and economic status of TMPs. The connectivity between deforestation and challenges of maintaining health in a rural setting is made clear. That is, the study showed clearly the implication of deforestation on resources availability, traditional health care services and the wellness of the people. Findings expanded academic discourse on environmental and health implication of deforestation. This increases awareness which motivates people towards protecting their forest. The study increases awareness on the importance of protecting forests resource for the benefit of present and future generation.

Review of Related Literature

Industrial scale felling of trees in Nigeria forest intensified with the influx of African Timber and Plywood industry (Okunomo and Achoja 2010). Till early 19^{th} century, no industry engaged in timber exportation in Nigeria. Natural resources remained untapped. Creeks such as Nana Creek, Alajiko Creek, Koko Port were later transformed and used as large Seaports. Vice Consulate was established in Sapele in 1892. It became well known grown Port in 1894 (Dafinone 2010). Around 1890 merchants like Crauston McNeil and Mathieson began operations in the Benin province, making Sapele the first Port timber in Nigeria. From 1925 to 1940 several laboratory tests of samples of Nigerian timbers were

carried out in the United Kingdom and in Europe to determine the wood properties and potential end uses. Large numbers of Nigerian timber species were accepted in overseas markets from about 3 or 4 in 1910 to about 40 in 1940 (Enabor 1976 1992).

Nigeria is in deficit of all wood products from 4 million m^3(r) in 1989 to 60 million m^3(r) in 2010 (Enabor 1992). Forest trees were used to produce walking stalks; medicinal parts of plants such as roots, stems, leaves, flowers, fruits, seeds, bulbs, rhizomes and tubers were useful materials for indigenous medication. These plants contained medicinal ingredients in form of Tannin, Saponins, volatile oil, flavaniods that are active as useful healing agents in plants. There is serious shrinkage in forest resources (trees and herbs) in Delta State especially in Sapele community. This shrinkage is responsible for the relocation of major deforesters from Sapele. What is left bear resemblance of desert? Dregne (1996) listed desertification processes as the degradation of vegetative cover, water erosion, wind erosion, salinization, reduction in soil organic matter and excess of toxic substances. Desertification is evident in Sapele forest as the above listed traits of desertification are noticeable in Sapele. This has affects traditional health care for the people and the TMPs among community members.

The need to evaluate deforestation aroused because of the health challenges and moral decay. Also, this problem forms agenda 21 among governments of 185 countries. This agenda which was adopted at the conference in Brazil, including Nigeria clearly spelled out the link between human health, the environment and resource availability, (Romulo and Rosa 2007). Resources that are required for the provision of health care are acquired from the forest (Wayne 2012 and Nina 2012). Larger percentages of health ritual practices are carried out in the forest. Most TMPs are also resident in the forest (Omobuwajo *et al*., 2008, Oladele *et al* 2011, and Steven2012). Forest trees provided medicinal plants, food plants (cereals, pulse, vegetable, fruits), fodder plants, fibre and cordage, pesticides and pisicides, gums, resins and dyes, incense and perfumes and many cultural requirements that are used for the production of shampoo, explosive (for explosive companies), drugs for pharmaceutical industries, medicinal liquids as vacines etc. Forest trees provide basic income to substantial number of people. Sales of trees barks, leaves, fruits, stem supply huge annual revenues for individuals and associations.

In the past, to survive the harsh economy, many families in Sapele relied on income generated from the sales of tree parts. With the destruction of the forest, those who depend on forest for survival are handicapped. It is pertinent to note that a degraded environment negates quality life. Poor diet with contaminated calories, suspicious and weak social relations impact negatively on health (Wayne 2012). Poverty and ill health live as neighbours in the community. Hence, there is a need to explore major environmental factors deteriorating health since much explanation for and provisions of health are environmentally inclined in recent times, (Romulo and Rosa 2007).

