An Analysis of the Influence of Housing Quality on the Residents' Wellbeing in Enugu Urban, Nigeria

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Abstract
The essence of human life is for man to live continuously healthy, largely satisfying and euphoric existence; and incidentally all of these begin from a well maintained residential structure. This desire to the potential influence of housing conditions on the health and wellbeing of dwellers in Enugu urban forms the basis of this study. The aim of this study was to examine the nature of housing quality in Enugu and its relationship with residents' wellbeing with a view to providing solution to the difficulty arising from the lack of information on the linkage between housing quality and dwellers' wellbeing in Enugu urban, Nigeria. Simple random, stratified and systematic sampling techniques were adopted in the study. Stepwise Multiple Linear Regression was to test whether health Risk Index was significantly related to the housing quality in the study area. The study suggests that building conditions and overcrowding accounted for 75.6% of total variance on incidence of Bronchitis. The study also revealed that indoor temperature/ventilation and building conditions were identified as major predictors of Asthma occurrence. Considered singly, indoor temperature/ventilation contributed 65.9% while building condition contributed 4.0%. For Pneumonia occurrence, the major predictors were: building condition and environmental quality. These variables jointly contributed 84.8% of total variance on Pneumonia occurrence. There should, therefore, be immediate rehabilitation of the poor housing units in the study area since there is a direct relationship between the condition of houses and house related diseases

1. INTRODUCTION

In Africa, poor quality housing transcends all human settlements, be it urban or rural perhaps, more profoundly established in the urban setting. The health profile of any country is of essence to the general growth of that country including their economy. World Health Organisation has assessed that of Nigeria and gazette that her health profile was worsening and degenerating. (WHO, 2005). This has a dangerous implication in the overall well being of the residents considering the fact that unhealthy individual is not only unproductive but constitutes heavy liability to others. Researchers have established evidences that support the connection between housing conditions and health (Olukalojo, 2013, Adetunji, 2015). This overview of housing conditions and health maintains that

quality components of housing determine, to a reasonable extent, the wellbeing of city residents in terms of comfort, economic benefits, and social relations. Many emerging countries in the world, Nigeria inclusive, have high prevalent housing problems like housing shortage, overcrowding, poor ventilation and this has its attendant profile health consequences. As a shelter, housing is more than mere physical barrier against the natural elements or weather; it provides economic, social, biological and physiological needs of man (Mabogunje et al., 2002). It becomes obvious that housing possesses certain attributes or qualities through which it can guarantee safety, security, satisfaction and good health to man. Adequate housing provides the foundation for stable communities and social inclusion (Oladapo, 2006).

Mbali and Okoli (2002) have observed that there is a significant association between housing conditions and mental health of an individual. People's right to shelter is thus a basic one and the provision of decent housing should be the hallmark of every civilized society and one of the criteria for gauging development. Furthermore, So and Leung (2004) have also established a significant correlation between the quality of life and the comfort, convenience and visual acceptability of the house. Naturally, as a form of shelter, housing has three quality components namely neighbourhood, location and structural quality

Very few recent works on housing in Enugu urban have dealt with the interrelationship between housing quality and wellbeing. Duru (2000), who attempted to analyze the influence of housing quality on health of Enugu residents used only the house attributes like occupancy ratio, number of toilets, ventilation and number of rooms as his parameters to measure housing quality. His result was not robust in the contemporary times where other categorical latent factors namely; use value, design and facility (dwelling quality indicators), infrastructure, sanitation and prestige (environmental quality indicators are attached to housing quality . None of these works actually dwelt on the underlying connection between housing quality and health of residents in Enugu, Nigeria. How the decline in housing quality has affected the health has never been established in any previous studies comprehensively. It is not also clear if quality of housing does not indirectly contribute to low life expectancy of Enugu and Nigerian people. There is a serious gap in knowledge and that is what this study seeks to fill concerning the influence of housing quality on the wellbeing of Enugu urban residents. It also intends to explain the ways housing quality influences health of inhabitants of Enugu residential areas. The study was aimed at examining the nature of housing quality and condition in the study area as well as analyzing the relationship between housing quality and wellbeing of the people. The study further hypothesized that the health Risk Index (as measured by the number of housing-related diseases) is not significantly related to the housing quality of the study area. The outcome of the study is expected to help housing and health experts in decisions that will help to raise the standard of living of the residents of the study area. Through this study, the trend where housing developers laid more emphasis on how well buildings conform to structural specifications instead of considering the health implication of the housing units, especially when they are ageing, shall be reversed

2. LITERATURE REVIEW

The housing quality indicators that may influence personal wellbeing of occupants are those that have something to do with water, poor environmental and dwelling conditions that can easily predispose inhabitants to diseases such as typhoid, malaria, and diarrhea (Bonnefoy, 2007).

