# Housing Conditions and Their Effects on the Residents of Abakaliki Metropolis of Ebonyi State, Nigeria

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## ABSTRACT
This study is aimed at assessing housing conditions and their effects on the residents of Abakaliki Metropolis of Ebonyi State, Nigeria. It has the objectives of examining the prevailing environmental and housing condition in the study area; appraising the perception of residents about their housing and environmental sanitation; identifying and assessing the various forms of housing and environmental sanitation problems and exploring possible actions that can be taken towards sustainable housing and environmental sanitationin the area. The research adopted the survey research design which helped in elucidating vital information from the respondents on the effects of housing conditions in the selected area of study. Purposive and simple random sampling techniques were adopted and a total number of 387 respondents were fit for the study. Structured questionnaire instrument, interview and personal observation facilitated information gathering. Using SPSS, collated data were presented and analyzed in tables, percentages, and means; while the hypothesis was tested using Chi-Square test. Major finding from the study revealed that majority of buildings in the study area were rented tenement buildings with over 40 years of age.Other information include the satisfactory level of refuse collection and disposal method; toilet location; quality of environment and residents' behavior; drainage and sanitation conduct in the area. Prevalent health issues' responses include skin disease, malaria fever, typhoid fever, diarrhea, cholera, depression and anxiety and genitourinary tract infection. The study also revealed approaches capable of addressing the housing condition. The hypothesis testing showed that there is significant relationship between the housing conditions in Abakaliki metropolis and the health conditions of the dwellers at the p-value (0.001) was less than the level of significance (0.05). Based on the findings, strict recommendations were made for implementing development plans and planning schemes in thestudy area.

**Keywords:** Housing, Environment, Waste, Sanitation, and Health.

## I.    INTRODUCTION
Housing is one of the major priority needs of man. Thus, it is being regarded as one of the three basic needs of mankind and the most important requirement for the physical survival of man after food (Owolabi, 2017). It determines to a large extent the success and identity of man and also considered as a tool for social advancement (Agbola, 2015). Housing is defined as the process of providing functional shelter in a neighbourhood day-to-day living and activities of individuals and families within the community with its services and utilities (National Housing Policy, 2006). Housing condition on the other hand is the totality of the physical, environmental and the satisfaction level of a particular dwelling unit measured against some variables of livability at a particular time (Owolabi, 2017). Researchers over the years have established the fact that good housing conditions are indispensable in improving household health (Ekpetere, Ekeh and Eziechi, 2019). Poor housing and environmental conditions can predispose to adverse health problems including infectious diseases (respiratory disorders), stress and depression.

In Africa, the housing problem is both quantitative and qualitative (Oladapo, 2016). Quantitative in the sense that there exist massive housing deficits and qualitative in the sense that

available housing units were devoid of basic amenities and services leading to the proliferation of slums (Aribigbola and Ayeniyu, 2014; Omede, 2014). In Nigeria, the Federal Housing Authority's (FHA) failure to adequately provide decent housing for its populace means that available units would be overcrowded, dilapidated and unfit for human habitation (Onibukun and Faniran, 2015). It is estimated that almost 75% of Nigeria's urbanities live in slums (Olotuah and Bobadoye, 2019) where access to basic amenities and services proves impossible. In Ebonyi state and Abakaliki metropolis in particular, the decaying and dilapidated housing units in the Old and New Kpiri-kpiri areas point to the fact that all is not well with the health and wellbeing of residents living in the area (Nwofe, 2015). Many studies have confirmed that there was a positive correlation between the population's quality of life and the quality of its houses and suggested that improving the standards of existing houses should be the main focus of housing policies (Odalapo, 2016; Ozdemir, 2014). This is necessary since poor housing conditions could in time lead to major health problems for residents (Adetunji and Isah, 2015; Wan and Su, 2016).

The aim of the study is to assess the housing conditions and the effects on residential dwellers of Abakaliki metropolis, Ebonyi State, Nigeria, with the objectives of examining the prevailing environmental and housing condition; the residents' perception; forms of housing and environmental sanitation problems; health issues and exploring possible actions that can be taken towards sustainable housing and environmental sanitation for healthy living in the area.

## II. REVIEW OF RELATED LITERATURE

**The Concept of Housing and Housing Conditions**

The World Health Organization (WHO) (2014) describes housing as residential environment which includes the physical structure used for shelter, all necessary services, facilities, equipment and devices needed or desired for the physical and mental health and social well-being of the family and individuals. The United Nations Ad-Hoc Group of Experts on Housing and Urban Development equally asserted that housing is neither a mere shelter nor household facilities alone (United Nations, 2015). It is an essential need that comprises essential services and facilities, which makeup a physical environment that link such individuals and his family to the community in which it evolves. Therefore, environmental amenities like waste disposal, water supply, road access and location services implied by the special links between necessary economic and social infrastructure like education, health and recreation are all parts of the package of services designated as housing (Aribigbola, 2015).

