

Coronavirus Pandemic and Social Distancing Strategy for Prevention in the Midst of Tenement Building Residents of Calabar, Cross River State, Nigeria

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Abstract— The transmission of Corona Virus disease is said to be mainly from symptomatic people to others by close contact through respiratory droplets, direct contact with infected persons or by contact with contaminated surfaces/objects (7). In view of the situation and for the fact that there is a lockdown, where everybody is at home, the tenement buildings, otherwise known as “Face me I face you” with its congestion and poor environmental condition, presents a breeding ground for corona virus to thrive, in the event of any outbreak. The reason is not farfetched as the social life of the residents permits them to mix up at all times. The air spaces and standard of the building does not make for social distancing. Unfortunately to these residents, in the absence of a known cure for the disease at the moment, social distancing of 2 metres between individuals is one of the strategies recommended by WHO to prevent the spread of the virus. Out of 150 respondents in the study area through contact persons and questionnaires, many live in these places for various reasons, ranging from affordable rent through inability to secure a good accommodation outside this informal settlement to the type of businesses some of the residents are engaged in which they do not want in the eyes of the public and the law. The environmental quality of the neighborhoods is laced with congestion, poor housing, lack of facilities and poor sanitary condition. To avoid the spread of COVID 19 pandemic, the researchers recommends demolition and proper reconstruction of the buildings, counseling of the residents to know the health implication of such residences to COVID 19 Pandemic and any other epidemic, affordable public housing supply to meet the accommodation needs of the citizens (both students and civil servants), good quality materials for construction and aesthetically pleasing environment.

Keywords— Corona Virus Pandemic, Environmental Quality, Housing Standard, Prevention of Spread, Social Distancing, Tenement Building.

I. INTRODUCTION

CORONAVIRUS (COVID 19) is a strange disease that broke out in Wuhan, a town in the Peoples Republic of China in December, 2019 (7). It is an infectious disease that has ravaged the whole world, destroyed thousands of lives and forced economics of different countries to its knees. It is christened COVID 19 to reflect the year (2019) when the infectious disease was first discovered. The disease is said to affect the respiratory organs of the humans by fast weakening the immune system and antibodies, meant to fight foreign substances in the human system (7; 5). Studies in Epidemiology and Virology have revealed that the transmission of the disease is mainly from symptomatic people to others by close contacts through respiratory droplets, by direct contact with infected persons or by contact of contaminated surfaces/objects (7). Repeated biological samples, collected through virology and clinical studies shows that patients demonstrate the shedding of SAR-COV-2 highest in upper respiratory tract (URT) i.e (nose and throat) early in the course of the infection within the first three days of the symptomatic appearance (7). The symptoms to the positive Ribonuclei Acid (RNA) virus include cough, shortness of breathing, fever and high temperature within fourteen days’ post infection (7). As at the time of this study precisely, August, 2020 COVID 19 pandemic according to WHO is responsible for over 650,000 deaths, 16,000,000 infected cases all over the world, including Nigeria (7). The consolation is that as at the times of this research, only a few cases of COVID 19 have been recorded in Calabar. Though the virus is

said to come to Nigeria in February 27, 2020 through persons from high risk countries (4). It is sad to note that, the world over, COVID 19 has made Orphans, Widows and Widowers, and sometimes made parents who hitherto had children to become childless. With the lockdown of every sector of the economy, through stay at home order by various governments of countries of the world, ban on travels of any kind and closure of schools (Kindergarten, Nursery, Primary, Secondary and Tertiary Institutions) the streets that were not even enough to carry the volume of traffic (Both Vehicular and human traffic) became deserted creating ghost towns in many places. To describe the spread of this pandemic like Hamattan wild fire in the desert is to say the least, in order not to increase the fears already in the minds of many. Health facilities of countries (underdeveloped, developing and developed) of the world became over stretched. Medical Doctors, Nurses and other health care givers who were trying to save lives, also paid the supreme price of losing their own lives by contracting the disease as Personal Protective Equipment (PPE) were either not available or in short supply. It is still very pathetic that, at the time of this study, there has not been found, by any country a permanent cure for this Pandemic. Countries are still on trial and error, grappling with both orthodox and traditional medicine, as well as spiritual heads of religious, what the cure should be. Powerful men of God and other religious organizations are yet to come out with statements on what God says about the disease (COVID 19). Could this be translated to mean God’s punishment for the sins of humanity? All that countries resorted to is preventive measures of not touching our faces, our nose, our eyes, and