Poor quality housing, providing insufficient protection from the outside, from noise, from scrutiny, and intrusion can be the cause of major suffering. Such events may generate pathological manifestations such as anxiety, depression, insomnia, paranoid feelings, and social dysfunction. Bad circumstances in neighbourhood relations may generate social pathologies: aggressiveness, vandalism, depression, anxiety, somatic complaints, and even paranoid feelings and ideas. Social tensions arise when common spaces fail to act as buffer zones between private and public space or when neighbours try to use them as private spaces, encumbering them with personal items such as prams or bicycles, using them as private meeting places (groups of noisy adolescents), and so forth. Feeling safe in the intimacy of one's home, good neighbourhood relations, respect for the boundaries provided by those parts of buildings common to all, are all essential to the feeling of well-being in housing.

Kriegar and Higgins (2002) in their study have associated indoor cold conditions with increased risk of cardiovascular disease. It is however obvious that the climatic condition of building environment has the ability to expose residents to moist and cold

Agbo et al (2012) in their study posited that some health disorders like typhoid, fever, urinary tract infections and numerous other intestinal and parasitic health issues are got through poor toilet facilities. This study was collaborated by Bamgboye (2006) in his study on rat infestation in university hostel asserted that the poor hygienic and insanitary condition as well as overcrowding of the hostel was the major cause of rat infestation in the hostel. It is obvious that ailments like Asthma, lead poisoning infections, mental health are attributed to substandard housing conditions. Little wonder why Shaw,2004 submitted that good physical and mental health are functions of safe homes. He posited that poor housing condition results in infections and chronic diseases, injuries and poor childhood development.

Loss of control over the residential environment or difficulties in appropriating space will unsettle individuals and groups. Disorderly, reactive, and transgressive appropriations will appear in overly impersonal places under the form of vandalism, tagging, damaging common property, and so forth (Green et al., 2002).

Several studies, particularly in the field of social and environmental psychology have shown the influence of environmental factors such as pollution, level of noise and crowding on mental health, depression symptoms, and social well-being (Leventhal and Brooks-Gunn, 2003, Olukolajo, 2013;).

In addition, symptoms of stress, anxiety, irritability, depression, including social misconduct (violence, vandalism), and alteration of attention capacities at school in children may be related to noise exposure in relation to the housing conditions. It is also accepted that stressful housing conditions can aggravate pre-existing psychiatric pathologies (Evans, 2003).

There is increasing evidence that mould growth in damp buildings is a major risk factor for respiratory illness. Mould-related symptoms are likely as a result of irritation, allergy or infection (Chapman et al., 2003). Mould spores are present in all kinds of indoor environment. Normal

building materials and furnishings provide ample nutrition for many species of moulds, but they can grow and amplify indoors only when there is adequate supply of moisture. Older houses with recent water damage are frequently the favourite sites for mould growth. Poor social conditions (large household sizes, state of rental housing, and financial difficulty with housing costs) were also found to be significant predictors of damp, mouldy homes. (Butler et al., 2003).

Ede and Ebakpa (2007) identified high demand for accommodation as a major factor contributing to the un-regulated housing environment. Despite highest priority accorded housing development in the study area, shanty structures, often illegally built from scrap materials, are still noticeable in the Capital Territory landscape. Okeke (2002) described the extensive use of temporary structures in the high-density neighborhoods of our urban centers as the forerunner of squatter settlement development.