The concept of housing conditions is very broad and encompasses both the dwelling's physical attributes and satisfaction with housing. Overall, if housing conditions are good on one hand the high housing costs on the other side constitute a major concern for households in many countries. In general, having satisfactory accommodation is one of the most valuable aspects of people's lives and it is a major element of people's material living standards. It is essential to meet basic needs, such as for shelter from weather conditions, and to offer a sense of personal security, privacy and personal space.

Housing is essential to meet basic needs, such as being sheltered from extreme weather and climate conditions. Housing should offer people a suitable place to sleep and rest, where they are free of risks and hazards. In addition, housing should give a sense of personal security, privacy and persona space. When assessing qualitative housing adequacy, (Ibem, 2014) has the following to be addressed:

- Interior and exterior structural soundness looking at walls, windows, doors, roofs and ceiling;
- Information about space and density: availability of space, number of rooms and information about lighting and ventilation, security and privacy of the housing unit);
- Availability of basic amenities: water, power supply, sanitary services, and accessibility to neighborhood infrastructure (schools, healthcare, recreational, shopping and other basic facilities).

Housing usually has a significant impact on dweller's safety and wellbeing. An unsafe environment, for instance, increases the likelihood of harm and injury, which could have implications for the whole family's wellbeing. Housing in poor condition is more likely to contain hazards that could create an unsafe environment for the whole family (Ford, 2014).Finally, housing is important to satisfy other essential needs, such as having a family. All these elements make a "house" a "home".

**Housing Condition and Health Status of Occupants**

Good housing conditions are also essential for people's health and affect childhood development.

The impact of housing situation does not only affect a person's state of bodily health, but also their feelings of wellbeing and general ability to cope with everyday life. The World Health Organisation defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). The exact relationship between poor housing and health is complex and difficult to quantify. Research on various variables of housing and health indicates that poor housing is associated with increased risk of cardiovascular diseases, respiratory diseases; depression and anxiety, rheumatoid arthritis, nausea and diarrhea, infections, allergic symptoms, hypothermia, physical injury from accidents and food poisoning (Center for Disease Control and Prevention, 2005). Good physical and mental health depend on having homes that are safe and free from physical hazards. Krieger and Higgins (2002) and Shaw (2004) opined that adequate housing can protect individuals and families from harmful exposures, provide them with needed privacy, security, stability, control and capable of making significant contribution to health. On the contrary, when the condition of housing is poor and inadequate, it may result in infectious and chronic diseases, injuries and poor childhood development.

**The Nature of Housing Problem in Nigeria and Empirical Review and Gap**

In Nigeria, even though there are no accurate data on the nation's housing stock, existing studies and observations strongly suggest quantitative and qualitative housing problems across the country (Agbola, 2018). Ademiluyi (2017) opined that policymakers in Nigeria are not really aware of the magnitude of the housing problems facing the low-income earners in the country. Most scholars on Nigeria's housing situation including Onibokun (2017) have assessed the condition of housing in urban centers as inadequate and dilapidated. Hence, the need for the impacts on the people.

## III. RESEARCH METHODOLOGY

The study employed the survey research design involving qualitative and quantitative method in which special attention is paid to sampling. Data were obtained through primary and secondary sources. Primary data source include a well-structured questionnaire, oral interview and personal observation; while econdary data source for the study include web pages, journals, periodicals, newspapers and textbooks.

In determining the sample size for the study, Taro Yameni (1976) method was employed.Purposive and simple random sampling techniques were employed for the study. Purposive sampling entailed that only indigenes of the selected areas of Abakaliki were available for sampling. Simple random sampling ensured that respondents were chosen randomly thereby giving no room for bias. A total of 399 questionnaire copies were administered in the areas selected with the help of field assistants to gain vital information in arriving at veritable findings and conclusion. Collationshows a 97% (387 copies) return on questionnaire. The remaining copies of the questionnaire not returned may be due to relocation of respondents to other places or loss of questionnaire. The result indicated that Agbaja-Unuphu had the highest rate of return of 35% followed by Nkaliki-Unuphu (31%) and lastly by Ntezi (31%) as shown in table 3.1.

