

## Precaution against Coronavirus and Housing Neighborhood Standard in Selected Areas of Lagos State, Nigeria

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**Article history:** Received: 31 July 2020 Received in revised form: 16 October 2020

Accepted: 21 November 2020 Published online: 12 December 2020

### Abstract

Housing and neighborhood conditions can significantly affect health, safety, and well-being of citizens in a country. The current COVID-19 outbreak and its manner of transmission tests the potential resilience of nations, while revealing various economic, political, and health challenges – whereby housing being one and in fact the basis of them. The most well-planned and maintained housing environments in Nigeria are mostly populated by the rich, more-privileged, and less often the middle-income earners, while the lower-class groups of people reside in unkempt or sub-standard neighborhoods. The objectives of this study are to examine the neighborhood and housing standards in five selected areas of Lagos and to investigate the level of residents' compliance with the physical/social distancing polices relating to the precautions against COVID-19 spread. Data were gathered through a mixed-method approach, alongside facility surveys and physical observations. A total of 161 copies of questionnaire were administered in the Fola-Agoro, Abule-Ijesha, Bariga, Abule-Oja, and Onike-Iwaya areas – all within the essential part of the city. 152 questionnaires were returned with 143 of them were found valid for generating the required analysis through the use of SPSS software. Features like road networks, drainage systems, infrastructural facilities, commercial properties, and various types of dwelling units exist across these areas. However, findings from the survey analysis indicated poor neighborhood and housing standards that manifested in lack of conducive neighborhood dwelling facilities/conditions like adequate space, proper ventilation, good security, serenity, efficient household services, and a well-planned environment, all affect residents' operations in the areas. The overall inadequacy of basic amenities affected the residents' level of adherence to the lockdown policy as the selected areas lacked appreciable neighborhood and housing standards. Hence, it is recommended that related and concerned authorities should provide the basic habitable conditions such as spacious neighborhood, good ventilation, serene environment, efficient neighborhood security and good road networks. This, presumably, will promote comfort among residents' and enhance their ability to abide by the physical distancing policy towards the prevention of the pandemic spread and indeed any subsequent disease outbreaks capable of being doused by good neighborhood and housing standards.

**Keywords:** COVID-19, housing, lower class group of people, neighborhood, Nigeria

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### 1.0 INTRODUCTION

Housing is often interpreted as a social condition which boosts the well-being of an individual or a group of individuals. It is further said to serve as a catalyst for economic development due to its high multiplier impact, vis-à-vis its link to the overall economy of a state (Owusu-Ansah et al., 2019). The affiliation between the housing and the economy of a country cannot be overemphasized as housing plays a central role in sheltering the citizens. It also offers a plethora of opportunities for securing local investments, and supporting business outputs by generating effective demands for a wide range of products. The construction industry, labour market, financial system, and infrastructural development companies are all beneficiaries of a vibrant housing sector (Lizarralde & Root, 2008; Rust, 2006). Therefore, inadequate housing structures and unsafe environments can greatly affect the operations of these sectors and indeed the entire economic operations in a country. The nature of people's accommodation, relating to the space quality and the materials used in constructing such facilities may expose them to pollution and significant health risks like reproductive defects, cancer, birth defects, lung diseases, headaches, and virus issues (Godish, 1989). These are some reasons why housing is often regarded as a complex subject with several other topics embedded in it, such as housing quality, building material usage, maintenance issues, adjacent land uses, crowding, site selection, and diversity of housing stock. Around 7.6 billion (i.e. 55%) of the world's population reside in concentrated environments, and with more than half of them suffering from deficient housing, due to the substantial lack of all or majority of the previously stated factors, especially across developing countries (Chamie, 2017). Standard housing and neighborhoods are however argued to be germane in overcoming such deficiencies by 2030, through a daily provision of not less than 96,150 accommodation units. Most research works however, focus only on the quantitative aspect of housing rather than considering the holistic issues of housing, that comprised of quantity, quality, and neighborhoods. The need for this holistic examination is due to the fact that housing, neighborhood quality and residential settings

generally determine the well-being of people and quality of their daily lives.

Across Nigeria, many housing neighborhoods are stigmatized by a high concentration of low-income families, social vices, poor living conditions, and relatively low quality of lives (Ilesanmi, 2012; Olufemi, 2018). The unceasing and almost uncontrollable population growth in the country resulted in severe accommodation shortages, coupled with the inability of citizens to afford the available houses in good locations. The average annual income of public workers is particularly not enough to afford a befitting house considering the enormous disparities between the lowest earners and the standard earners. The minimum monthly wage in Nigeria is ₦18,000 (USD50), while the monthly average income for public workers is about ₦43,200 (USD120). This indicates the intensity of unaffordability of standard housing by many average citizens. Many households reside in crowded, informal communities without compounds and with multiple habitants, due to lack of standard house affordability. Lots of the overcrowded structures have inadvertently been wrecked and rendered vulnerable to security attacks and even collapse as a result of over-loading the structures. Furthermore, the use of substandard construction materials and the age of such buildings also contribute to their precarious states. It is vital to know that continuous expeditions and research on housing policy, and quality housing delivery in nations like Nigeria, with high housing deficit and substandard housing is unavoidable. The ever-increasing needs for accommodations justify the necessity to promote housing policies that ensure the supply of economical and affordable housing types for all income class, apart from improving the quality of existing blocks and their surroundings and correcting related environmental problems vis-à-vis boosting the quality of infrastructures and urban services (Olotuah & Taiwo, 2015).