The beautiful nature and less hazardous way of maintaining health with natural health care methods that is friendly, cheap, credit worthy, and conveniently close in a condusive atmosphere became altered due to industrial scale deforestation (Stephen 1995). What can be seen are sights of abandoned and dilapidated structures, unpleasant climate and unattractive environment that are neither comdusive for business, nor attractive to tourist, or educated workforce (Steven 2012, Anthony and Jo-Ansie 2008). The economic reservoir of resources for farmers, TMPs, and hunters, are destroyed (Vandana 2003). About (2%) to (25 %) prescriptions given by modern health care providers are on drugs that have natural ingredients, (Steven and Donald 2012).

These resource materials which are forest derivatives have become scarce due to deforestation, (Shakuntala *et al* 2010*)*. The forest, a once boisterous entity becoming quiet and all we could hear or see is the beating of hearts panting for survival, (Awake 2012). Sapele, a once bubbling town returning to a remote village with cold and dry climate that encourages disease distribution, disasters and poor farm produce which herald hunger, fantod and strife within the community. Most environmental problems arise from production or consumption of goods that is generated from polluted land, air or water. Felling of trees contributes to environmental degradation of fragile agricultural lands, (Dean 1995, East Lutz, *et al* 1995).

Theoretical framework

This study was anchored on two related theories. These are Environmental Precedence and Environmental Health theories. They complemented each other in the vprocess for adequate understanding of the subject under discussion..

The **Environmental precedence theory** by Obono (2016) places emphasis on the importance of the environment in people's livelihoods and their right to the use of the environment. The forest is seen as 'the predictor of social, political, economic and cultural systems' (Obono, 2016:184). The theory of environmental precedence shows how Sapele history is traced by understanding environmental imperatives. Forest shows geographical origins and migratory trajectories of Sapele people. The origin and functions of the social institutions of beliefs and forest related rituals are best understood within the domain of ecological perspective. In reality, all human activities are engrained in the environment. Thus, outside the concave of environment, man looses sense of humanity, existentialism and relevance. The environment is the predictor of social, political, economic and cultural system (Obono 2016). The environment supports life sustaining activities. The precedence of the forest lies in its irreplaceable role of being a haven for the veneration of ancestral spirits. The forest was central institution through which health and other "main concern" was met.

The status quo was later intercepted by nascent capitalist forces of industrial scale deforestation. Deforestation and the changes introduced by merchants dowsed indigenous institutions and ushered in a modern phase of civilization. This phase was characterized by market-oriented and unfriendly practices which are antithetical to conservative beliefs and forest practices. Deforestation compromised the conservative beliefs and forest related practices. The diminution in the conservative beliefs and forest practices was drastic consequent of the civilization introduced by major deforesters. The prescribed civilized practices were based on the perception that the forest and related practices are not sufficient in sustaining the social institutions, health of the people and social order. Accordingly, changes in agrarian feudalism, marked a major transformation in the forest, "forces of production", social order and life sustaining practices.

All social institutions and order previously formed on the basis of environmental capacity were altered by alterations of the environment (ibid). The connexion between the environment, social institutions and social order are evident in the consequences of alterations of the ecology on living things. Conservative beliefs and practices are directly linked to their ecology. Hence, alteration in the environment impact directly on the institutions and its constituents. Because no ecological zone was fully self sufficient in the past, there was exchange and diffusion of ideology and resource. This cross boundary transactions led to environmental alteration and forest scarcity. Scarcity created intolerable crisis which upturned the social order and health status of the people.

In effect, this theory emphasizes how 'patterned human actions crystallize into institutions but originate in sustained interactions between people and the environment.' Essentially, social institutions and social orders are developed because of adaptations to changes in the physical and non physical environment. Built on principles of ontology, ethnography, and environmental dialectics, this theory emphasizes that 'social institutions and social order are emanations of historical human interactions with the environment (Obono, 2016:83).