our mouths with our fingers. No hand shaking, no hugging, social distancing, the use of alcohol based hand sanitizers; regular washing of hands with soap under running water. Since water taps could not be erected everywhere, manufacturers of simple plastic buckets inundated with taps at the base made brisk business because it was found at the entrance of every home, every establishment, business premises (no matter how small) and every religious worship centres. Another preventive measure was the use of face shield and nose mask to prevent the entry of the virus through the nose, eyes or mouth. Other preventive strategies are the banning of social gathering, night life, religious worship centres, wedding and child naming ceremonies, birthday parties, football tournaments and leagues as well as any other social gathering such as political meetings and campaigns, annual general meetings of organizations, mandatory professional trainings, religious conferences, show business etc, that attracts large crowds. Hotels, Motels, Bars and other fast food joints were closed down. In some cases, Brothels and Hotels that tried to defy the lockdown order by the government were pulled down. The list of banned social gathering is endless, varying from one state to another and from one country to the other depending on the cultural and social practices prevalent in the country. There is also the issue of Social Distancing (at least 2 meters apart, between individuals) in public places such as banks and hospitals as a measure to prevent the human to human transmission of COVID 19 pandemic. This strategy actually got the authors thinking on how effective these control measures would be amongst residents in tenement buildings sometimes locally referred to as “Face me I face you”.

II. MATERIALS AND METHOD

This study is conducted in Calabar, the capital city of Cross River State, Nigeria. Figure 1 below is the map of Calabar showing the study area located between longitude $8^{\circ}18^{11}E$, $8^{\circ}24^{11}E$ and latitude $4^{\circ}46^{11}N$, $5^{\circ}4^{11}N$. The study area is a coastal city with sub-equatorial climate of high temperatures and rainfall of double maxima with a brief period of dry season called August break. The study adopted survey method to elicit information from the purposively sampled locations where this type of residences exists. Contact persons, some of whom are residents or reside close to such residences were used for the study. Observation method was equally employed to elicit information on the nature of the buildings as well as the environment. A total number of 150 people in this sampled residents were reached with questionnaires. The unsanitary nature of the environment was also observed by the researchers. This adds to the diminishing quality of the dwelling units. According to (1) the rate of deterioration of dwelling units is a function of its environment or location.

Suffice this to mean that there was no controlled development, because the department of physical planning in Ministry of Urban Development, controls land uses, building types and heights, visual aesthetics, ribbon development, agricultural land, employment location, transportation and traffic flows. (2). Tenement buildings (Locally known as “face me I face you”) in this circumstance shall only be referring to a line of buildings with rooms facing each other. It could also be a single building with rooms facing each other and sometimes the passage in between them ranging from 1.22m to less than 0.46m. The buildings maybe be fabricated or concrete but with fabricated pit toilet, bathrooms and kitchen outside the main building and in some cases the verandah (passage) becomes the kitchen. These characteristics fits into what Durazoechi (1) considers substandard housing though there is no global definition of standard housing. These type of buildings most times harbor the poor, the retirees, and commercial sex workers who cannot afford decent accommodation in standard building (flats) with all the facilities in the building and in a good quality environment devoid of social malady and physical defects. Such buildings also give accommodation to students who cannot pay for their fees as well as pay for a standard accommodation, considering how short their stay in school would be. This is a situation where rent (affordability) and environmental quality measures willingness to pay. (3). The occupancy rate (occupancy ratio) in most cases is more than five people in a room of 3.6m by 3.6m or less (as small as 1.83m by 1.83m). This is overcrowding. *Social Life of the People*: It was discovered that the residents in this type of accommodation live an unparalleled communal lifestyle where every property, no matter who owns it, belongs to all. Whoever does not allow others to make use of his or her property is regarded as selfish and therefore, a social misfit, who should be avoided as if a leprous person. Staying together at all times, either in each other’s room or the verandah (the only space available) when the heat in the rooms due to poor ventilation becomes unbearable, is the norm among them. The researchers therefore, wonders whether the 2m social distance can be maintained amongst the residents in these type of neighborhoods.