In addition, housing differentiates the environmental space from internal to external. The external being susceptible to virus transmissions, while the internal protects inhabitants from maladies, hence the need to promote eco-friendly neighborhoods that support human operations. The ongoing COVID-19 pandemic being a global disaster has tested the potential resilience of all countries while also exposing lots of health, political and economic challenges – with housing emerges as one of them. While individual nations have been able to curtail the spread of the virus, it is imperative to note that the level of restriction in each country is dependent on their diverse level of housing development. It is therefore undeniable that in this period of the disease transmission, residing in substandard shelters can make preventive measures such as physical distancing and other personal hygiene difficult, and with a high level of underlying health issues to include obstructive lung disease and increased vulnerability (Henwood et al., 2020). In places like Nigeria, urbanization rate, migrations and the consequent deficiencies in housing and related neighborhoods significantly affect the health and well-being of people. A preponderance of housing projects being executed in major towns across the country lacks the required quality of a standard house (Atanda & Olukoya, 2019; Ebekozen et al., 2019; Saidu & Yeom, 2020). With the country having a population of over 180 million, and half of its population belongs to the lower class, there is a need for the government to establish workable policies and programs that support the standard housing provisions for growing populations. For instance, various studies have suggested that housing stock is not in the normal living conditions for human habitations, while lots of houses in urban areas have deteriorated and become overcrowded (Babalola et al., 2020; Murtala et al., 2018). Even the national housing programs lack continuity and consistency with political interference and nepotism impacting the housing sector's operations. Meanwhile, with the recent conditions and restrictions to the use of public spaces, physical distancing, self-isolations, and confinements amidst the COVID-19 crisis, the uncertainty of the impact of the pandemic on future usage of public spaces and other related changes have further put pressure on residential neighborhoods operations, while stimulating the importance of quality housing environments. This is because many companies have restructured their operations by encouraging remote working among employees, thereby dumping the conventional idea of public offices. Thus, the situation resulted in reducing overcrowded work spaces, but increasing the need for more spaces in houses, neighborhoods, and infrastructure to ensure people's well-being and productivity during and after the pandemic era. To that extent, the objectives of this study are to examine the neighborhood and housing standards in five selected areas of Lagos and to investigate the level of residents' compliance with the physical/social distancing policies relating to the precautions against COVID-19 spread. Dominant attributes that can influence the spread of a disease within such neighborhoods are investigated as well.

## ■ 2.0 LITERATURE REVIEW

### 2.1 Housing Neighborhood Concept

Neighborhood is described by De Chiara et al. (1984) as a residential vicinity with homogenous features and can be compared to the size of a regular elementary school. Summarizing the features of a neighborhood, the author posited that:

1. The size of neighborhoods can be determined through populations who required an elementary school.
2. Such places need to be bounded by various arterial roads which are developed through traffic to the district.
3. Within neighborhoods, existing streets need to be designed with minimum widths that comfortably support human operations.
4. Streets should be planned well with no hindrance from traffic and noise pollution.
5. 10% of existing areas should be allocated for recreation and open spaces for human comfort and well-being.
6. Any learning centers should be placed at the heart of such neighborhood with needed public infrastructures located close to required places.
7. Residential apartments should be at proximity to learning centers for easy accessibility.

The aforementioned factors were suggested as good and highly essential for sustainable housing neighborhoods. It is expected that such planning and features will sustain and enhance communities that reside closely, and such would contribute to prevention of the spread of diseases, especially with the existence of enough space and required facilities. This is further supported by plentiful commentators (e.g. Macke et al., 2018; Nath et al., 2018; Stanislav & Chin, 2019) who all recognized the irrefutable importance of environmental facilities in promoting sustainable neighborhoods, smart cities and conducive vicinities. In other words, the role of urban planners does not just involve

planning essential amenities, charting future plans for cities, and towns, zoning land uses as expected, and physical development control; but also requires precise urban space designs for more supportive districts. As postulated by JPBD's Doctrine in 1997, cited by Kasim et al. (2008), a good housing environment should have certain features, some of which are considered in this paper. They include:

**Table 1** Factors that make a good housing neighborhood  
(Sources: Adapted from Kasim et al., 2008)

Essentials	Features
Comfort	Interior design and environments must foster family system and support their operations.
Friendliness	Essential fundamental amenities must encourage a sociable vicinity, its embellishment, quality and must allow for subsequent growth.
Affordability	Housing cost should be within the affordability and demands of people at all income levels.
Cleanliness and Synchronization	Housing vicinities must be clean, free of germs, and well harmonized with related environs.
Adequacy	There must be sufficient public facilities and amenities that support individual household and general populations.