From the fore going analogy of environmental precedence theory, the environment-forest is central to life in Okpe kingdom. The theory show clearly how the people relied on the forest for food, for maintenance of health, development and security. It also shows that individuals in the community in the past use the forest to practice their beliefs. The theory shows how the cession of the forests subjected the people to hardship. This is substantiated by research participants who reported that many communities in Sapele have lost their rights of ownership and use of forest to multinational companies through government acquisition. The environmental precedent theory, demonstrates that social institutions previously built based on environmental capacity are being altered by changes in the environment. As this study shows, interactions between the environment and social institutions are best illustrated by observing historical empire formation of different type of ecology.

Environmental protection is one of the universal concerns which consider human rights that grant access to the environment. Just like the ecological model, the tenets of precedence emphasized the prevention of destruction and the right of people to the use of the forest resources found within their environment. Protection of the forest becomes paramount to secure their beliefs that endorsed traditional health care practices. Here, the principles of solidarity which is derived from the perception of environmental problems are ultimate (Philipe 1995). Internationalization of the need to protect the beliefs and implementation mechanisms such as procedural rights are now developed to secure the rights of Sapele people to their forest. The judicial appraisals of environmental protection in the context of enforceable human rights are paramount to safe guarding the forest from deforestation. This enhances rejuvenation of traditional health care.

On the other hand, the **Environmental Health theory** suggests that health problems are environmentally related. Depletion of the forest causes shortage of forest resources that constitute main source of materials that are used as regulatory regimen for wellness. Thus, health care service and path way to health care are channeled to environmental bodies which are largely found in the forest. Maintaining wellness is largely affected by industrial scale deforestation which shrinks the material resources that are used for health care. The unsustainable exploitation of forest resources led to scarcity of forest derivatives which were used in maintaining health. This scarcity affects the resources base and health. It also displaces health care practitioners. Shrinkage in treatment options, increased cost of health care services. While health abnormality and cost of services increased, harmonious relationship and development declined.

Materials and Methods

The research design for this study is descriptive survey design. Inferential tools were used to clarify the connection between deforestation and challenges of traditional health care. The results were used to project the health performances of the people if unsustainable deforestation continues unabated. A cross section of the population was surveyed. This design provided the context within which unambiguous statements shows the relationship between the variable under study were analyzed.

Sapele Local Government area of Delta State was selected as the research setting/area of the study. This setting was purposely selected because of the industrial scale deforestation activities which heightened the diminution of indigenous beliefs that protected the forest. As herbs got destroyed, this exposed the people to high level of health problems and endemic crises which impact on livelihoods, thus development. The depletion of forest resources and disintegration of the indigenous traditional health care practices affects the health status of the people. This increased health crises, general insecurity and retrogression. These indices motivated the choice of this research. Sapele has latitude of 5^0.0.012N and longitude of $5^{0\cdot}$00‘E. The study area consists of the following major

communities, Sapele, Amukpe, Elume, Ogiedi, Ughorhen and Ikeresan. All are Sapele Okpe people. It has fresh rivers with clear mangrove and fever swamps of the coast.

The population size of Sapele was put at 161,692 (1996 national population census). In view of the fact that the population is likely to change over the years (1996-2016),, population projection of 200,180 (2010 national population projection) for 2015 was adopted in this study. Adopting the projection is based on the fact that, since the people are highly fertile, it is believed that there will be slight changes in the population composition of the people. Therefore, the 2010 population projection of 200,180 was adopted for generation of sample size for the study. The age limit respondents to be sampled in the study are adults of the age range 20-75, alien and indigenes alike.

Out of the 200,180 population projected for Sapele, a total of 300 were drawn as sample size for the study. These samples were randomly constituted in generating data for the study. Thus, respondents were selected using the simple random technique and snowball method. Snow balling was used to sample key respondents who are resourceful in providing significant information. While household heads were randomly selected, title chiefs, TMPs and Modern health care personnel's were purposively selected. The study area was delimitated into 25 communities. This delimitation ensured easy identification, distribution and retrieval of instruments.