Whereas the researchers, writing as town planners have not carried out any clinical test to ascertain the rate of the spread of the diseases amongst residents in such accommodation, common sense informs that at the rate which the Corona Virus (COVID 19) is spreading, residents of this type of accommodation are at a very high risk. They would only be at the mercy of God to stay safe and be alive if the pandemic hits such environment. Another thing that would safe them is, if a cure for the Corona Virus disease is discovered early before it gets to them.

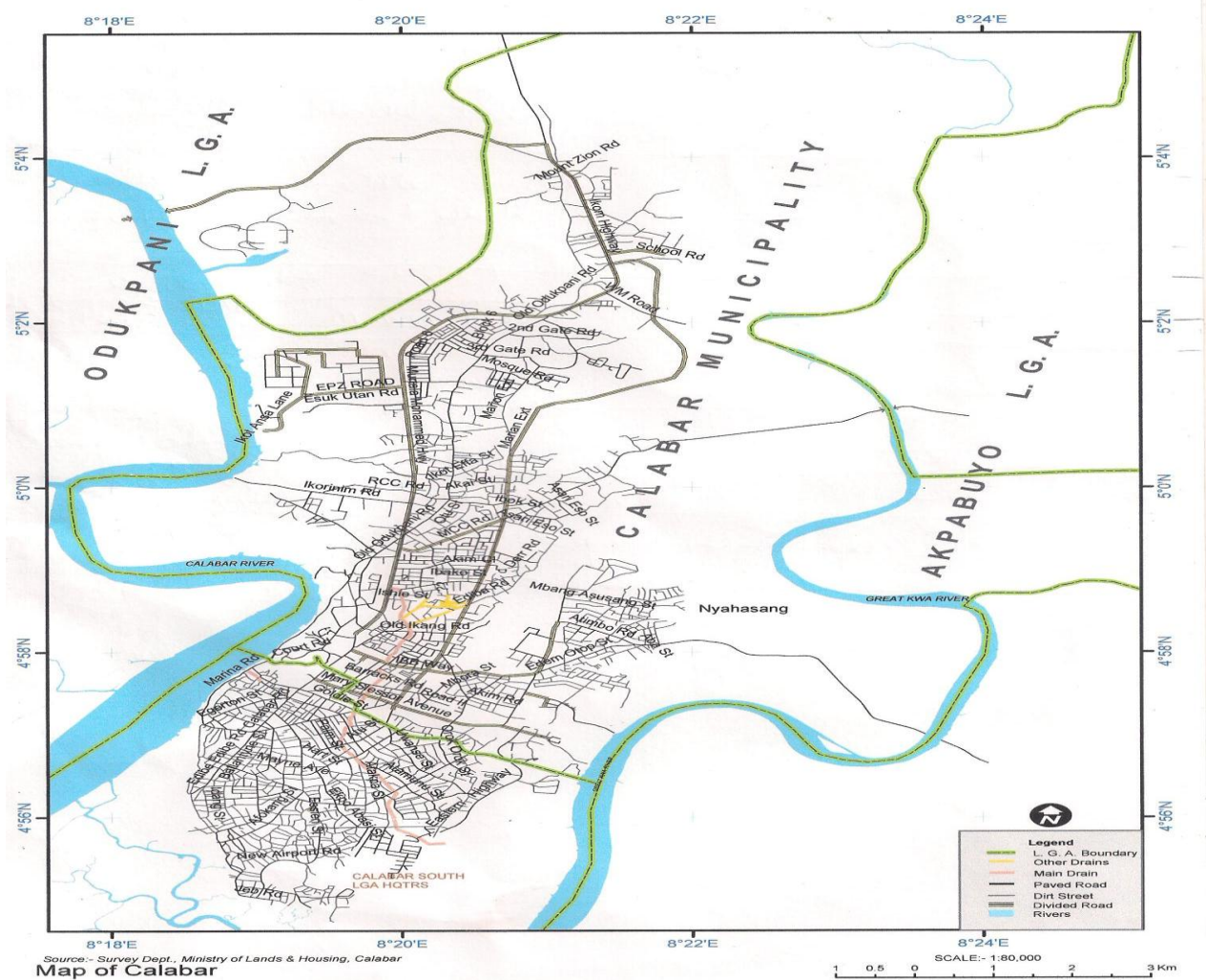


Figure 1: Map of Calabar showing the study area.

III. ANALYSIS AND RESULTS

The data from the field were brought together and analyzed using descriptive statistics and the results presented in Tables.