**Table 3.1:** Questionnaire Distributed and Returned in the Study Area

| Areas | Distributed Questionnaire | Returned Questionnaire | Percentage Return |
|---|---|---|---|
| Agbaja-Unuphu | 141 | 139 | 35% |
| Ntezi | 125 | 122 | 31% |
| Nkaliki-Unuphu | 133 | 126 | 31% |
| **Total** | **399** | **387** | **97%** |

Source: Researchers' Calculation from Field Survey, 2023

The research analyses results were compiled in a data base using the Statistical Package for Social Sciences (SPSS).Two types of statistical tools were employed in the study, descriptive and inferential statistics. Descriptive statistics inform of frequencies,mean were employed with 5-point rating likert scales indicating the level of responses for goodness/poor, level of satisfaction, and significance.

For the inferential statistics, Chi-Square $(X^2)$ test facilitated achievement of the aim of the study.

It is a statistical tool used in testing hypothesis when the data are in nominal or ordinal form. The Chi-square test is an important tool in hypothesis testing, it is used when there is need to compare cultural or observed distribution with a hypothesis or anticipated one, and this is often

referred to as goodness of fit. The computation is based on the difference between the actual and expected value. Here, the hypothesis was tested with Ho: There is no significant relationship between the housing conditions in Abakaliki metropolis and the health conditions of the dwellers.

## IV. ABAKALIKI METROPOLIS – THE STUDY AREA

**Location:** Abakaliki is the capital city of Ebonyi State in Southeastern Nigeria (Figure 4.1). It is located 64 kilometres (40 mi) southeast of Enugu (Dale, 2014). It lies between latitudes $6^0 34'20''$ to $6^0 41'20''$N and longitudes $7^0 34'20''$E to $8^0 05'30''$E. It is bounded to the North by Izzi and Ebonyi Local Government areas; to the East by Ezza North; to the West by Cross River state and to the South by Ikwo and EzzaSotuh Local gove3rnment areas (Figure 4.2).
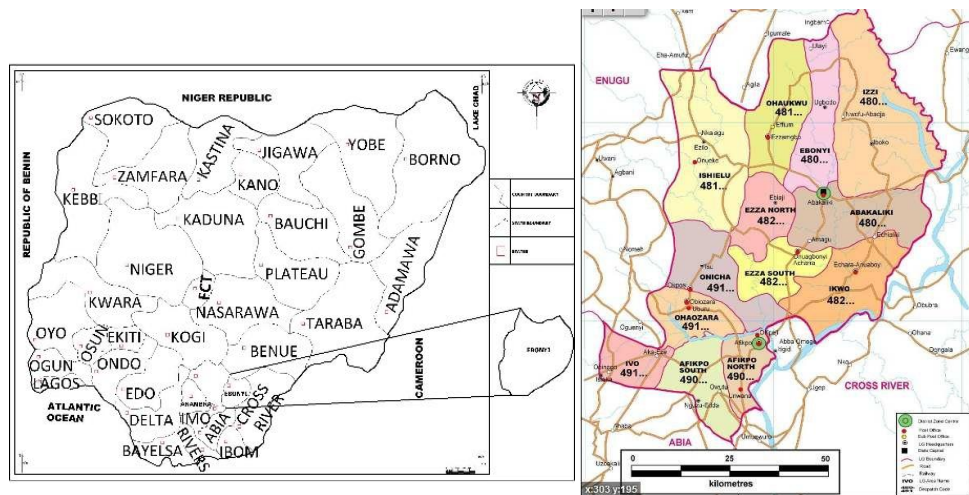


**Fig. 4.1: Map of Nigeria: Enonyi/Other StatesFig.4.2 Map of Ebonyi State:Abakaliki /LGAs**
**Source:** ResearchGate.net, (2016)**Source:** Researchgate.net, Publication (2013)

**Historical Origin and Geospatial Features:** The name Abakaliki has its origin from 'Aba Nkaleke' which is a name of a community in Izzi land (Nkaleke) (Dale, 2014).The relief of the area is generally undulating and no location exceeds 400 m above-sea-level. A major relief structure is hills formed by the pyroclastic bodies. Two main seasons exist in the Abakaliki area, the dry season which lasts from November to March and the rainy season which begins in April and ends in October with a short period of reduced rains in August commonly referred to as "August break" (Aghamelu, Nnabo and Ezeh, 2017). Temperature in the dry season ranges from 20 to 38°C, and results in high evapotranspiration, while during the rainy season temperature ranges from 16 to 28°C, with generally lower evapotranspiration. The average monthly rainfall ranges from 31mm in January to 270 mm in July, with the dry season experiencing much reduced volume of rainfall unlike the rainy season, which has high volume of rainfall. Average annual rainfall varies from 1,500 to 1,650 mm.