Sampling Procedure- The study adopted a multi-stage sampling technique for communities, Sub Communities and Participants

First Stage: Sapele LGA was chosen as the study area. Choosing Sapele is based on the predominant deforestation activities and its consequences on the health care provisioning among the people. The five major communities which make up Sapele LGA surveyed. Each of these communities has up to ten sub communities. Below is the tabular presentation of the major clans and sub communities,

	Clan/Communities	**Sub Communities**
1	Sapele	*Urhiapele town, Ugwandja, Ogorode, Ugbekoko, Oton, Amuogodo (Ajurgodo), Ugberikoke,Oton, Gana, Ugbeyiyi, Erhera-Amua,Etamua, Amuogodo, Ojolu (New road), Abeke* and *Aronwon*
2	Elume	*Adagbrassa-Elume, Okuo-Ajamata, Jakpa, Amuokpokpor-Elume, Otorakua, Edegborode, Deghele, Iriabome, Odjedi, Ugbimidaka, Okuo-Soja, Okuoke & Otorakua.*
3	Amukpe	*Okirighwre, Eko, Ibada-Amuokpe, Idale, Ugbeyiyi, Ogegere, Amuokpe, Ajamikawa, Ovbori, Adagbrassa-Amuokpe, Okuo-Sajere* and *Okuovwori Amuokpe.*
4	Ozum-Okokporo	*Okokporo 1, Okegborade, Okokporo 11, Okworu I, Okworu* 11, *Okwodede 1* and *Okwodede 11.*
5	Ugborhen	*Ugborhen, Ikeresan, Ugborhen, Ugbukurusan, Obotie, Okuoboregbe, Okuaziza* and *Ovuvukolo*

Second Stage: each of these clans has at least ten communities. Using the non probabilistic sampling method, five communities with high deforestation history were selected from each clan. For *Sapele clan, Ugwandja-mission road, Ugbekoko, Oton, Amuogodo* and *Aronwon.* For *Elume, Adagbrassa, Okuo-Ajamata, Jakpa, Amuokpokpor* and *Otorakua.* For *Amuokpe, Okirighwre, Ibada, Idale-Ugbeyiyi, Ogegere* and *Okuovwori.* For *Ozue, Okokporo 1, Okegborade, Okokporo 11, Okworu I,* and *Okwodede.* For *Ugborhen, Ikeresan, Ugborhen, Ugbukurusan, Obotie* and *Ovuvukolo*.

Third Stage: these selected communities from the five clans were divided into different compounds.
Fourth Stage: identified compounds within the selected communities were divided into households. The total number of houses as indicated by population enumeration exercise was written in papers. These papers were subjected to balloting. Balloting ensured a random selection of houses that was sampled.

Data Collection- Data for the study was generated using quantitative and qualitative method. Quantitatively, the structured questionnaire was pretested and used to generate information for this research. A total of 300 questionnaires was divided evenly and administered across the community delimited within the study areas. The first section of the questionnaire focused on respondents demographic characteristics, subsequent sections concentrated on the problem under study. The likert scale instrument was adopted and used to determine the magnitude/degree of the problem under study.

Data was generated from secondary and primary sources. Primary data was generated by the researcher, while secondary data were derived from established information which were not designed for this research but were found available and relevant to the objectives of the study.

The IDI method was used to generate information that validates responses on the questionnaire. The research also made use of key informant, that is, information gathered from elderly people amongst who were chiefs, TMPs and other community members of different age range. The responses from these respondents provided a balance view on the implication of deforestation and depletion of resources on health care provisioning in Sapele.

Data Analysis- Descriptive and inferential statistical method was used to measure the centralness as well as the variability of responses. The frequency distribution and the percentage analyses basically described the total number of times a value or data interval occurred in the data set. In analyzing the data, the percentage and regression correlation and probit regression analyses was used to analyze the relationship between deforestation and traditional health care provisioning in Sapele.