Over the years, there have been several advocacies on the essentials of adequate environmental planning due to the inconsistency related with households and environments. Several pointers have been used to evaluate the performance of various forms of housing environment. Among these, neighborhood satisfaction and its connection to people's health has mostly been used to determine an entire neighborhood's comfort level (Dong & Qin, 2017; Inchley et al., 2016; Zhan et al., 2018). For an environment to satisfy its purpose to its residents, its physical and social factors must support the improvement of residents' life quality and wellness. Life quality is described in two phases by Jeffres and Dobos (1995). Firstly, that it is the value of satisfaction of the people. Secondly, as the value of satisfaction with an individual's spouse, partner, children, entire household, friends, and the individuals themselves. These concepts are holistically referred to as social environmental quality of life, which is rated as important for satisfaction in this pandemic period, as a house and its neighborhood are expected to support people's safety and life operations. Equally, environmental life quality involves having satisfaction with one's accommodation, school(s), transportation, security, and health services (Porio, 2015). Patterns of mobility, spaces and stability of an environment can also determine the neighborhood's satisfactions (Brower, 2003). Residents who are satisfied with their environment hardly move out of it, but rather, are willing to stay back regardless of the housing cost while encouraging others to stay too. Conversely, unsatisfied households often relocate to better environments. Hence, household's mobility behavior and well-being of residents are often assessed by residents' perceptions on their environs (Chen et al., 2019; Fattah, 2017; Hanafi et al., 2018). This justifies the reason why the method of questionnaire was adopted for this study, as residents of the neighborhoods visited were able to give vital information about their environment and the issues affecting their stay-at-home position and other operations during the physical distancing period.

## 2.2 The Role of Neighborhood Amenities in Housing Occupation and Health

Housing environs can influence people's operations and well-being in several ways. Several scholars (e.g. Henwood et al., 2013; Pollack et al., 2004; Stafford & McCarthy, 2006) justified the high importance of social environments, physical settings and infrastructural services for housing to meet its purpose of use. Neighborhoods in the social context relate to any community with diverse social networks like community engagement opportunities and social support system. Neighborhoods in the physical and service context refer to available infrastructure and amenities that are required in providing basic services such as the availability of parks, sidewalk, traffic facilities, police stations, leisure centers, connectivity of paths, aesthetic, and safety. The presence of all these factors can influence the density of houses and engender physical and social interactions as well as well-being. On top of that, its absence will significantly affect people's health and community growth. Hence, it is prudent to always consider social and environmental factors when designing environmental facilities in housing vicinities. Notably, the role of environmental amenities is changing over time which indicates the need to constantly service existing facilities and provide new ones as required. This will ensure that neighborhood amenities meet the people's well-being and daily needs, more so, in this period of the COVID-19 pandemic where physical distancing becomes inevitable. Thus, the review of housing and neighborhood amenities that support people's self-isolations, housing satisfactions and future development is highly required. This will involve related experts refocusing on the need to provide necessary facilities that can prevent the spread of diseases with a significant regard for residents' operations. The availability of needed facilities in housing environments together with business opportunities will promote a sense of community, social, and economic sustainability as people will be motivated to use available resources to establish their own businesses especially in nations like Nigeria where unemployment is constantly on the rise. Availability of such facilities in a period like the pandemic era can also give birth to new growth, thus improving quality of lives and communities. This can promote the housing market at large, as more houses would be required in environments with sufficient standard facilities and services. Although providing such facilities can impose more cost on developers, particularly when the provision of basic facilities is left in the hands of private individuals, however, considering the significance of facilities and neighborhood infrastructure to health as well as their contributions to sustainable neighborhoods, it is rational for developers to contribute their quota into making housing and vicinities secure for human operations.

