ENVIRONMENTAL HEALTH AND DISEASE PREVALENCE IN SELECTED COMMUNITIES WITHIN ADDO-ODO/OTA LGA, OGUN STATE, NIGERIA

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ABSTRACT

There are certain diseases that are most prevalent among certain human living environment or community. Such includes cholera and malaria diseases that occur from time to time Iju community and other three in this study are typical Nigerian localities that malaria has become an epidemic problem. This study therefore sets out to investigate the most prevailing environmental related diseases in four proximate communities of Iju, Igboloye, Obere and Onibukun all within Ado-Odo/Ota local government. The research's aim was achieved through a quantitative research method by which two hundred randomly sampled populations were drawn and the subsequent enquiry across the community through a direct questionnaire method. The generated data were processed using the statistical package for the social sciences (SPSS) from which findings has revealed that malaria is most prevalent nagging disease in the selected communities. Investigation further indicated some common factors as causes of malaria among which are poor physical environment and ignorance of how to handle the challenge. The study unveiled that low educational status population or person earns a poor living which in turns has implication on proper living condition of his environment. The study concludes that much work still needs to be done in research and by the government with the intention to taming the ugly ravaging situation in the communities. The employment of both orthodox and traditional medicine is suggested as combat tools on the malaria ravaged society.

Keywords: Community, Disease, Environment, Malaria, Iju, Igboloye, Onibukun, Obere

INTRODUCTION

The word 'health' though may have diverse connotations across all devices; however, in the generic usage health is being described as the general condition of a living being in all aspects bodily. At the onset of World Health Organization (WHO)'s establishment in 1948, the term health was put in a more acceptable definition as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". Development in the global environment had put the entire world on its feet as per the need to mitigate certain negative trends or indicators of climate change, which basically arose from poor human management of the living environment.

Health services are known widely to be provided at different levels by different agencies and specialists. In Nigeria for example, the orthodox health-care services are controlled by the existing three tiers of government, namely: the Federal, State and Local governments. The first attempt at planning ahead for the development of health services in the country took place between 1946 and 1956 and covered all aspects of governmental activities in the states. These also are beefed up by different private organizations and vision minded individuals who establish and run private medical services. The orthodox health care juxtaposes with the traditional medical practitioners which seem to serve the majority of the rural populace and now highly patronized by the significant population of the urban poors.

Researches have revealed several problems challenges of the rural people to include environmental related health. According to Eyeni (1987), the critical set back to development in most developing countries of the world is the lack of proper and adequate attention to the difficulties faced by the rural regions. It is however, interesting to know that issues of rural development are being backed by philanthropists, individual researchers and the government at various levels in Nigeria. Most illnesses worldwide are not only products of hereditary or lifestyles, most of them are environmentally or ecologically related. Much havoc which such illness introduced into the lives of the affected individual or a population has the potent force to undermine their quality of life. From studies around the globe, local communities have been neglected in the adequate provision of social infrastructural services such as health-clinics, good water and effective environmental sanitation. This study investigates the physical environment *vis-à-vis* diseases that are common in Iju, Igboloye, Obere and Onibokun communities of Ado-Odo/Ota Local Government Area of Ogun State.

The four communities like many others in the same region, have experienced a continuous negligence in the provision of those essential services to some degrees. Regardless of advancement in the field of physical planning, medical sciences and routine availability in clinically effective therapies in the proximate cities of Ota and Lagos accessibility to good services has eluded these so-called rural communities. This is a clear evidence of poor linkages and coordination in the salient public sectors (government ministries). From the time of independence and creation of Ado-Odo Local government, when the four communities were mere mini communities, there could hardly be found any function cottage health care clinic in the area. It is needful that the study identifies the causes of the poor healthy environment and certain diseases that affect ordinary people of these rural communities.

Many of these communities have need to live with poor physical environmental   particularly with the high rate of urbanization that engulfed the linear pattern communities since two decades ago, and worsened by unmatchable provision of basic health care   centres to combat the diseases that affect the communities. This study dovetails into brief surveys on into the sources of drinking water, geographical location, and level of disease awareness in the area.