Research Results/Findings and Discussion

Table 1: Correlation Analysis on Effect of Deforestation on traditional Health Care

Deforestation Implication on;	Standardized Beta coefficient	X Statistic	Probability values	Remarks
X_1 Healing herbs	0.072	6.077	0.064	Significant
X_2Income generation	0.087	4.096	0.046	Significant
X_3 Health	0.039	1.503	0.078	Significant
X_4 Development	0.712	2.063	0.033	Significant

Note: Significance value is valued at 0.05.

From the table above, (X_1=6.07; P<0.05) revealed, deforestation heightened the scarcity of forest resources that were formerly used for healing people who are ill. The (X_2 =4.09; P<0.05) correlation analysis clarified that the depletion of resources impacts negatively on income generation for the people especially the traditional health care practitioners. Scarcity of herb do not only affect the generation of income for practitioners, it also affected general rendition of health care services to the community. Thus, (X_3=1.51; P<0.05) validated the responses which agreed that depletion of forest resources impact negatively on the people's health in Sapele.

Consequently, because large percentages of the population who constitute the work force are saddled with different health challenges, there is stagnation in development. The varying health problems reduced the level of productivity. The correlation analysis also revealed that deforestation and subsequent depletion of resource led to relocation of major companies whose raw materials are forest based. These problems impact negatively on growth and development in Sapele. Retrogression induced aggressive behaviors, fragmentations and confrontational relationships among the people who struggle to make a living amidst the scarcity, hardships and ill health. According to the participants, the negative effects of deforestation on medicinal plants, herbs and saplings were rated as (71.3%). That is grade one scarcity of resourceful forests derivatives. Ceaseless and uncontrolled utilization of non-timber forest products NTFP and consumption of trees resources for the construction and production of materials posed huge threats to the existence of trees and animal species in Sapele. These responses correspond with the findings of Pahang (2012), and Oladele *et al (*2011). According to these authors, unsustainable consumption of forest resources moves the resources towards exhaustion. This impacts negatively on the health of the community members.

A total of (57%) participants agreed that, deforestation reduced the richness of biodiversity in Sapele forest. This finding coincides with the conclusions of Ajetomobi and Abiodun (2010) and Akeem (2010) which detailed that compositions of forest and natural habit get destroyed during deforestation. The health of the people became compromised. The relegation of the importance of the forest to maintaining healthy lifestyles jeopardized economic development. This research findings corresponds with Okunomo conclusions which states that there was rapid transformations in the Sapele economy but the transformation later plummeted because of resource depletion. Depletion and unsustainable deforestation created market failures for wood business. Apart from health problem, lack of sustainable exploitation of the forest resources in Sapele created what majority referred to as stagnation and retrogressive growth.

Sustainable development with patterned transformation that enhances economic and social benefits for present and future generation without impairing basic ecological processes is absent in Sapele. Sustainable development in relation to forest consumption is absent in Sapele.

Other notable human activities that heightened deforestation and depletion of forest resources in Sapele includes bush burning, oil exploration, timber business, incessant and frequent crisis, oil spoilage from bunkering activities and equipment failures, gas flaring, residential and industrial developmental activities. These activities depleted the forest which was useful in maintaining healthy lifestyles.

Table 2: Use of Forest for Traditional Health Care Practices

Items	**Responses in Percentage (%)**	
Personal Experiences	**Yes**	**No**
Do you have challenges using herbs from forest for traditional health care	12	
If you have challenges do you have problems consulting a traditional healer	16	
Did the practitioner satisfied your health needs	5	2
If no, did it affect your health negatively (illness could not be cured)	9	
Have you ever had scarification as alterative form of treatment of illness	6	3
Have you ever used scarification as prevention against illness		7
Have you ever used herbs and other charms to help you overcome a problem	26	
With the challenges, do you know anyone who cure using forest trees today	14	
Total	88%	12%