## 2.3 COVID-19 Pandemic: Virus, Environment, Transmission, and Housing Neighborhood Quality

In the past years, countless diseases have emerged across various geographical zones with pathogens. These include, but not limited to, Zika, Ebola, SARS, Nipah, and most recently, the coronavirus (COVs). COVs which fall into the family of viral infections emanated from

Wuhan City, China, with a difference from genomic sequential data, indicating its novelty. Like the virus SARS-COV-1 that existed in 2002, COVs mostly called COVID-19 is termed as a severe acute respiratory syndrome (SARS-CoV-2). Ostensibly, this basically is the latest deadly virus affecting humans (Dhama et al., 2020). While COVID-19 has been said to be emanated from animals such as bats, and subsequently transferred among humans with its four strains causing mild clinic symptoms being referred to as a pneumonia related cold, the possibility of it being transferred from objects and food to man cannot be ignored (Zu et al., 2020). This indicates the need for housing environment to be clean, spacious, and secured for dwellers, especially in clustered housing vicinities such as it exists in Nigeria. In comparison with other ailments previously caused by human COVs like Avian H7N9 and Ebola, COVID-19 has a less pathogenesis, yet a higher transmission ability, as it is evident in its unceasing increase in confirmed cases worldwide (Singhal, 2020). The virus easily transfers from person to person through respiratory droplets being released through an individual's cough, sneeze, and exhales, with same symptoms. Early diagnosis by actual time polymerase chain reaction (PCR) and next generation has indicated the presence of pathogens at early stage (Dhama et al., 2020). In the absence of any antiviral medications or vaccines to cure or prevent COVID-19, possible therapeutic technique which is currently assessed is coined from previous experiences of curing related viruses (Singhal, 2020). Medical practitioners have maintained that no wholesome or specific vaccine can cure COVID-19 than people observing personal isolations, physical distancing, hands and surface sanitizing, and the use of face masks. However, the risk of such disease spread can be higher in clustered and disorganized environments where people hardly observe the laws by believing that they do not live in a public place.

Furthermore, the anxiety about the vast spread of COVID-19 in homes and environs, brought health authorities to a big issue of concern. This has stimulated a lot of discussions in Nigeria as many of the citizens, especially in Lagos, reside in sub-standard houses and generally crowded areas. As stated by Do and Finch (2008), deprived neighborhoods or socio-economically disadvantaged vicinities are prone to higher level of disease spread based on the condition of their environments. Such place will also experience higher environmental challenges than the advantaged environments such as: littering, poor air quality, increased risk of health, low socio-economic status, violence, traffic, and noise pollution (Kim et al., 2013). Housing and environmental aesthetics, quality, and changing structure also have a direct effect on the mental well-being, vis-a-vis people's level of feeling hopeless. It is noteworthy that the problem of social disorder, cumulative poverty, incivilities, self-isolation and the fear of contacting the virus has further promoted some changes in neighborhood's usual operation and have had a multiplier effect on impact (Bond et al., 2012). It is perceived that a profound understanding of housing and neighborhood impact on health and productivity can lead to identification of crucial problems of housing and its environs in the study areas. As a result of this, government and housing related experts are encouraged to initiate projects and policies that will benefit citizens' livability.

### 3.0 METHODOLOGY

The research philosophy relates to the ideology of positivism as the information gathered was subject to a mixed method approach (literature review, questionnaire, and personal observations). Residents' ideas and experiences in the studied areas were explored to support the research objectives. This was assumed to provide an objective truth of the situation in the areas and its connection with a disease spread like COVID-19. Questionnaire administration was adopted in the study. Data were accumulated from April to May 2020. Quality of neighborhoods in terms of housing quantity and quality across the country has been tagged below the standard of other nations (Adeoye, 2016; Olufemi 2018). This mostly affect the low income/least-privileged citizens who are of higher percentage of the population. Most of the questionnaires were answered by this group based on their location and assumption of providing the required information. The exploration of the households' living standards and operations prior and during the COVID-19 lockdown was the study's focus. There was difficulty in obtaining an official and current statistics of the study's population due to lack of current data in the country. Hence, systematic and convenient sampling techniques were combined to aid the questionnaire administrations. 161 questionnaires were administered in five locations across Lagos state. 152 were returned, while 143 were deemed valid and eventually used for analysis with nine unused due to missing values and omissions. Being the commercial hub of the country and the former capital of the country, Lagos was purposely selected to further understand the condition of housing and neighborhood vis-a-vis the level of adherence to the pandemic policy in the state. The locations sampled are Folagoro, Abule-Ijesha, Briga/Apata, Abule-Oja and Onike-Iwaya all within the mainland part of the city. These locations were chosen due to their proximity to three of the oldest higher institutions in the country (University of Lagos, Yaba College of Technology, and Federal College of Education), hence, the areas are predominantly occupied by students, and workers of various institutions and organizations.

**Table 2** Questionnaire distributed and retrieved according to geographical locations  
(Sources: Questionnaire administrated based on sampling technique adopted)

S/N	Location	Questionnaire administered	Questionnaire Retrieved
1	Folagoro	35	33
2	Abule-Ijesha	28	26
3	Briga	48	43
4	Abule-Oja	18	18
5	Onike-Iwaya	32	32
	Total	161	152

## ■ 4.0 RESULTS AND DISCUSSION

### 4.1 Results Analysis

During the survey, the features of neighborhood and housing standards found in the study areas include: road networks, drainage systems, infrastructural facilities, commercial properties, and different types of dwelling units. On the other hand, the literature review conducted to answer part of the study's objectives discovered that several factors affect neighborhood and housing standards in the city, these factors aided the formation of the questionnaire and subsequent analysis hence, the factors are indicated in Table 3 below.