Table 1: Sizes of Accommodation

S/N	Size Of Accommodation	Frequency	Percentage
1	One room self-contained with facilities (3.66m by 4.27m)	20	13.33
2	Two rooms apartment (No facilities) (3.05m by 3.05m)	30	20.00
3	Single room apartment (No facilities) (3.05m by 1.83m)	40	26.67
4	Two rooms bedroom flat (with facilities) standard room (3.66m by 3.66m)	10	6.67
5	Prefabricated apartment (with no facilities) (1.83m by 1.83m)	50	33.33
Total		150	100.00

Source: Researchers Field Survey, 2020

Out of a total of 150 respondents interviewed, 20 (13.33%) live in one room of 3.66m by 4.27m size with facilities, 30 (20%) respondents live in two room (3.05m by 3.05m) apartment without facilities; 160 (26.66%) respondents live in single room (3.05m by 1.83m) with no facilities; 10 (6.66%)

respondents live in two bedrooms flat (standard room of 3.66m by 3.66m) with all the modern facilities intact and 50 (34.33%) respondents live in prefabricated apartment with no facilities. The Plate 1 below shows a good example of tenement apartments without facilities in it but multiple tenancy.



Plate 1: Fabricated Apartments without Facilities
Source: Researchers Field Survey, 2020

Table 2: Type of Building

S/N	Types of Building	Frequency	Percentage
1	A long prefabricated building with rooms facing each other	70	46.66
2	A line of single rooms self-contained apartment	30	20.00
3	Two rooms apartment	40	26.66
4	A line of flats facing each other (estates)	10	6.66
	Total	150	100.00

Source: Researchers Field Survey, 2020

This location has different types of building as reflected in table 2. 70 respondents (46.66%) live in a long prefabricated building with rooms facing each other, 30 (20%) respondents, live in a single rooms self-contained apartment; 40 respondents (26.66%) live in two rooms apartment; 10 respondents (6.66%) live in a line of flats facing each other in an estate. The Plate 2 and 3 below are tenement buildings with rooms facing each other.



Plate 2 and 3: Fabricated Buildings with rooms facing each other

Source: Researchers Field Survey, 2020

Table 3: Occupancy Ratio (Rate)

S/N	Number of Person Per Room	Frequency	Percentage
1	One person	15	10
2	Two persons	20	13.33
3	Three persons	25	16.67
4	Four persons	40	26.67
5	Five persons and above	50	33.33
	Total	150	100

Source: Researchers Field Survey, 2020

As shown in the table above, the occupancy rate (ratio) in this location ranges from one person to over five persons in a room of different sizes ranging from size of 1.83m by 1.83m to 3.66m by 4.27m as shown in table 1 above. From table 3 above, over 50 families (33.33%) have occupancy ratio of more than five persons per room. It is clear therefore, that Social Distancing to avoid COVID 19 will be difficult if not impossible, especially where some of such families live in “Face me I face you” building.

Table 4: Facilities in the Building (E.G Bathroom/Kitchen)

S/N	Availability and Location Of Building	Frequency	Percentage
1	Both Bathroom and Kitchen are inside the main building	10	6.66
2	Both Bathroom and Kitchen are outside the building	70	46.67
3	Kitchen is inside while bathroom is outside the building	40	26.67
4	Bathroom is inside the building, while kitchen is outside	30	20.00
	Total	150	100.00

Source: Researchers Field Survey, 2020

In view of the fact that facilities play a significant role in determining a decent accommodation, it sad to note that in this type of accommodation only 10 (6.66%) respondents have bath rooms and kitchens inside the main building. This might be the only available flats that are amongst other buildings in this location. Almost half of the total respondents, 70 (46.67%) have their bathrooms and kitchens outside the main buildings, 40 (26.67%) respondents have kitchens inside while bathrooms are outside the main buildings, another 30 (20%) respondents have their bathrooms inside the main buildings while their kitchens are outside. Plate 4 and 5 below are example of tenement buildings with shared toilets and bathrooms fabricated outside the main building.