Geologically, it is underlain by the Abakaliki Shale Formation of the Asu River Groupand localized occurrences of sandstone, siltstone and limestone intercalations (Ofoegbu and Amajor, 2014).The Abakaliki Shale Formation, which has an average thickness of about 500 m, is dominantly shale, dark grey in colour, blocky and non-micaceous in most locations. The major river that drains the area is the Ebonyi River and its tributaries: Udene and Iyiokwu Rivers. Both tributaries are perennial and usually overflow their banks at the peak of the rains.

**Major Economic Activities:** The major economic activity within the Abakaliki area is subsistence agriculture. Statistics show that more than 60% of the population is engaged in it. One of the main cash crops grown is rice. This has necessitated setting up of rice milling industries in the Abakaliki area. The available land for agriculture is fertile and supports rice and cassava cultivation. The main industries in the area, apart from rice milling industry, are quarrying and rock crushing. Lead-zinc mining occurs around Enyigba and Ameka; in the outskirts of Abakaliki metropolis. The traffic

comprising mainly of heavy-duty vehicles, resulting from the transportation of agricultural produce and other economic activities, mount pressure on the existing road and highway networks in the area.

**Ethnic Composition and Population:** Abakaliki is generally populated by the Igbo people. It is predominantly populated by the Northeastern Igbo of the Afikpo-Abakaliki axis. Abakaliki is also used to refer to people of old Abakaliki political block comprising Ohaukwu-Ishielu-Izzi-Ezza-Ikwo.

**Land Use Activities:** Abakaliki metropolis is the heart of commercial activities in Ebonyi state. Studies by Iyi, Ogbaga and Okeke (2019) showed the total built-up area for Abakaliki was just 42.89km$^2$ of the land cover or 10.45% of the total land cover. From the study also, it was observed that farm land still occupied 315.79km$^2$ representing 76.91% of the total land cover. Since then, there have been a lot of recent expansionary activities in the study area. Iyi et al.'s (2019) findings also showed that in 1986, before the establishment of Ebonyi State, bare land made up about 14.93 km$^2$ of the studied area, or 3.64% of the total land cover. Within the same period, vegetation occupied an area of 104.47km$^2$; representing 25.51% while farm land at that period covered an area of 270.82 km$^2$ representing 66% of the total Land Cover and built-up area covered 19.65 km$^2$ of the land cover representing 4.84% of the total land cover.

## V.    DATA PRESENTATION, ANALYSES AND DISCUSSION OF FINDINGS

**Environmental and Housing Condition in the Study Area**

The housing condition in the three (3) selected areas,at Agbaja-Nnuphu, out of 139 houses investigated the majority (30%) were in fair states. 26% were poor; 19% in good conditions; 14% in very poor conditions while 11% in very good condition. For Ntezi-Aba, analysis revealed that

out of the 122 houses studied, only 9% of them were in very good conditions. Majority (54%) of the houses were in fair conditions; 14% in good conditions; 13% in poor conditions and 10% in very poor conditions. For Nkaliki-Nnuphu, results showed that majority (36%) of the 126 houses investigated were in poor conditions. 25% were fair; 17% were good; 15% were very good while 6% were very poor. Overall, it can be deduced from the analysis that majority (36%) of the houses in the selected areas of Abakaliki Metropolis were in fair conditions while only 12% were in very good conditions. This therefore implies that urgent intervention measures like repairs and rehabilitation is required in the selected areas of the study area.

**Residents' Perception of their Housing and Environmental Sanitation in the Study Area**

The cases surveyed had 4% of their toilet location very satisfied, 9% of the respondents had their toilet location fairly satisfied and 27% of the surveyed area are satisfied in the location of their toilet, while 34% are dissatisfied while 26% are very dissatisfied with their toilet location. On sanitation conduct, 4% of the residents are very satisfied, 10% of the residents are fairly satisfied in their sanitation conduct, 14% are satisfied based on their sanitation conducts, 25% are dissatisfied, while 47% of the residents are very dissatisfied. On drainage condition, 64 % were dissatisfied while 6% claimed to be satisfied.

**Quality of the Environment:** It was revealed that 8% of the residents are very satisfied with the quality of their environment, 18% are fairly satisfied, 20% are satisfied, 29% are dissatisfied, 25% are very dissatisfied and 1.8% was missing. Also, 97% of the respondents regarded maintaining their house and the entire surroundings as important and necessary while 3% regarded it as not necessary.