Nevertheless, Nigeria government has overtime attempted to improve the housing development plans by establishing the 1991, 2006 and 2016 National Housing Policies, all these have not had any visible improvement in the deplorable housing qualities in most states of the nation and this poor quality has been shown by the presences of most o houses having inadequate water supply, inadequate ventilation, overcrowding etc and all these according to Amao, 2012 pose severe adverse effects on the health of residents

ENUGU URBAN

Enugu Urban which is the study area is made up of Enugu East, Enugu North, and Enugu South and is located within latitude $6^0 24$'N and $6^0 30$'N and longitude $7^0 27$'E and $7^0 32$'E. It is one of the Ibo tribe towns in Nigeria. This city was the provincial capital city of the then eastern region of Nigeria. At present, Enugu had been projected to have population of 346,780 people. The City is currently the capital city of Enugu state. The city's morphology has transformed over time and this has explained for increased housing problems present in the area. Enugu city is currently experiencing high rate of urbanization in unplanned manner and this has resulted in many unsanitary housing environment seen in most of the neighbourhood in the area. over 75% of the neighbourhoods in this area needs urban renewal program due the dilapidated nature of the houses in the area, this when done will make the area livaeale and habitable. Areas like Abakpa Nike, Obiagu, Emene and many other neighbourhoods in this ancient city has remained blighted. (Figure 1).

Despite the effort made by the government of Enugu state, Nigeria, in the provision of decent housing for her residents and the seemingly large amount of money budgeted for housing construction in the capital city- Enugu metropolis, the clear picture of extremely deplorable state, as evidenced by the unsanitary housing conditions, poor ventilation, unhygienic surrounding, is characterized in the area at large. This has been linked to the poor health among the residents living in the area. The continuous rise in the number of medical chemist stores for drug dispensaries in the area has been attributed to the deplorable health condition of residents of Enugu area. Significant number of residents in this area live in houses that have leaking roof, cracked walls, broken doors and these could likely increase the moisture and growth moulds in the building.

Furthermore, housing standard is a major problem in Enugu Urban and other Nigerian cities in general. Danson (2008) observes that the problem of most cities in Nigeria emanated from the fact that cities were not planned by experts. In Enugu Urban, the situation is not different. Poverty level and low technological approach to housing reflects in the standard of existing conditions of residential neighborhoods, especially in sector one where most existing residential settlements are located. Houses constructed with wattle and dub walls as well as low height, made it difficult for water related facilities like bathing and water closet to be carried out. The unsanitary housing situations in Enugu Urban has made most houses unsafe and dilapidating in nature. The sub-standard buildings in the area deface the capital cityscape and are noticeable in nearly all the eight neighbourhoods of the Capital Territory. Buildings are constructed too close to each other and to the roads; thus, destroying the urban fabric and beauty. Some are constructed under high-tension lines and water channels thereby contributing to housing dissatisfaction in terms of quantity and quality.
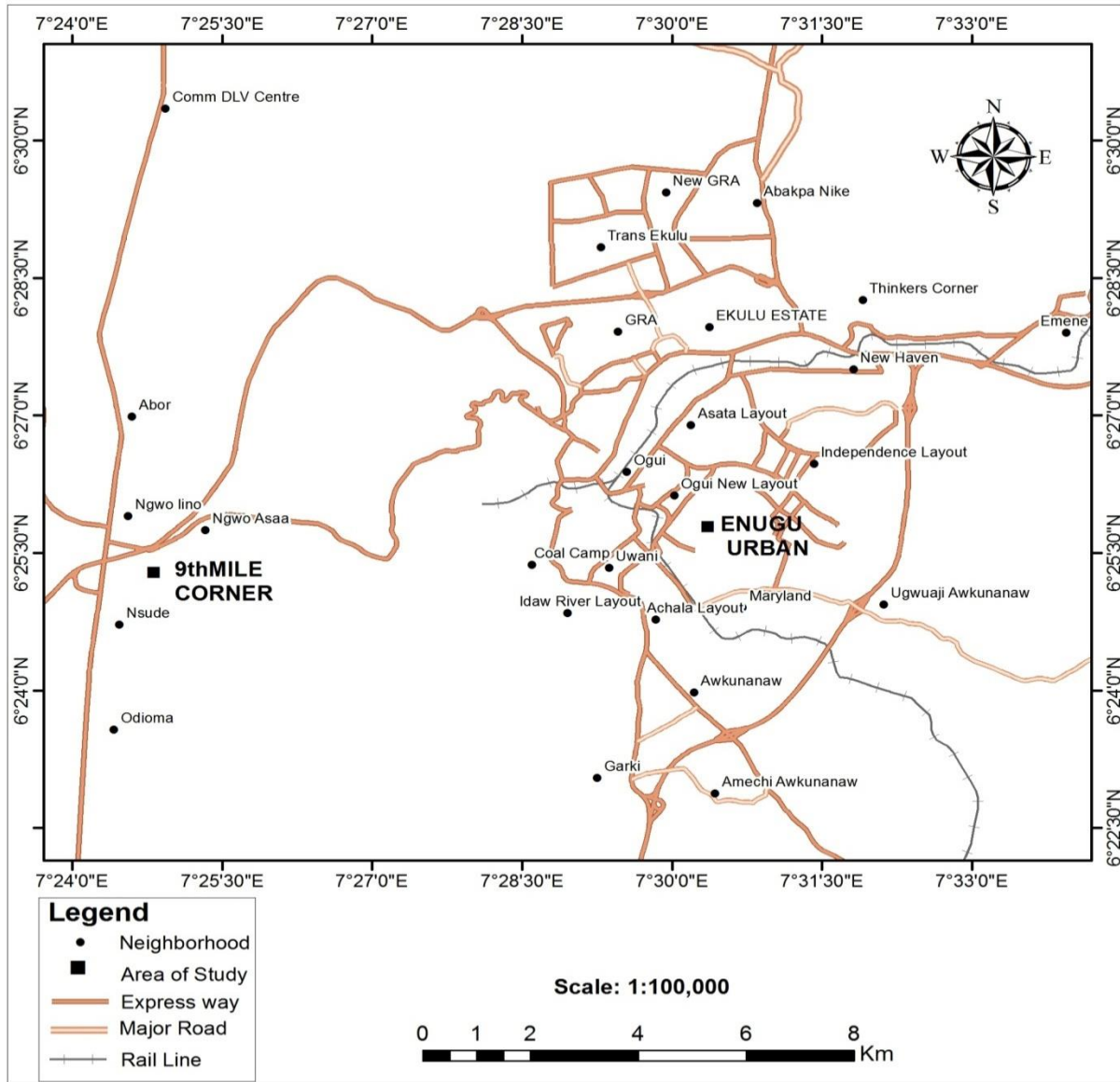
Figure 1: Map of Enugu Enugu Urban
Source: produced from Geographical Information system GIS (Quickbird Satellite imagery 2018)