The study has identified the types of disease that are environmentally widespread among the residents of Iju, Igboloye, Obere and Onibokun communities. This was carried out under the employment of four objectives, namely:
1. To document the commonest disease that is prevalent in the study communities.
2. To identify the factors responsible for the common diseases in the four communities.
3. To examine the factors that aids the spread of the diseases in the area.
4. To examine the role of the community in eradicating such diseases.

BACKGROUND OF THE STUDY AREA
The four communities of *Iju, Igboloye, Obere and Onibokun* are ribbon pattern settlements which stretch near five kilometers along a major regional artery which is located on longitude $3^{o}10'E$ and Latitude $4^{0}12''N$ (see Figure 1.0). By the fact of the communities location advantages particularly along the only connecting route to Benin republic border and the closed proximity to the port city of Lagos, the communities over

two decades have began to feel the impact of urbanization which filters from Lagos mega city and the surrounding bigger towns
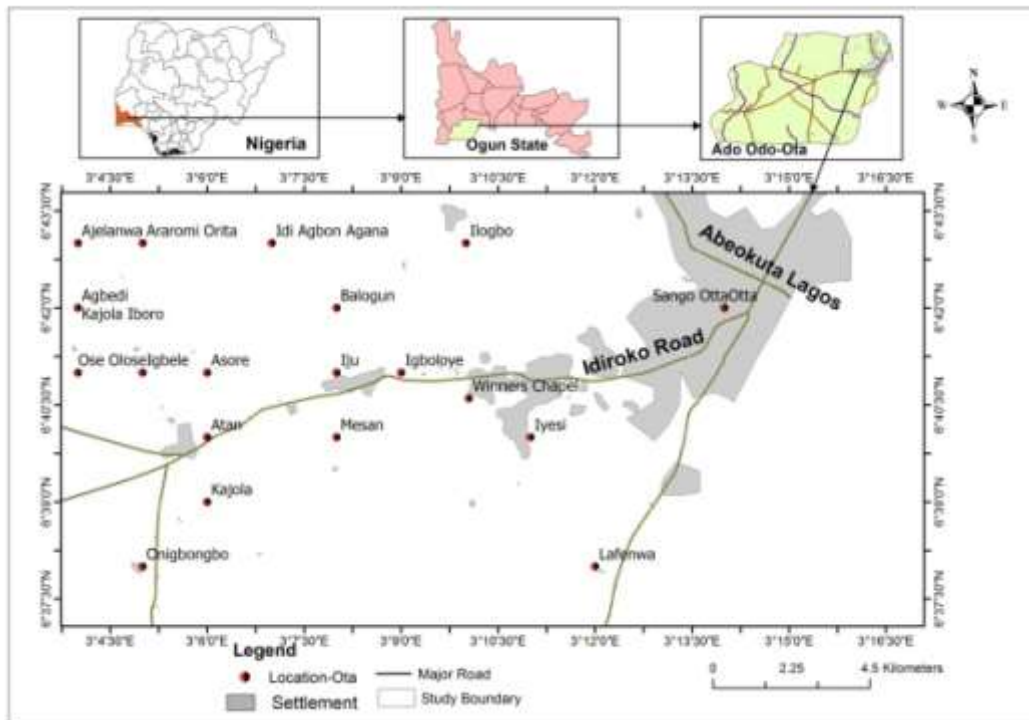
Figure 1.0: Location Map of Ado-Odo/Ota Local Government and the Study Area

The economy is of the area is mixed as at the moment due to incessant migration of people from other parts of the region and Lagos in particular. As agrarian rural communities for many decades, much transformation has come upon them over the years. The entire area depicts a mixed cultures and social background. The Aworis, A sub strata of the Yoruba ethnic group are the original inhabitants and land lords. The entire land area is currently attracting a higher price than it was about twenty years ago before the emergence of many industrial and educational establishments which situate at proximate distance within the communities. Essentially, the emergence of Winners mega church and its university further accentuate the land value of the entire landscape. The people are gainfully engaged in trading, poultry farming and other personal works while a considerable numbers are employees of industries, government institutions or big time private organizations in the cities of Ota and Lagos.