Plate 1, 2&3: State of Poor HousingConditions in the Study Area
Source: Researchers' Field Survey, 2022

**Housing and Environmental Sanitation Problems'Analysis in the Study Area**

Results from table 5.2 below show that out of the 10 identified housing and environmental situations, 6 were significant in the selected areas as they recorded mean scores above the benchmark of 2.49. These include broken floor (m=4.0), broken doors and windows (m=3.70), leaking roof (m=3.60), poor electricity and water supply (m=3.18), indiscriminate waste disposal (m=2.81) and cracked wall (m=2.52). However, presence of mould in room (m=1.70), foul and polluted air (m=1.80), poor ventilation (m=1.70) and outbreak of disease (m=1.80) were not significant in the selected areas of Abakaliki Metropolis as their mean scores were below the cutoff point of 2.49. The results show that more attention is needed to improve the living condition of urban dwellers in the areas.

**Table 5.2:** Housing and Environmental Problems' Analysis of the Study Area

| Situations | Very Significant 5 | Somewhat significant 4 | Significant 3 | Less significant 2 | Not significant 1 | Mean | Remark |
|---|---|---|---|---|---|---|---|
| Leaking roof | 56 | 206 | 59 | 40 | 26 | 3.60 | Accepted |
| Broken floor | 78 | 213 | 96 | - | - | 4.0 | Accepted |
| Broken doors and windows | 63 | 165 | 125 | 30 | 4 | 3.7 | Accepted |
| Cracked wall | 50 | 56 | 62 | 96 | 123 | 2.52 | Accepted |
| Presence of mould in rooms | 15 | 23 | 42 | 45 | 262 | 1.70 | Not Accepted |
| Poor electricity and water supply | 59 | 96 | 98 | 122 | 12 | 3.18 | Accepted |
| Indiscriminate waste disposal | 66 | 63 | 93 | 61 | 104 | 2.81 | Accepted |
| Foul and polluted air | 23 | 19 | 46 | 65 | 234 | 1.80 | Not Accepted |
| Poor ventilation | 15 | 16 | 29 | 96 | 231 | 1.70 | Not Accepted |
| Outbreak of diseases | 23 | 33 | 35 | 66 | 230 | 1.80 | Not Accepted |

Source: Field Survey, 2023

**Table 5.3:** Prevalent Diagnosis and Frequency in the Study Area

| Diagnosis | Very often 5 | Often 4 | Sometimes 3 | Rarely 2 | Never 1 | Mean | Remark |
|---|---|---|---|---|---|---|---|
| Respiratory disease | 23 | 63 | 25 | 102 | 174 | 2.12 | Accepted |
| Skin disease | 222 | 56 | 65 | 36 | 8 | 4.16 | Accepted |
| Malaria fever | 169 | 102 | 96 | 17 | 3 | 4.10 | Accepted |
| Typhoid fever | 152 | 98 | 93 | 28 | 16 | 3.90 | Accepted |
| Genitourinary tract infection | 65 | 96 | 59 | 93 | 74 | 2.90 | Accepted |
| Diarrhea | 68 | 79 | 103 | 93 | 44 | 3.10 | Accepted |
| Cholera | 56 | 53 | 98 | 153 | 27 | 2.90 | Accepted |
| Asthma | 23 | 22 | 19 | 235 | 88 | 2.10 | Not accepted |
| Depression and anxiety | 63 | 122 | 96 | 59 | 47 | 3.25 | Accepted |

Source: Field Survey, 2023

The majority (62%) of the respondents also agreed that housing and environmental conditions influences their health status. 25% strongly agreed; 8% were indifferent; 4% disagreed; while only 1% strongly disagreed. Table 5.3 shows the prevalent diagnosis and its frequency among respondents in the study area. From the analysis, skin disease (m=4.16), malaria fever (m=4.10), typhoid fever (m=3.90), depression and anxiety (m=3.25), diarrhea (m=3.10), cholera (m=2.90) and genitourinary tract infection (m=2.90) were prevalent diagnosis among the respondents of the study area. However, respiratory disease (m=2.12) and asthma (m=2.10) were not common health challenges faced by the residents of the areas.