**Table 3** Factors affecting neighborhood and housing quality in Lagos, Nigeria

S/N	Title	Author(s)	Study Focus	Methodology	Result
1	A comparative analysis of residential quality of public and private estates in an urban centre of Lagos, Nigeria: A case study of Iba Estate in Ojo and Unity Estate in Alimosho	Olatunbosun, (2018)	Residential quality, low cost housing scheme, public and private estates, housing environment	Mixed method approach	Poor infrastructure and poor environmental conditions of both the houses and environment due to poor management
2	Housing, neighbourhood quality and quality of life in public housing in Lagos, Nigeria	Ilesanmi (2012)	Housing quality, neighborhood quality and infrastructure, areas of vulnerability to future health hazards in five low income and three medium income estate, quality indicators and causes of inadequacy in the areas	Quantitative method	Poor quality and dilapidated houses, poor quality environments
3	Assessment of housing quality in Ibeju-Lekki-peri-urban settlement, Lagos State, Nigeria	Adedire & Adegbile (2018)	Socio-economic profile, neighborhoods quality, locational quality, dwelling quality, and building materials	Mixed method approach	Lack of suitable infrastructure, high state of building disrepair
4	Impact of poverty on housing condition in Nigeria: A case study of Mushin Local Government Area of Lagos State	Aluko (2012)	Socio-economic characteristic, physical environment and level of infrastructural facilities	Quantitative method	Environmental deterioration, overcrowding, social and economic problems
5	Urbanization, housing quality and environmental degeneration in Nigeria	Lanrewaju (2012)	Urbanization, environmental, degeneration, substandard, housing, housing quality, overcrowding	Qualitative method	Inadequate basic infrastructural amenities, substandard housing, overcrowding, poor ventilation in homes and work places, and noncompliance with building bye-laws and regulations
6	Urban housing in Nigeria for sustainable development: Challenges and prospects	Jiboye et al. (2020)	Adequate housing, urbanization, sustainable development	Qualitative method	Lack of adequate infrastructure and social amenities
7	Assessing the causes of urbanization and its impact on housing quality in the city of Lagos	Akinyemi et al. (2020)	Urbanization, impact, housing, quality	Qualitative method	Lack of appropriate heating, plumbing, electricity or proper sanitation, high crime rates, lack of sanitation and garbage disposal problems. Lack of clean water for washing and drinking

Table 3 above indicates the factors affecting the existing housing neighborhoods and residents' living standards across Lagos state. These factors form part of the questions asked in the questionnaire. Also, based on the observations during the field survey, majority of these factors are applicable to the selected areas. One hundred and sixty-one (161) questionnaires were administered on household while 143 were analyzed. This represents 88.82% of questionnaires administered. The variable measured are listed below in Table 4 with their respective outcome.

**Table 4** Measured variables

Variable	Options	Percentage (%)
Lack of space in neighborhood	Yes	71.3
	No	28.7
Poor ventilation	Yes	69.2
	No	30.8
Light pollutions	Yes	51.7
	No	48.3
Lack of security into the neighborhood/building	Yes	52.4
	No	47.6
Noise from generators	Yes	100.0
	No	0.0
Noise from neighborhood/loud parties	Yes	76.2
	No	23.8
Criminal activities	Yes	45.5
	No	54.5
Rowdy people/drun kard in the environment	Yes	56.6
	No	43.4
Communal areas problem	Yes	51.7
	No	48.3
Lack of adequate security in the environment	Yes	76.9
	No	23.1
Refuse disposal problems	Yes	55.9
	No	44.1
Level of awareness that COVID-19 infected persons can die	Very Low	2.8
	Low	25.2
	Fairly High	44.1
	High	25.9
	Very High	2.1
Physical distance practiced in areas	Very Low	9.8
	Low	33.6
	Fairly High	51.0
	High	4.2
	Very High	1.4