3. **METHODS AND PROCEDURES**

The study adopted the survey design method which involves the administration of questionnaires to the target population for the study. Secondary data were also used in the study. The sample population was heads of households or proxy respondents for the household. In this research, the sample size calculation formula shown below was adopted. The formula assumed maximum degree of variability. The sample size was derived through the formula

$$n = \frac{Z^2 P(100 - p)}{X^2}$$

Where Z = Confidence level

X = precision (percent)

P = Estimated Proportion

Sample size of 420 was computed. This was based on 1.64 confidence level (on critical value at 90%), 5 percent precision, 50 percent estimated proportion. Copies of questionnaires were used as the core research instruments. Since this questionnaire must be proportionally distributed between the neighbourhoods in Enugu urban residential zone, three sampling techniques: stratified random sampling, systematic and simple random sampling techniques were employed. Enugu urban area was first stratified into three residential density areas – high, medium and low densities. From each density area, one neighbourhood was randomly selected for the study and this made up the selected number of neighbourhood to three. The 5th building along any chosen streets in the neighbourhood was selected for sampling. Then, simple random sampling technique was then used to get the residents. Equal number of questionnaires was distributed in each of the densities for better representation and to ensure that every member of the population has a chance of being interviewed. The study through random sampling chose 120 respondents consisting mainly of household heads in each of the quarters totalling four hundred and twenty (420) respondents for the study. It was however noticed in the study that some respondents, due to their cultural and religious belief did not properly fill the questionnaire due to their convictions. Hence, their questionnaires were not used in the study. Altogether only four hundred (400) of all questionnaire retrieved were valid for data analysis. To further strengthen the study, other longitudinal secondary the data on the number of reported cases of illnesses were also obtained from the University of Nigeria Teaching Hospital, Enugu State Teaching Hospital as well as the four other Primary Health Care Centres which service the residents in the study areas. There are only very few private hospitals in residence, thus, eliciting data from them on the number of reported illness from the residents will be of insignificant effect. The illnesses are those that are directly related to housing quality. These data include aggregated number of reported cases of tuberculosis, scabies, meningitis, measles, pneumonia, diahorria, cholera, typhoid, malaria and dysentery. These ailments are associated with housing and environmental conditions (Bailie et al, 2005; Evans et al 2000; Amao, 2012 and Chadwick, 2010). Other secondary data used in the study was the data on the quality of houses in the study area and this was elicited from unpublished study conducted by the Enugu State Ministry of Housing and Land, Enugu state (2021). They collected an all- inclusive longitudinal data on the housing quality of the houses in the study area.