In effect many houses have been built on self-occupiers' bases. The very few affluence individuals have built their residential houses for rental otherwise known as commercial purpose, to generate income for their

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family upkeep. Although most of the structures (houses) are grossly inadequate in terms of proper planning (lacks prior planning approval) just like the villages' future development lack any form of proposal especially physical development (comprehensive master plan) documents. However, the whole landscape is somehow rugged and dissected in some areas - the situation which left many internal streets inundated during raining season. Moreover, the rainstorms pervade easily through the sloppy terrain down stream. The effects of this unplanned physical development of the four urbanizing settlements are the unkempt environmental condition of the communities and essentially the profuse multiplication of mosquitoes insect that breed malaria and yellow fever diseases.

On health - centres availability in the communities, Table 9 in the appendix page reveals that there is 80% positive affirmation, confirming the existence of health centre in the community. There is a problem of awareness of what exists within the four communities. This could be because there are parallel existing ways of doing things, hence the residents seldom know if there is availability of social infrastructure in their communities. Moreover, the closeness of one health center for example from the other is worrisome.

LITERATURE REVIEW

The classical Western medical notion that one could improve one's health through ones own actions for example, by eating right, breathing fresh air, and getting enough sleep and exercise proved to be a powerful influence as medical theory developed beyond yesteryears' influence over the centuries. Ancient medicine made it clear to physicians and ordinary people that responsibility for disease and health was not the province of the *gods and goddesses*. Every person, either independently or in counsel with their physician, had the opportunity to attain and preserve health, meaning that this notion of personal responsibility for health acquired even greater attention, and it was understood generally that *''we die by the way we live''* (Berryman, 2003).

Right from the early time of city development especially during industrial revolution when most rural population flocked into the cities where there were jobs opportunities but without adequate residential accommodation to march, there seem to be an evolution of myriad of diseases that emerging from poorly handled living environment. The inadequacy of infrastructural provision and good environmental management of any place could lead to environmental related

sicknesses or in a way the intensification of diseases that could have been avoided. Malaria is a major disease that is prevailing in most Africa nations especially in the tropical rain forest zone. Malaria as one of the greatest threats to African population is said to have attacked an individual on average of four times in a year with an average of 10 to 14 days of incapacitation (Alaba and Alaba, 2002). This prevalence have external factors linkage to it (factors known as the exogamous factors like, culture, social group, environment, etc) according to Obiyemi & Adeniyi (2003).

Environment factor deals with certain environmental features such as vegetation (trees), rivers and hills, all of which are believed by many traditional societies to be the habitation of gods or spirits. Trees in any given spatial environment often bring a lot of birds like the owl and bat which could facilitate the evolution of certain diseases. For instance, in the African belief system, a cry of an owl bird in an area signifies a negative happening in anticipation such as 'seriously illness or 'sudden death' (Ojo, 1971). Beyond this however, the issue of poverty is also at the roots of the malaria giant' in Africa (Coluzzi, 1999). Poverty impacts on self-treatment, health seeking behaviour and capacity for disease prevention at home and community level.

Comparative localized studies of parameters in areas of active deforestation and areas of non-active deforestation in Ebonyi State (Southeast Nigeria) revealed that: there are mechanisms linking deforestation with malaria epidemiology and the mechanisms are extremely complex. Findings from the study suggest that deforestation encourages mosquito density, and consequently the landing/biting rate and obviously the malaria incidence. Deforestation, population growth, human movement, economics, power, environment and malaria are intimately interconnected. However, predicting the impact of specific land-cover changes on malaria status will require analysis of specific local conditions. Malaria has varying relationships with deforestation, but in most cases deforestation appears to increase the disease load of local people as can be seen in the study.

Generally in most developing world, especially in the Africa continent poverty constitutes a larger proportion of many abnormalities that have beclouded the populace – poorly handled living environment, health issues, poor education attainment and so many other crises. Even now that health is higher on international agenda than ever before, and

concern a vital issue in development, there are still no immediate solution to too many challenges with regards the living environment. Frankly, three of the Millennium Development Goals (MDGs) recognized the necessity of achieving health improvements by 2015. Until the expiration of the gap period, the set millennium development goals only scratched the surface of the deep problems. The nations of the world have agreed that enjoying the highest attainable standard of health is one of the fundamental rights of every human being, without distinction of race, religion, and political belief, economic or social condition. Nonetheless, beyond its inherent value to an individual, environmental health is also central to the totality of human development and to the reduction of poverty.