From the above table, out of 143 respondents, 71.3% lack adequate space in their neighborhoods. 69.2% experiences poor ventilated vicinities, while light pollutions are often experienced by 51.7% respondents. 52.4% of the respondents lack the basic security measure that is required to protect their vicinities while monitoring people's movement and operations within their areas, while all respondents experience noise pollution in their areas especially from the use of private generator which is a major source of electricity for the majority of the country's citizens, whereas 76.2% respondents noted that other neighborhood activities and loud parties affect their housing environment. Criminal activities were identified by 45.5% as a major problem in their areas, while 56.6% of the respondents are affected by rowdy people/drun kards in the environment, while communal area problems were identified by 51.7% of the respondents. Lack of holistic security measures in the vicinities was reported by 76.9%. Refuse disposal problem also affected 55.9% respondents. With respect to COVID-19 awareness, respondents were asked to rank their awareness level on the likelihood of death for COVID-19 infected individuals and physical distance awareness level with a Likert scale option from very low to very high. A paltry of 2.8% indicated their very low awareness level, while 25.2% have low awareness. On the other hand, 44.1% have fairly high awareness, and high awareness

level was only indicated by 25.9%, while three respondents noted their highest level of awareness. Equally, the report on the understanding and practice of physical distancing indicated that 9.8% have very low practice, 33.6% have a low adherence to the policy, fairly high practice is done by 51.0% respondents, high adherence to the policy is indicated by 4.2% respondents and highest practice is indicated by only 1.4% of the respondents. Some of the respondents noted that as much as the pandemic subjects them to working from home, the lack of necessary facilities to support their operations usually make them go out in search of other means of carrying out their official responsibilities. For instance, they often go out to purchase fuel for their generating sets due to lack of electricity supply in their environs. Some people also reported that they go out in search of where to carry out their official duties other than their house. This is due to their low-income level and their inability to fuel their generators constantly. Hence, these posed great challenges to the precautionary measures directed by the authorities as several residents in this category are usually found clustering around the streets in search of Electricity means mostly in the evening.

## 4.2 Discussion

Residing in substandard housing environments make preventive measures against the spread of COVID-19 including self-isolation, physical distancing, and personal hygiene difficult, with a high profile of health conditions. Quality neighborhoods which is connected to sustainable developments simulates the sustenance of housing environmental systems, and quality of life (Porio, 2015). Several factors determine the quality of housing and neighborhoods. In the current phase of the pandemic, it is glaring that cities lack adequate facilities to qualify their neighborhoods as supportive towards the prevention of the pandemic. Based on the survey, most respondents were dissatisfied with their housing and neighborhood conditions. Quite a number of works have argued that supportive networks within neighborhoods promote healthy and satisfying environments (Al-Hagla, 2008; Bantjes, 2011). Open-space inadequacy being part of the problem of housing neighborhoods in Nigeria has been reported as an unignorable factor in promoting interactions and well-being (Addas & Alserayhi, 2020; Nasution & Zahrah, 2017).

**Lack of Space in the Neighborhoods:** It has always been argued that identifying obstacles to the development of neighborhoods and housing is becoming more essential with a matter of urgency (Zhang et al., 2018). Respondents highlighted their discomfort at a lack of adequate spaces in their housing and neighborhood. This is generally the case of low-income households and neighborhoods in Nigeria. The connection between policies, sustainable developments and urban planning in the areas are questionable. Where a geographically localized community is located in a spacious environment, quality of life and adherence to public rules can be promoted while such communities are able to retain their values, character and a commonly beneficial interest which will easily distinguish them from other settings. Also, Marouf et al. (2015) and Omar et al. (2018) prophesied that the deficiency in neighborhood spaces has negative implications on child/youth livelihoods thereby causing them to lose their sense of place and quality of lives when they find themselves in different communities. As upheld by Bostic and Martin (2003), housing neighborhoods are most viable and recognizable units of household identities that play a key role of unleashing people's sense of networking, and social belongings. It is apparent that most households in the study areas engage more in neighborhood activities such as one-on-one discussions during the lock-down as many used it to ease the tension, boredom, and anxiety of the self-isolations. Hence, the lack of space poses a challenge to curbing the spread of the disease.

**Poor Ventilations:** Poorly ventilated environments have lots of negative health implications (Boomsma et al., 2017). In most cases, the problem of wall and floor dampness, molds and the presence of rats relate to such places. Based on respondents' answers and conscious observation of the areas, some of the houses are full of dams and unpleasant smells due to poor ventilations. This directly affects their health and quality of well-being, most especially in children, low income earners and individuals with health problem history (Liddell & Guiney, 2015; Novoa et al., 2015). The problem of poor ventilation sometimes causes households to stay longer outside the confines of their homes during the lockdown than usual as some respondents verbally mentioned lack of power supply and consequent heat as reasons they seek fresh air in open spaces while also getting the opportunity to relate with cohabitants. To buttress this, Sharpe et al. (2015) noted that poor ventilations in connection with damp, mold and condensations offer additional health risks as it increases house-dust, more molds and mites which are strongly identified as a cause of asthma and related respiratory illness. Hence, poor ventilation contributes to people's poor health generally, and sabotages efforts to curb the spread of any disease (Evans et al., 2000).