Stepwise Multiple Regression Model was used to test whether the health Risk Index (as measured by the number of housing-related diseases) was significantly related to the housing quality of the study area. The Stepwise Model was considered most appropriate for selecting fewer independent variables (Predictors) which could explain the dependent variables. The housing indicators namely safety/security, indoor temperature/ventilation, building conditions, sanitation/hygiene, crowding, and environmental quality were the independent variables which interacted either singly or jointly to explain the incidence of Asthma, Pneumonia, Cough and Bronchitis (dependent variables) among households. These data have the aggregate number of houses that have leaking roof, less than two windows, overcrowded, broken doors, no water access, sanitary toilet and no sanitary

waste bin. These were the surrogates used to measures the housing quality and it was aggregated to absolute figure. Housing conditions in this study was also further assessed through direct observation.

4. RESULTS AND DISCUSSIONS

Table 1: Socio-economic characteristics of respondents

Characteristic	N (400)	%
Length of Stay		
Less than one year	13	3.3
1- 2 years	135	33.7
More than 3 years	252	63
Age		
less than 20 years	37	9.3
20 – 30 Years	170	42.5
31 – 40 Years	106	26.4
Above 40 Years	87	21.8
Marital status of respondent		
Married	357	89.2
Never married	32	8
Widowed	3	0.8
Divorced	8	2.
Educational level of household head		
Illiterate	13	3.3
Primary education	12	2.9
Secondary education	168	42.1
Above secondary education	207	51.7
Main occupation of household head		
Civil servant	129	32.2
Trading	37	9.2
labourer	56	13.9
Self Employed	119	29.8
Unemployed	59	14.9

Table 1 shows the summary of the background information about the respondents. It is observed from the table that 96.7% of the respondents had lived in the study area for at least one year. This

means that those who have lived in their chosen neighbourhoods are compotent to answer the questions in the questionnaire and this increased the internal validity of the study. The age distribution indicates that 9.3 percent are less than 20years; 170 respondents are between 21-30years; 106 respondents representing 26.4 percent are between 31-40years, while those above 40 years are 87. This means that majority of the respondents used are between 21-30 years. It can therefore be inferred from this that the data provided by the respondents can be relied upon for the purpose of analysis. The study shows that 129 respondents used in the study are civil servants; 37 respondents representing 9.2 percent are into trading; 56 respondents are artisans\labourers; 119 respondents representing 29.8 percent are self-employed, while 59 respondents representing 14.9 percent are unemployed. The analysis seen in Table 1 showed that majority of the respondents are civil servant.More than half (51.7%) of respondents have educational attainment above the secondary education. This also increases tha validity of the study.

Report of Illnesses in your Home
The study elicited the number of illnesses in the homes of the respondents. Fifteen percent of the respondents have cases of asthma; 52% reported cases of pneumonia; 88% have cases of cough; another 52% have cases of bronchitis. However, 85% do not have any case of asthma as against 15% that have; 48% do not have any case of pneumonia as against 52% that had, 12% do not have any case of cough as against 88% that have; 29% do not have any case of bronchitis as against 81% that had.

The study, however, revealed that the health Risk Index (as measured by the presence of housing-related diseases like Asthma, Pneumonia, Cough and Bronchitis) was significantly related to the housing conditions (as measured bysafety/security, indoor temperature/ventilation, building conditions, sanitation/hygiene, crowding, and environmental quality of the houses) in the study area as shown in table 2 where the regression result was depicted.