In like manner, education, (that is, the formal knowledge transfer and acquisition), which is generally believed to have aided transformation in the developed world, are something elusive to many habitat places in the African rural, peri-urban and cities alike. The impact of this is colossus in the rural areas where formal education is absolutely inadequate or is being mitigated upon by the cultural belief system. In such places, it is easy to see the knowledge scarcity physically reflected on ground (in the physical environment) with distasteful sighting. Nwafor (2006) has emphasized that rurality, ignorance and poverty all are synonymous to the killer diseases of malaria, and HIV which have equally ravaged the African continent in recent years. It is easy without hesitation to affirm that ignorance indeed corrupts and absolute ignorance corrupts absolutely.

Education has the impact to modify beliefs about diseases causations and cures and thus influences receptivity to modern health care services. However, schooling enhances people's knowledge about modern health care services, improves their ability to communicate with modern health care providers, increases the value they place on good health results and heightens demand for modern healthcare services (Caldwell, 1979, Caldwell, 1989). Perception studies have also shown that people of low educational status are not often favourably disposed towards the use of western /orthodox medical health care services. There is a strong opinion that people of low educational status often perceive illness and disease within the natural and supernatural realm (Jegede, 1988),

METHOD OF RESEARCH
Consistently, the research method adopted in this study is the quantitative research method in which questionnaires were

administered to the sampled population within the four communities. The rationale for the method was to generate data on first hand basis which can be used to checkmate secondary information particularly on the pattern of disease prevalence and health care utilization among the four communities in focus (all within Ado-Odo/Ota local government area, Ogun State, Nigeria). Details information on the people's pattern of health care utilization, their health seeking behaviour and treatment of illness pattern were collated and analyzed with the assistance of SPSS, to generate graphical features of the situation.

The study sample size of two hundred households was drawn using the simple random probability and purposive non-probability sampling technique. The purposive sampling technique was adopted to select respondents based on the specific interest and focus of the study which targets the indigenes of the four communities in Ota region, Ogun State. The simple random sampling technique is the most suitable for this study because it gives every individual an equal opportunity of being selected. However at the point of administering the questionnaire, the researcher has to give the questionnaire to the people to pen down their opinions on environmental condition of the community.

Basically, the questionnaire was fractionalised into two sections. The first section contained questions on the respondents' socio-demographic and socio-economic characteristics. The second section in the questionnaire elicits information about what the most prevalent diseases are and information about their beliefs and major causes of the diseases in the community of residence. Both the primary and secondary data sources used gave the research intention a good standing. Primarily, the data were sourced from observed events; manipulation of data or variables; conducting research or experiments and eliciting information from respondents through questionnaire. The secondary data on the other hand are data collected from previous study and existing materials such as bulletins, newspaper, government publications, and non-governmental publications.

Quantitative analysis of the retrieved questionnaires was carried out with the use of SPSS Statistical Package for the Social Sciences (SPSS version 7) which helped to reveal the processed data in frequency tables and percentages. The employment of chi squared test to affirm the authenticity of the opinion of the respondents become very crucial in the study.

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RESULTS AND DISCUSSION

Chi squared test in Table 1 affirms the validity of the perception of the respondents in the seven vital questions or inquiries as a preliminary investigation into the communities residents living behaviour.

Table 1: Chi Squared Test

Parameter /Issue	Chi Sq	Significance
Is there no good drinking water in the building you live in?	18.075	0
Is there any seasonal flood around your residential building?	30.204	0
Do you have leaking roof in your apartment?	5.688	0.017
Is your drainage system poor?	0.269	0.604
Do you have poor sanitation?	0.871	0.351
What is your source of water supply?	52.196	0
How do you dispose of your refuse	72.957	0

Source: Analysis by using SPSS 15.0 Evaluation

Responses given concerning the parameters (issues) are valid because the significance of the responses are lesser than 0.05 at least in 66.6 % cases. This means that the respondents gave the questions some careful thoughts before choosing their answers. In other parameters it means the respondents chose their options without giving the questions a deep thought – in an irrational manner.