**Lack of Security in the Neighborhoods and Buildings:** People's social participations and mobility are indispensable to their health and standard of living. However, a secured environment can only make this possible. In the study areas, it was discovered that most of the streets exist with little or no security measures and thus, unidentified persons are able to move around the areas at any period without being challenged. Some respondents noted that this has caused several problems in the past like criminal activities, accidents by reckless drivers and disruption of public peace by drunkards. It was observed that the neighborhoods are highly connected with adult mobility and socializations than the younger ones. For an inclusive age, supportive neighborhood where public health interventions and curbing of any disease spread can be promoted, neighborhood security, social support, and user friendly walk environment are important (Kirchner & Sperling, 2007; Levasseur et al., 2015). Housing environments can only grow and be less vulnerable to disease spread with the presence of better infrastructures, quality communication media, healthcare facilities, safety and security measures that give people a sense of personal safety (Garau & Pavan, 2018). Hence, households who show satisfaction with their living environment security-wise also indicated their feelings of a satisfactory life quality (Litman, 2020). However, insecurity, which is connected to residents' neighborhood exposure can relate to perception of people about lack of safety, risk of getting involved in traffic incident within their neighborhoods, being victims of crimes, threats, violence and contacting of disease through those who commute around the vicinity.

**Criminal Activities:** One of the unceasing mental health problems in Nigeria is the presence of criminal activities which is very rampant especially among the low-middle income settings. Owing to the lack of effective security operations in the country, and lack of employment, criminal activities have become an escape route for some people. There have been series of criminal reports around the country's cities during the lockdown period especially on the highways and neighborhoods. Hence, besides the fear of contacting COVID-19 that causes depression for some people, the fear of household not being invaded while sleeping at night was reported to cause psychological instability for some people (Litman, 2020; Oyeyemi et al., 2015). In some of the street visited it was even reported that households run a teamwork shift at night safeguarding neighborhood and property from crime. Lack of sleep is highly noted as a cause to many health problems, risk of death, low self-esteem, and constant tiredness, etcetera. These further weakens people's immune systems towards overcoming any virus contacts. In such case, this can further make individuals susceptible to contacting a virus.

**Rowdy People/Drunkard in the Environment:** Another aspect of the criminal and safety problems reported across the targeted areas involves drunkenness and unmannered behaviors in the public places by people mostly between the ages of 20s and late 40s. It was observed that these sets of people do not sometimes observe the COVID-19 and physical distancing rules during the lockdown, most especially when under the influence of alcohol. Respondents who indicated their housing and neighborhoods as low-quality further stressed that idleness subjected many to drinking during the lockdown which often resulted to unscrupulous behaviors around the street without observing physical distancing. This relates with the declaration by Kearns et al. (2015) that loneliness caused by weak neighborhood qualities subjected people to drinking resulting in antisocial behaviors. In such cases, the people and their families vis-à-vis the neighborhood residents, become exposed to COVID-19 infection.

**Communal Area Problems:** Most multi-tenant residential properties in Nigeria have communal areas and other facilities like roof, gardens, closes and stairs attached to buildings being shared by residents. With regard to tenant's personality and user satisfaction, most of the respondents voiced their dissatisfaction with the lack of maintenance of the communal areas even long before COVID-19. They complained about the lack of ventilation and substandard materials used for the constructing their houses. It was also noted that rats and mice reside in some communal areas due to poor waste disposal, i.e. closeness to the area to dumping sites. It is generally known that COVID-19 virus can also easily be contacted through surfaces which indicate a key importance of disinfecting communal areas within housing neighborhoods as it is easily infected through available facilities. It is important to say however that majority of the houseowners/agents hardly care for tenant's welfare in their homes and there is often lack of good communication between the parties which is one reason why communal areas and refuse disposal is a big issue in housing neighborhoods. During the questionnaire administration, respondents' reports on poor communal area maintenance and weak refuse disposal management were further observed. Some areas visited were littered with household refuse while drainages had also become dumping sites in some areas. Regular maintenance in connection with regular expert's property inspections is unavoidable in such areas as it will not only help in saving cost in the long run, but will also help in preventing expensive spending due to negligence and will also prevent damage. Dahab et al. (2020) opined that authorities, housing professionals, and house owners can intervene in the situation of their home to in curbing the spread of the disease as well as supporting resident's well-being. It is also upheld by Wasdani and Prasad (2020) that residents in such low income or suburb areas hold physical distancing as an aspiration rather than an attainable reality due to the situation of their homes and environment. The authors further advocate the need for economic support towards the socially vulnerable in the society and for groups residing in substandard environments.