Table 2: Stepwise Regression of ill health on housing indicators

Variables	R	R^2	R^2 Change	F	Sig.
Asthma(Predictors)					
Indoor temperature/Ventilation	.812	.659	.659	143.720	.000
Building Condition	.836	.669	.040	3.100	.000
Pneumonia(Predictors)					
Building Condition	.822	.676	.676	183.522	.000
Environmental Quality	.921	.848	.172	83.100	.000
Cough(Predictors)					
Crowding	.805	.648	.648	127.627	.000
Bronchitis(Predictors)					
Building Condition	.740	.547	.547	97.112	.000
Crowding	.870	.756	.209	88.741	.000

Source: regression table

Viewed in the light of the presentation in table 2, indoor temperature/ventilation and building conditions were identified as major predictors of Asthma occurrence. These variables made a joint

contribution of 69.9% of total variance on Asthma occurrence and is significant *(R^2 change = .699; P > 0.05)*. Considered singly, indoor temperature/ventilation contributed 65.9% *(R^2 change = .659)* while building condition contributed 4.0% *(R^2 change = .040)*. For Pneumonia occurrence, the major predictors were building condition and environmental quality. These variables jointly contributed 84.8% of total variance on Pneumonia occurrence *(R^2 = .848)*. Relatively, building condition was found to have the strongest influence on Pneumonia incidence *(R^2 Change = .676)*. Regarding cough occurrence, the major predictor was crowding *(R = .805; R^2 = .648; P>0.05)*. Crowding accounted for 64.8% of total variance in cough incidence (Table 4). Finally, the results showed that building condition and crowding accounted for 75.6% of total variance on incidence of Bronchitis *(R^2 = .756; P>0.05)*.

5. DISCUSSION

Further discussion on the findings of the study shows that housing conditions in Enugu urban are similar to those reported in a number of urban communities in other parts of Nigeria and African countries such as Kenya (Muller and Job, 2006), and Ghana (Adarkwa, 1983). The result indicates that Enugu urban suffers gross inadequacy in housing facilities and conditions. The safety and security condition of the dwelling leaves much to be desired. With nearly all the households (95.6%) reporting absence of fire extinguishers, the houses were therefore vulnerable to utter destruction in case of fire outbreak. WHO (2004) recommends that adequate housing should include facilities that could ensure safety and security in the home. Such items as first aid box, security dogs and fence wall are lacking in most households in urban Nigeria. Most households rely on makeshift fence and crude methods of fighting fire outbreak (Esin, 2013).

Majority of households reported negative conditions in terms of indoor temperature and ventilation index. The presence of electric fan can augment for natural ventilation, but most households lacked electric fans, ceilings and window for maintaining acceptable room temperature and adequate ventilation. With the typical tropical climatic condition of Nigeria, households are bound to face severe discomfort in terms of indoor temperature. The study revealed that the respondents had houses with windows; however, only 35% of them had rooms with more than one window in each room. This implies that there is no good ventilation in most of the houses and this has the tendency to spread airborne diseases among the occupants. This is also true in the entire area since the regression results showed that there was a significant relationship between the housing quality and some of the airborne disease experienced in the study area. See table 2. This finding sync to the study of Aaby et al (2010) where he established an association between measles and tuberculosis with overcrowding. A similar investigation by Shaw (2004) concluded that dilapidated building conditions, poor indoor temperature and overcrowding are greatly linked to diseases like Asthma, cough and bronchitis among residents. This finding is again, in congruent with the output of the regression results seen in table 2 of the study. These discoveries are sync to the earlier research findings that housing qualities generally affect the living well being of residents by Krieger and Higgins; 2002 and Shaw, 2004.

The building conditions with reference to the roof condition, the state of the wall, windows, ceilings and floor, depicted a dereliction largely due to the age of the building and lack of routine

maintenance. Most of the houses (75%) suffer roof leakage, cracked walls and broken floors with increased risk of pneumonia due to mould and damp development (Jacobs, Kelly, and Sobolewski, 2007).

The absences of toilets encourage unsanitary behaviour and passage of excrement in unauthorized places such as nearby bushes, tracks and footpaths. The study further showed that 63% of the building do not have sanitary latrines and also only 15% of the residents have sanitary waste bins. The implication of these is that most of the residents indulge in open defecation in the bushes and surrounding uncompleted building as was observed by the study. This has serious health challenges due to the possibility of spreading faeco-oral infections. Furthermore, this observed absence of sanitary waste bins results in residents engaging in opening burning of waste and dumping of wastes along the streets and inside the drainages. The multiplier effect of this is the retaining of waste water in gutters which encourages breeding vectors and mosquitoes, pests and rodents. Bailie et al, (2005) similarly stated that such deplorable housing situations are associated with contagious diseases like skin infections and diarrhoral illness because of absence of portable water supply.