Table 5 (in appendix 1) shows that 2.1% of the respondent drinks stream water, 7.7% outsourced from the river, 53.3% obtained theirs from tap water, and 36.4% sourced drink water from the well. From this analysis it shows that many people take tap water which is considered as a suitable source for drinking. But the fact that they still fall ill means that to some extent the water intake does not really have much to do with the health challenge prevailing in the communities under investigation.

EDUCATION AND RELATIONSHIP TO THE FINDINGS

The study reveals that a quite number of the respondents are not highly educated; most of them had their education up to primary school level, few others to secondary level, and very few others to tertiary level. Although the education status of the respondents may not have a direct

effect on their frequency of getting ailment or choice of healthcare utility, however, through ignorance this could have contributed to the spread of malaria fever. Many of the respondents had no idea of the use of mosquito nets and insecticides. The fact that high number live in unkempt environments shows that they are exposed to insects bite. For a better expression, 'education' as used here implies 'enlightenment'. This simply means the populace has to be enlightened on the use of mosquito prevention methods. Moreover, as long as the high percentage of the population is unschooled, they will automatically have little understanding on self defense mechanism as regards preventive environmental health issues. Consequently, medical treatment may become elusive or a whole lot of luxury to attain.

Most respondents attested that their stressful dealings coupled with the indecent ambience have some negative effects in their health conditions. Others have thought otherwise, but rather linked their health conditions to dietary lifestyle. Further more the study discovered a typical environmental relationship which affects the living condition of the four communities. Approximately 10% live within a proximate distance to over grown bushes and/or stagnant water pool. The implication of this is that such locations are favourable breeding places for mosquitoes. Analysis further revealed factors aiding the spread of diseases in the communities.

The role that the people themselves play is significant as they know what it means to be protected from mosquito bite to some extent because most of them have an idea of prevention from mosquito bite but not all of them. They also understand the use of hospital facilities. From their responses of the present of health care facilities, it shows that a lot of them know what to do when they need health care; they go to the hospital to treat themselves. It is rarely difficult to stop street hawking trading but a lot has to go into their level of education in order to reduce excessive labour which only translates into little remuneration that would not be enough to take care of what they see as necessity.

Lack of a basic health knowledge for instance can make residents of a poor environment to suffer ill-health. Better education, in a null-shell can aid better jobs opportunity. Community as an entity of organized settlers has some definite roles to play in keeping and reducing the level of malaria disease prevalence, although individual must first take care of himself and the immediate ambience as a first step toward caring for other members of the community. The socio-demographic characteristics

constitute the *age* of respondents, their gender, religion, marital status, level of education, and occupation. These socio-demographic features of the respondents are broken down into sub headlines tabulated below

Table 1: Personal and Socio-Economic Characteristics of Respondents

Age	Freq.	Percentage
16-20	45	23
21-25	42	22
26-30	28	14
31-35	31	17
36-Above	46	24
Total	192	100
Gender		
Male	113	58
Female	82	42
Total	195	100
Religion		
Christianity	125	64
Islam	68	35
Traditional	2	1
Total	195	100
Marital Status		
Single	86	44
Married	106	54
Others	3	2
Total	195	100

Table 1 depicts the age, gender, religion and marital status of the responding population. Accordingly, 23% of the respondents are between ages 16-20, while 22% and 14% are within age ranges 21-25 and 26-30 respectively. Only 17% are within age's bracket 31-35, but significantly 24% of the respondents have attained the age 36 or more. Characteristically, because most elderly ones are retirees, they are either at home doing nothing tangible or have restricted work activity to home environment. The age cohort 26-35 is lesser in number because they mostly belong to the energetic working class age. This cuts across the two genders which revealed that 57% for males, and 42% for females.

Evidently, there are more male respondents than the female. Religion plays a significant role in the life and social inclination of most Nigerian. For this reason it is not surprising that majority of respondents lean

closely to one of the religions faiths. 64% of the respondents are Christians, while 34% and 1% are Muslims and traditionalists respectively. Marital status of the survey depicts 44% of the respondents as singles, and 54% are married. There are indications that those who are married have lots of responsibilities in terms of cares for family members and cares for a good living environments. Although research in this area has shown that success of cute environment is made possible when greater percentage of the population are educated.