Plate 4 and 5: Shared toilets and bathrooms in tenement buildings
Source: Researchers Field Survey, 2020

Suffice the above situation to mean that minimum housing standard is not followed in the construction of these buildings. Though (1) posit that “Standard” in housing or shelter facilities is a relative term, nevertheless, he said that a dwelling unit which lacks sanitary facilities such as running water or without a flush toilet or without bathing facilities inside the structure for the exclusive use of the occupants of the dwelling is substandard. With this type of substandard housing, the communal lifestyle amongst the residents, the spread of COVID 19 becomes easy. Below is Plate 6 showing shared kitchen outside the buildings.



Plate 6: Shared Kitchen outside the building
Source: Researchers Field Survey, 2020

Table 5: Individual’s Opinion, Whether to Stay or Packout

S/N	Opinions	Frequency	Percentage
1	Yes, if the rent elsewhere will be cheaper	10	6.67
2	Yes, provided that environment is more decent than here	10	6.67
3	I cannot pack out due to my poor income as a retiree	20	13.33
4	I cannot pack out because this place is secluded and fits my kind of business	50	33.33
5	I hope to pack when my personal house is ready	10	6.67
6	As a student, I cannot pack out because it is close to my school	50	33.33
	Total	150	100

Source: Researchers Field Survey, 2020

From table 5 above, residents have various reasons why they should stay or pack out of tenement buildings. Ten respondents (6.67%) wish to pack out if the rent outside the location is cheaper, another 10 (6.67%) respondents hope to pack out of this residence if the environment where they are packing to is more decent than in the tenement “Face me I face you” building, because this represents an informal settlement. (6) have observed that the crowded and dilapidated housing found in most of Nigeria’s city centers is a form of informal settlement. 20 (13.33%) respondents cannot not pack out because of their poor income as retirees. Another 10 (6.67%) respondents hope to pack out when their personal house is ready. On the other hand, there are some of the respondents who do not hope to pack out. Amongst them are 50 (33.33%) respondent who find the residence secluded and fit for the kind of business they are doing. Though they did not disclose the kind of business, the researchers suspect such business to be commercial sex work or engagement in other illegal business activities. Finally, another group who do not intend to pack out are the students, 50 (33.33%) respondents. Their main reason is that the accommodation is cheaper and the place is closer to their school, since they cannot afford to pay the hostel accommodation in the school. Plate 7 below shows the businesses engaged in by some tenants in tenement buildings which might not allow them leave the settlement.



Plate 7: Tenement building and tenants engaged in kerosene business.

IV. RECOMMENDATION

Based on the nature of houses regarded as tenement accommodation, in a time like this where there is COVID 19 pandemic, and to forestall the spread of other diseases should there be any epidemic, such buildings should not be allowed any longer. Where there exist, government should demolish them and provide better accommodation; this suggests clearance for urban renewal. Public housing supply to meet the accommodation needs of the citizenry should be government priority. There should be legislation against such types of substandard buildings by the government of the federation, state or local government. Where it becomes inevitable for the private sector to provide such accommodation, good quality building materials, standard room sizes of not less than (3.6m by 3.6m), good air space and aesthetically pleasing environment must not be compromised and sacrificed for financial gains of the owner. The residents of such accommodation should also be made to know (through

counseling) the health implications of such accommodation should any epidemic breakout. Government should provide affordable hostel accommodation with decent modern facilities for students in the institutions of higher learning and dormitory for secondary school students and made almost free (Affordable). Staff housing or rent subsidy for workers in both public and private sector should be made compulsory for employers. This must be backed up by legislation, it should be part of the total package for the employees. At retirement, provision of personal accommodation by the employer to the employee should be part of the retirement benefits of the retiree, so that he/she should not retire into a “make-shift” accommodation with his family since he/she can no longer afford to pay for a decent accommodation.

The implementation of this recommendations would minimize the problems of tenement buildings (“Face me I face you”) if not completely eradicating it. This would consequently reduce the spread of diseases in the event of an epidemic or pandemic as in the case of the NOVEL CORONA VIRUS (COVID 19).

V. CONCLUSION

The researchers came to the conclusion that in view of the various reasons given by respondents why they cannot pack out of this kind of residence, there is therefore, a of cluster population in this location with high occupancy ratio, poor

environmental quality and poor materials used for constructing some of the buildings. The Communal social lifestyles also defy the policy of stay at home and stay safe. This invariably suggest that the social distancing of a minimum of two metres in a public place cannot be adhered to amongst residents, whereas, its characteristics already suggest a public place. By this, COVID 19 already finds a breeding place to thrive and spread.

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