Most households depended on communal bathrooms in the absence of private ones. In addition, some households reported not having enough supplies from available sources such as streams and rivers due to distance, nature of terrain and seasonality of some streams. The absence of portable water in 78% of the buildings in the study area was a source of worry to be noted. The presence of hand-driven wells which are characterized with seemingly coloured water in most compounds portends danger to the occupants and this is quite similar with the study by Udoh and Uyanga (2013) where they revealed that 72% of household in rural area of Akwa Ibom State, Nigeria fell below the minimum requirements for safe water consumption. The minimum daily water requirement per person is estimated to be 30 litres by Nigerian standard. Results of this study showed that 78% of households fell below the minimum requirement for water access. Inadequate water supply sounds ironical in an area with enormous water resource endowment. However, impact of regional water schemes and the World Bank Assisted water projects are yet to be felt by many urban dwellers in Nigeria (James and Essien, 2012). This study also found that households lacked waste collection and disposal facilities. Essentially majority of the households rely on communal dumpsites near the compound while some dispose directly into nearby bushes or rivers (Udoh, 2012). The quality of residential environment as reported by households is threatened by rainwater floods, bushy surroundings and mice/rat infestation (91%). Floods and stagnant water provide breeding grounds for mosquitoes and increases malaria burden for urban households. Mice/rat act as disease vectors and attract other predators such as snakes - a situation inimical to the health of occupants.

The study also revealed that the housing indicators: building conditions, indoor temperature controls, environmental quality and crowding, significantly influenced the occurrence of Asthma, Pneumonia, Cough and Bronchitis, among household members (P<0.05). This finding has, therefore, identified housing condition as an important determinant of ill health. The study confirmed an already established history of research into the impact of poor housing on health as

conducted in developed nations. Prominent among these studies is the work of Chadwick (2010) which attempted to establish a link between "appalling living conditions of the poor and their ill health" in Victorian Britain. This finding has also buttressed the need to address housing as a major public health issue. The importance of housing to health is driven by the prolonged exposure people have to the home environment: an average of 16 hours daily (Baker, 2007). The indoor temperature controls of a home along with the condition of the building determine the efficiency with which a house can generate and retain heat for the occupants as well as affecting mould growth and dampness, all of which could influence Asthma attack. The fact that "sick buildings" beget sick occupants needs no dispute. Buildings with cracked walls, leaking roof, broken windows and broken floor are bound to increase the risk of Asthma and Pneumonia due to moisture and mould growth. Furthermore, poor quality residential environment as defined by presence of floods, mice/pest infestation and bushy surrounding has been found to be linked with Bronchitis. This finding has practically demonstrated the need to strengthen community environmental sanitation and provide drainage facilities in urban areas. It is now evident that the promotion of community health would require a deliberate and conscious effort at improving housing conditions. It has been noted, however, that although some other factors may be responsible for health condition of residents in any area, housing has undoubtedly been established to have much influence.

5. Conclusion

In this study, the relationship between ill health and housing conditions in Enugu urban has been clearly demonstrated. The housing condition of the people is found to be "inadequate" and failed to guarantee the health of its occupants. Housing conditions like dilapidated building condition, inadequate indoor temperature control, poor environmental quality and crowding were observed as the major predictors of incidences of Asthma, Pneumonia, Cough and Bronchitis among households. In as much as urban dwellers in Nigeria have suffered perennial neglect by the Urban-based ruling elites, the findings of this study serve as a "wake-up call" to the Nigerian Government to exhibit an active interest in urban housing and health by promoting healthy housing that could eradicate the negative health impacts. The World Bank urban interventions should be directed at strengthening the community's health programme, raising housing health awareness and encouraging good self-help environmental sanitation among urban households. The housing producers should always be mindful of the fact that the wellbeing of the occupants of these houses is a function of the nature and conditions of the houses, hence the need to be very proactive while designing and developing the houses. This study which has explored both all inclusive longitudinal variables over time as well as cross section data provided the needed understanding in the association between human well being and housing quality. This study had added to the existing knowledge of the interplay between housing quality and health, thereby the need for an effective housing intervention program like urban renewal and rehabilitation programs that will better the quality of houses in Nigeria cities, thus, reducing public health challenges and risks which are linked with poor conditions

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