Table 2: Education and Occupation Status

Education Status	Frequency	Percentage
Primary	33	18
Secondary	124	64
Tertiary	35	18
Total	193	100
Occupation		
Farming	17	9
Trading	60	31
White collar	9	4.6
Other	109	56
Total	195	100

Table 2 shows that 16% of the respondents are holder of primary school certificate only, 63% are secondary school certificate holders as their highest level of educational attainment. However, 18% have scaled through tertiary (post secondary) institution. This shows that a number of respondents are illiterates to some extent – this has a part to play in the quick response to certain illnesses and diseases in their body. There has always been a correlation between education and healthy consciousness. Being informed often assists individual ability to seek or adopt safety precautions.

The graphic illustration of the Occupation of the study area confirms that 8% actually engages in agriculture, 30% in sales business, only 4% in white collar jobs, and yet as much as 55% found solace in other jobs ranging from hair dressing, car repairs, carpentering, and other hand jobs. From these we know that majority are self employed rather than working in government ministries or in the industrial sector for monthly pays. This structural pattern may have arisen from the fact that the greater population do not have the good educational qualifications or the requisite skills to work in government or private set ups. The nature

of job types in the communities has exposed them to all sorts of dangers, for example street hawking is a not at consonance with high way crossing. Other challenges include high motor traffic affronting the four communities to scorching sun exposure every day of the week.

COMMUNITY RESIDENTS 'PERCEPTION OF ENVIRONMENTAL DISEASES

Table 3a: Percentage Distribution of Diseases within a Short-Term

Disease	Freq,	%
Malaria	75	38.5
Typhoid	15	7.7
Headache	13	6.7
Other	24	12.3
None	68	34.9
Total	195	100

Table 3b:

Environmental Living Condition	Freq,	%
Damp	13	6.9
Cold	105	53.8
Noisy	59	30.4
Overcrowded	15	7.9
Total	192	100

Table 3a shows that 38.5% of the respondents were ill of malaria, 7.7% of the respondents had typhoid, 6.7% of the respondents had headache 12.3% of the respondents had other illnesses ranging from stomach ache, leg pain, cough and catarrh. 34.9% of the respondents had nothing serious, which means that nothing was wrong with them. From the analysis, it is obvious that majority had malaria fever, and by comparison the percentage gap between malaria and other diseases /illness is large. This is followed by typhoid which could be due to the type of water intake of the members of the community.

Table 3b reveals essentially the environmental living conditions of the sampled population. It further reveals that malaria plague is not an uncommon experience with people in different locations or environmental conditions (damp, cold, noisy, overcrowded) in the four communities across the local area. There is the belief however, that both damp and cold conditions are favourable for malaria breeding.

Table 4: Prevailing Disease in the Community

Ailment	(a) Common disease by Survey		(b) Assumed Disease by mere Guessing	
	Freq.	%	Freq.	%
Malaria	108	55.4	152	77.9
Typhoid	17	8.7	20	10.3
Headache	25	12.8	2	1
Others	23	11.8	9	4.6
None	27	11.3	17	6.2
Total	200	100	200	100

From Table 4, one could see that 55.4% of the respondents have identified malaria as the most common disease in the community, followed by headache and others ailment - 12.8% and 11.8% respectively. Only 8.7% affirmed typhoid fever as a prevailing disease. Findings explicitly affirm that 11.3% of the people could not identify any ailment as too common to them. From the analysis, it could be agreed that majority had malaria and the occurrence tendency gap between malaria and other diseases or illness is large. Typhoid fever prevalence could be due to the quality of water used for drinking by the respondents. The reduction in percentage of those that had nothing wrong with them may suggest that even if most people have not been ill in the past four weeks, they must have a member of their household falling ill.

Based on the question on their assumption or guessing on the common illness in the communities, that is, the particular disease common by respondents' observations. Table 4 (part b) shows that 77.9% of the respondents guessed that malaria is common, 10.3% of the respondents thinks considered typhoid, however only 1.0% went for headache. From this therefore we could deduce absolutely that majority of the populace have had issue with malaria parasite. The prevalent of malaria over other diseases has been established in this study.