**Level of Awareness that COVID-19 Infected Person Can Die:** One visible observation during the fieldwork is the lack of adequate understanding of the nature of COVID-19 transmission. Many of them do not know the intensity at which the virus spreads and kills infected person. Some respondents who showed interest in monitoring the issues were deterred by lack of electricity in their areas, and lack of adequate information provided by the authorities. In recent time, the virus has further affected the country with hundreds of death recorded mostly in the low-income group residing in the north. This is partly because of their lack of proper awareness on the disease. More so, many people believe that their Immune system can easily fight against the virus even if they get infected which makes them more relaxed while operating with less care within their neighborhood during the lock-down. To put succinctly, there exists a gap in the country's health system, government operations in curbing the disease spread, with untimely and concise information on the entire nations readiness in addressing the inconsistencies that could further increase the disease spread compared to the operations of other countries like United Kingdom, Singapore, Malaysia, to name a few. The aforementioned factors, however, have played a successful role in increasing citizens' awareness and safety from the disease spread in other countries. This is very essential to the condition of Nigeria, most especially the low-income neighborhoods and vulnerable citizens who are mostly at risk (Hu et al., 2020; Patel et al., 2020). The lack of security to keep residents under check in the neighborhoods, poor management and lack of care of authorities as noted in the reviewed literature, and confirmed through the respondents during the field survey can also be related to the low level of respondents' awareness of COVID-19 infections. This is because lack of electricity prevents them from keeping abreast of global updates regarding the pandemic. Hence, most of them only get a second-hand information through their peers within their environs or family members which is not adequate enough to understanding the pandemic situation.

**Physical Distance Practice in Areas:** It was observed that many residents of visited areas did not observe the 2-meter physical distancing partly because of the lack of understanding of virus manner of spreading. To mitigate and reduce the pandemic spread, most countries in the world adopted an unprecedented physical distancing policy. Such policy is strictly implemented in some countries than others. This is further buttressed by Agusi et al. (2020), who studied the social distancing adherence in Nigeria during the pandemic. The authors noted that physical distancing, being a global trend in controlling infectious diseases remain questionable in Nigeria as neighborhoods are often clustered by residents, commercial cars and buses in the study area are closely packed with people like the usual operations. This is

because of ignorance, and insolence to policies. The settings of some respondent's neighborhoods and houses i.e. the lack of space also deter them from practicing the physical distancing policy as the environment is over populated and poorly ventilated. It is noteworthy that government will require more efforts and plans to substantially reduce people's contact levels in the public and particularly in the neighborhoods as many citizens will be working from home for a long time before the situation can be normalized.

## 5.0 CONCLUSION, IMPLICATION AND RECOMMENDATION

In assessing the neighborhood and housing standards in the selected areas, some factors were highlighted to affect the operation of residents within their neighborhoods and houses through literature review. These factors aided the formation of the questionnaire, and subsequent analysis. From the survey data, majority of the respondents reside in a substandard house that are over populated, with lack basic amenities and inadequately equipped environment which somewhat affect their operations during the lockdown. As much as the residents indicated their willingness and readiness to work remotely and stay safe during this period. They maintained that the conditions of their houses and vicinities most especially the absence of sufficient ventilations, inadequate necessary infrastructure, lack of standard settings, lack of security measures, lack of electricity and lack of recognition and care from authorities affect their operations. This, to some extent further increase the mental health challenges of people vis-a vis their capacity to adhere to safety measures or policies. Residents' level of compliance to the pandemic lockdown policy is low when compare to some other cities or location within the state. Also, the housing and neighborhood situations are contrary to the putative believe that a house is a place of relaxation and peace for households. The cited problems alongside the high poverty rate across the state and the country at large distracts different activities as majority find it difficult to meet their work and family obligatory demands within their limited income while working from home during this period. Dominant issue of concern has been discussed in this study. Hence, it is recommended that related housing and neighborhood authorities should try to understand the basic necessities of individual housing neighborhoods and provide the essential amenities to support residents' operations such as security measures that can ensure safety of life and put people under check, provision of electricity and infrastructures that can help them to operate comfortably from their houses and environments. This would also help them to stay connected with the current ongoings around the world through daily news broadcast during and after the pandemic period. It is assumed that such action will go a long way in curbing the spread of any disease as the presence of essential facilities could better help people to operate more in their respective homes rather than moving around in search of electricity for their work. Public enlightenment and the provision of adequate information by the authorities could also encourage residents to abide by rules and preventive measures towards disease spread in and around their environs. The provision of a standard neighborhood setup towards future housing developments should be considered as an obligation by relevant professionals. The steps will promote a safe and supportive environment towards people's well-being during and after the pandemic.

## Acknowledgement

The authors' appreciation goes to the reviewers for their valuable comments and suggestions. Thanks to the staff of the Department of Estate Management, Federal Polytechnic Ado-Ekiti, Nigeria for their constant communication and discussions during the survey and preparation of the paper. The editorial crew also deserves heartfelt appreciation for their constant update during the paper publication process. On the whole, the Department of Real Estate, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia is highly appreciated for the opportunity to publish in this special edition and for funding the research publication.

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