| Situations | Very Significant 5 | Somewhat significant 4 | Signific-ant 3 | Less significant 2 | Not significant 1 | Mean | Remarks |
|---|---|---|---|---|---|---|---|
| Improvement in the education and income level of residents | 96 | 93 | 146 | 47 | 5 | 3.60 | Accepted |
| Provision of adequate housing and enviro. facilities in homes and neighbourhoods | 123 | 136 | 96 | 15 | 17 | 3.90 | Accepted |
| Effective and strict implementation of developt control & planning guidelines | 96 | 232 | 45 | 12 | 2 | 4.10 | Accepted |
| Timely rehabilitation of ageing buildings | 233 | 96 | 42 | 16 | - | 4.41 | Accepted |
| Implementation of housing policies (mass housing development) | 66 | 96 | 103 | 102 | 20 | 3.22 | Accepted |
| Reduction in the cost of building materials | 226 | 123 | 33 | 33 | - | 4.50 | Accepted |

5.4    Measures for Improving Housing and Environmental Conditions in AbakalikiMetropolis
Source: Field Survey, 2023

From the results of the analyses, it was also revealed that all the six (6) identified measures for improving the conditions were significant in improving the housing conditions in the study area as they all recorded means cores above the benchmark score of 2.49. These include reduction in the cost of building materials (m=4.50), timely rehabilitation of ageing buildings (m=4.41), effective and strict implementation of development control and planning guidelines (m=4.10); provision of adequate housing and environmental

facilities in homes and neighbourhoods (m=3.60), improvement in the education and income level of residents (m=3.60) and implementation of housing policies (mass housing development) (m=3.22). Results from the interview of town planners in the state were also in tandem with the results of the study. Measures as elucidated from town planners include urban renewal programme for the area, strict adherence to the 2006 Building Codes (building materials, height, building type,etc.), heavy fines on tenants and landlords whose houses constitute nuisance to the public, the discouragement of open defecation and indiscriminate waste disposal.

**Testing of Hypothesis:**

Table 5.5: Chi-Square Results from the test Hypothesis:

| | Value | df | Asymptotic significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 648.604[a] | 16 | .000 |

Chi-Square Value        =        648.604
P Value                =        .000
Level of significance (α)   =        0.05

**Decision Rule:**
Reject Ho, if p value is less than level of significance and accept Ho if otherwise.
Since P value = .000 and Level of significance = 0.05; Therefore, Ho is rejected because p value (.000) is < (less than) level of significance which is 0.05.
The implication of this result is that the null hypothesis (Ho) was not accepted, which states that there is no significant relationship between the housing conditions in Abakaliki metropolis and the health conditions of the dwellers and $H_1$ is accepted which means that there is significant relationship between the housing and the health conditions of the residents.

## VI.    Discussion of Findings

Analysis revealed that majority of the respondents resided in rented tenement buildings of over 40 years. The result also showed that majority of the buildings were deteriorated and in fair conditions needing urgent rehabilitation. This result is in line with that of Onibokun (2017) and Olotuah (2016) who found that majority of buildings were in poor conditions not suitable for human habitation in Nigeria in Akure respectively.

On the residents' perception of their housing and environmental sanitation in the selected area, analysis revealed that respondents were only satisfied with the refuse collection and disposal methods employed in the selected areas. The result also showed that the respondents were dissatisfied with the toilet location, quality of environment and resident's behavior. However, the respondents were very dissatisfied with the drainage and sanitation conduct in the area. The result also showed that the maintenance of houses and surrounding was very necessary as opined by the respondents. From the research, it was evident that the indicators of housing quality (the physical condition of buildings, environmental sanitation, accessibility and availability of facilities, building materials among other) were low in the selected areas. This result is also in tandem with the result of Ibem and Amole (2017) who averred that majority of residents are very dissatisfied with the general condition of their houses, facilities and neighbourhoods.

Analysis revealed that broken floor, broken doors and windows, leaking roof, poor electricity and water supply, cracked wall and indiscriminate waste disposal are prominent housing and environmental problems in the selected areas. The analysis also showed that majority of the respondents had taken ill while residing in the area with skin disease, malaria fever, typhoid fever, diarrhea, cholera, depression and anxiety and genitourinary tract infection being the prevalent diagnosis in the selected areas. The study also revealed that majority of the respondents agreed that their housing and environmental conditions greatly influence their health status. This result corroborates that of Ilesanmi (2014) who averred that majority of buildings in Lagos had a number of defects which requires urgent maintenance, repairs and renovations. On the prevalent diagnosis, the findings reverberates that of Ahianba (2018), and Asenso-Okyere (2014) who opined that decayed housing impacts the health of city dwellers causing sicknesses like malaria and mental stress among others.