Table 7: Mosquitoes Prevention Method and Malaria Frequency

(a) Mosquitoes Prevention Method	Freq.	%
Nets usage	62	32
Insecticide	103	53
Other	25	15
Total	195	100

(b) Mosquitoes Nets Treatment Frequency	Freq.	%
Monthly	43	22.1
Yearly	7	3.6
Quarterly	8	4.1
Never	2	1
None	135	69.2
Total	200	100

Table 7 depicts both mosquitoes'' prevention methods (a) and treatment frequency of mosquitoes (b) among the respondents. Table 7(a) shows that 32% of the respondents make use of the mosquito nets, 53% use insecticide, 15% use other means like mosquito-coil. From the analysis, majority make use of insecticides which may be too expensive for an average low income household nevertheless they could be very effective depending of the grades use – local made or the factory types. Information on net treatment was sought as whether the residents frequently treat their mosquitoes' nets or not, and how this is being carried out.

Table 7 (b) reveals that 22.1% often have their nets treated on a monthly basis, 3.6% does that on a yearly basis, while 4.1% does that quarterly, but only 1% never needed to consider net treatment. Interestingly, 69.2% do not have nets again. This shows that higher populations are grossly exposed to mosquitos' bites and therefore suffer malaria fever.

When a net is not treated, it is as good as having nothing to protect or mitigate the direct effect of malaria vector.

Table 8: Preference of Health Care System among the People.

Health Type	Freq.	Percent
Traditional healing	56	28.7
Private-own hospital	43	22.1
Government hospital	63	32.3
Faith healing/ prayer	32	16.4
Others	1	0.5
Total	195	100

Question four, sought to know the type of health services that the respondents prefer to use, table 8 shows that 28.7 percent of the respondents prefer to use the traditional method like herbs, concussion, and others, 22.1 percent prefer to use the private hospital, 32.3 prefer government hospital, 16.4 percent prefer faith healing or prayer system of getting health service.

CONCLUSION

From the research a number of cursory conclusions can be drawn pertaining to the pattern of environmental health- living and disease prevalence among the four communities of Iju, Igboloye, Obere and Onibokun. First, malaria has been identified as the most common disease in the study area and its spread is carried out absolutely by mosquito insect which widely rides on the poor environmental conditions and care –free attitude of the inhabitants. Should the environment be kept clean and the residents take extra care by continuous self protection through the use of nets or insecticide, there would be a better result.

Second, some of the socio-economic and socio-demographic characteristics of the communities have significant influence on the environment especially in respect to their occupation. It shows that a lot of them live a pauper's life and are not really able to meet their basic daily need of health care. In view of this, it is pertinent that a further

study is considered as a follow up on research. For instance it is needful to know the reasons why malaria is most prevalent in the four communities of Iju, Igboloye, Obere and Onibokun. Good quality water supply will obviously go along way to alleviating the hardship of the resident. The most urgent research need at the moment is for a more thorough approach to structural conceptualization, so that the main sources of good health care provision can be clearly identified, together with their characteristics and interrelationships. The structural frame work should also be put into a developmental perspective in order to examine its linkages with the wider socio-spatial system, urban, national and international, of which it is a part.

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Appendix 1

Table 5: The Source of Domestic Water

Source	Freq	Percent
Stream	4	2.1
River	15	7.7
Tap	104	53.3
Well	71	36.4
Total	194	99.5

4b)   Causes of Ailments

Causes	Freq.	%
Mosquito	69	35.4
Bad food	37	19
Environment	32	16.4
Stress	15	7.7
None	32	16.4
Ignorance	10	5.1
Total	195	100

Table 8: Regularity of Falling Ill

Regularity	Freq.	%
Weekly	12	6.2
Monthly	33	16.9
Yearly	30	15.4
Rarely	112	57.4
Others	7	3.6
Total	194	99.5

Affirmation	Health Centre Availability		Health Centre Proximity	
	Freq.	%	Freq.	%
Yes	156	80	118	60.5
No	39	20	77	39.5
Total	195	100	195	100