In table 2 above, 12% of the participants revealed that, they have challenges in using local herbs from the forest to treat different kinds of illnesses in recent time. The responses of respondents which corresponded with Pahang findings of (2014) shows that forest derivatives were very effective in treating health abnormalities in the past. They also revealed that in the past, forest derivative was green and were available in large quantities. One can easily dash into a nearby forest to get herbs and other animals products needed for immediate healing of the sick for the materials were readily available. As forest became ceded for exploitation without afforestation, the forest became depleted. Consequently, total of (16%) participants revealed that they have problem consulting a traditional healer in treating health problem. The herbs are no longer available, when available they are expensive. The health needs of the people according to (5%) participants are provided by traditional medicine practitioners but it is expensive due to cost of procuring the raw materials. This finding corresponds with research findings of Owumi (1989) which detailed the effectiveness in the treatments given by traditional medicine practitioners. Thus, (9%) reported that their health needs could not be met traditionally because they could not afford the cost of treatment. The shrinkage in forest resources has a triangular effect among the community members. Forest depletion affects traditional health care. As raw material gets depleted, cost of health care increased. While the people suffer in their health as they manage health problems due to lack of money to assess high cost of health care services, the traditional medicine practitioners are displaced as patronage becomes low.

The environmental impacts of deforestation on traditional practitioners are enormous. Because the people fall trees without deliberate attempt of afforestation, the traditional medicine practitioners experienced difficulty in dispensing their services due to scarcity of resource. They are dislocated from their practice. Lack of skills limits their mobility to other jobs. They are alienated from the resource and the people in the community who consider them as half human and half spirits. Invariably the perception that they have magical powers to heal and afflict restrain people from relating with them like every other human. With depletion of resources, they are rendered jobless and handicapped for a long period of time if not for the rest of their life.

While (7%) denied ever using scarification as prevention against illness in modern times, a total of (6%) participants revealed that they have had scarification as a form of treatment for diverse illness. On the question whether participants have ever used herbs and other charms to help overcome a problem, (26%) agreed that they have used herbs to treat health challenges but this is almost impossible today due to shortage of forest resources. A total of (14%) participants including those who revealed that they have never used herbs said they know traditional health practitioners who cured patients using forest derivatives despite the challenges of raw materials scarcity and high cost of traditional health care.

Adaption Strategies

The adaptive techniques to these changes have been the adoption of modern day health care services. For the traditional practitioners, they have upgraded their materials and method of healing. That is, adaptive techniques to economic dislocation for traditional practitioners and shrinkage in alternative health care services have been the modernization of traditional healing practices. They do this by buying other ingredients from churches and orthodox health practitioners. Instead of using herbs, they resolve to use of holy materials such as holy oil, incense and other non forest derivatives which are readily available but expensive.

Conclusion

Deforestation activities affected traditional health care that was a cheap outlet for individual self help and that of the health of the entire family in the community. Thus, health of the people deteriorates greatly with deforestation and its attendant changes that dominated the community over the years. Exploration and exploitation activities by multinational companies' depleted vital herbs, animals and streams, trees and other resource that were used in treating health problems. Practitioners are dislocated, to cure; they travel far in search of these materials. Presently, to treat ailments, patients are directed to search for these materials as a result of scarcity in the community. This increased the cost of treatment. Time, proximity and cost therefore deter the villagers from seeking health at the onset or at the detection of illness symptoms. Many have lost their lives or that of relatives; some are incapacitated as a result of delay in prevention or cure.

The implications of deforestation on medicinal plants, herbs and saplings are that, during felling of trees or when drilling oil, large amount of trees which provide herbs and little saplings are destroyed. The chemicals used in preserving oil equipment along with spills silt the soil. This destroys both plants and animals to the highest degree. The environmental and socio-economic impact of deforestation can be inferred from the above paragraph. The environment is polluted; it becomes unfit for human consumption. The socio economic activities of the people are disrupted. Life becomes unbearable and their local economy suffered great setbacks. These have been the plight of Sapele people who have limited power to question the administration which on regular basis impose exploiters on the people.

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