On the measures for improving housing and environmental conditions in the selected areas, the result of the analysis revealed that all the identified measures were significant in improving the housing conditions in the study area. Notable

among them include reduction in the cost of building materials, timely rehabilitation of ageing buildings, effective and strict implementation of development control and planning guidelines among others. Result from the interview session with town planners also indicated urban renewal, heavy fines on offending tenants and landlords among others. This result is in tandem with that of Ibem and Amole (2017), Olotuah and Taiwo (2019) who stated that more attention should be placed on providing adequate facilities and the use of local construction materials in buildings which is less expensive and durable.

## VII.    CONCLUSION AND RECOMMENDATION

**Conclusion:** This study has focused on the impact of housing condition on the urban dwellers of Abakaliki Metropolis, Ebonyi State, Nigeria. The condition of housing and environmental sanitation in the study in the study area is deteriorating due to inadequate infrastructure such as, drainage, refuse disposal system, lack of proper maintenance of buildings, the age of the buildings and the socio-economic status of the respondents such as their level of education, occupational status and income level. The study has again brought to the fore, crucial matters regarding housing and the deplorable conditions in which the vast majority of Nigerians live. The truth of the matter is saddening, and is not an issue to be taken with levity. It is unfortunate however, that this situation has persisted for too long without any hope of alleviation in sight. It is hoped that in the next too distant future, when a similar study is carried out, the result will depict a different situation.

**Recommendations:** In line with the findings and conclusion of the study, the following recommendations were put forward for adoption:

1. Strategies for building new houses with local and environmentally friendly building materials will be encouraged to reduce rapid environmental deterioration, health and mental problems associated with poor housing condition;
2. To ensure reduced rate of deteriorated and dilapidating in buildings, timely repairs and renovation of building fabric and components should be enforced as mandatory activity for landlords in the study area.
3. Town planners must insist that development plans and planning schemes are implemented to the latter. Also, officers on development control must carry out their duties accordingly without fear or favour. This will help to reduce encroachment, proliferation of slums and unwanted vices in the area.
4. Total compliance with monthly sanitation exercises should be adhered strictly by the residents and heavy fines imposed on defaulters.
5. The governments at all levels should enforce laws like the 2006 Building Codes and the Nigerian Urban and regional Planning Law of 1992 which makes for good living conditions without further delay.
6. Private sector organizations and individuals should be encouraged to go into mass housing schemes to augment the efforts of governments. This will help to reduce the cost of rent and overcrowding being experienced in urban centres of Nigeria.
7. Sites and services programme should be reactivated to in order to adequately address infrastructural provision for the residents.
8. Mortgage and loans facilities should be extended to the residents of the area to afford them the opportunity to build their own houses, while planning schemes should be prepared and implemented in the study area to ease the burden on existing housing stock.

## References

[1]. Ademiluyi, I.A. (2017). Public Housing Delivery Strategies in Nigeria: A Historical Perspective of Policy and Programme. Journal of Sustainable Development in Africa12 (6): 153-161
[2]. Adetunji, M. A., Isah I. O. (2015). Urban housing quality and its health implications in Nigeria: An example of Lokoja, Kogi State, Nigeria. Ethiopian Journal of Environmental Studies and Management 8(5): 570-578.
[3]. Agbola, T. (2018). The Housing of Nigerian: A review of policy development and Implementation. Research Report No. 14.
[4]. Agbola, T. (2015). Assessing Private Sector Participation in Housing Delivery in Nigeria" A paper presented at a One Day Continuing Professional Development Workshop of the Ogun state Chapter of the Nigerian Institution of Estate Surveyors and Valuers, in Gateway Hotel, Abeokuta. October 28, 2015
[5]. Aghamelu, Nnabo and Ezeh (2017). Geotechnical and environmental problems related to shales in the Abakaliki area, Southeastern Nigeria. African Journal of Environmental Science and Technology 5(2), 80-88

[6]. Ahianba, J. E. (2018). Built environment decay and urban health in Nigeria, Journal of Human Ecology 23(3): 259-265.

[7]. Aribigbola, A. (2015). Housing and Nigerian Development: Assessment of Policy Measure and Direction. African Journal of Environmental Studies, 2(2), 117-122

[8]. Aribigbola, A., Ayeniyo, O. I. (2014). Sites-and-services as a strategy for achieving adequate housing in Nigeria in 21st Century. International Journal of Humanities and Social Science 2(2): 126-132.

[9]. Asenso-Okyere, K. (2014). Socio-economic factors in malaria control, World Health Forum, 15(3), 265 – 268

[10]. http://england.shelter.org.uk/__data/assets/pdf_file/0010/726166/People_living_in_bad_housing.pdf

[11]. Bonnefoy, X. (2017). Inadequate housing and health: An overview. International Journal of Environment and Pollution, 30(3/4), 411 - 429.

[12]. Dale, H. (ed) (2014). Abakaliki. Encyclopedia Britannica. Vol. 1: A-ak Bayes (15th ed.) Chicago, IL

[13]. Ekpetere, O. K., Ekeh, O. F. and Eziechi, M. N. (2019). Housing Conditions in the FCT, Abuja-Nigeria: A Case Study of Gwagwalada Satellite Town. Journal of Environment and Earth Science 9(4), 105-118

[14]. Ibem, E. O., Amole O. O. (2017). Assessment of the qualitative adequacy of newly constructed public housing in Ogun State, Nigeria. Property Management 29(3): 285-304.

[15]. Ilesanmi, A. O. (2014). Post-occupancy evaluation and residents' satisfaction with public housing in Lagos, Nigeria. Journal of Building Appraisal 6: 153-169.

[16]. Iyi, E. A., Ogbaga, M. N. and Okeke, S. (2019). Assessment of the Impacts of the Growth of Abakaliki Urban on its Sub-urban Communities in Ebonyi State, Nigeria. African Research Journal of the Environment, 5-18

[17]. Krieger, J. & Higgins, D.L. (2002). Housing and Health: Time Again for Public Health Action. American Journal of Public Health, 92(5), 758 - 768.

[18]. National Population Commission, (2006). Nigeria's over 167 million Population: Implications and Challenges. Retrieved from: www.population.gov.ng/index.php/84-news/latest/106-nigeria-over-167-million-population-implications-and-challenges

[19]. Nwofe, P. A. (2015). Determination of the Generation Rate of Solid Waste in Abakaliki Metropolis, Ebonyi State, Nigeria. Continental Journal of Environmental Sciences 7 (2): 1 – 3

[20]. National Housing Policy (2006).National Housing Policy of Nigeria, Federal Republic of Nigeria.

[21]. Ofoegbu, C. O. and Amajor, L. C. (2014). A geochemical comparison of the pyroclastic rocks from Abakaliki and Ezillo, southeastern Benue Trough. Journal of Minerals and Geology, 23(1 - 2): 45-51.

[22]. Oladapo, A. A. (2016). A study of tenants' maintenance awareness, responsibility and satisfaction in institutional housing in Nigeria. International Journal of Strategic Property Management 10: 217-231

[23]. Olotuah, A, O. (2016). The physical and socio-economic dimension to housing quality: an empirical investigation of a city suburb. African Journal of science, 4(1): 799-810.

[24]. Olotuah, A. O. and Bobadoye, S. A. (2019). Sustainable housing provision for the urban poor: A review of public sector intervention in Nigeria. The Built and Human Environment Review 2: 51-63.

[25]. Olotuah, A. O. and Taiwo, A. A. (2019). Housing the urban poor in Nigeria through low-cost housing schemes. International Journal of Physical and Human Geography 1(3): 1-8.

[26]. Omede, K. F. (2014). An assessment of housing conditions and socio-economic life styles of slum dwellers in Akure, Nigeria. Contemporary Management Research 6(4): 273-290

[27]. Onibokun, P. (ed) (2017). Urban Housing in Nigeria. NISER Ibadan.

[28]. Onibokun, A. andFaniran, A. (2015). Urban research in Nigeria. Institute Francais de Recherche en Afrique, Ibadan.

[29]. Owolabi, B. O. (2017). Effect of Housing Condition and Environmental Sanitation on the Residents of Oyo State, Nigeria. International Journal of Research in Environmental Science 3(3) 20-36

[30]. Ozdemir, O. B. (2014). Reinvestment decisions and rehabilitation of housing, in Ural, O., Abrantes, V., Tadeu, A. (Eds.), Conference Proceedings on Housing Construction – an interdisciplinary task, Coimbra, Portugal, 3, 1927-1934.

[31]. Shaw, M. (2004). Housing and Public Health". Annual Review of Public Health, 25, 397 - 418.

[32]. .

[33]. United Nations (2015). Manual X, indirect techniques for demographic estimation.

[34]. Wan, C. and Su, S. (2016). Neighborhood housing deprivation and public health: Theoretical linkage, empirical evidence, and implications for urban planning. Habitat International 57: 11-23

[35]. World Health Organization (2014). New evidence from WHO: inadequate housing causes more than 100000 annual deaths in Europe. http://www.euro.who.int/en/media-centre/sections/press-releases/2011/06/new-evidence-from-who-inadequate-housingcauses-more-than-100-000-annual-deaths-in-europe. Accessed 18 May 2023