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NIGERIAN CITIES AT CROSSROAD AS COVID-19 PANDEMIC RAGES ON

[1] UMAR ABUBAKAR DAHIRU; [2]MANSUR BELLO & [3]OTARO T. OLUDAYO

[1]Department of Urban and Regional Planning, Federal Polytechnic Nasarawa. [2]Department of Urban and Regional Planning, Kaduna Polytechnic, Kaduna. [3]Department of Urban and Regional Planning, Federal Polytechnic Iddah.

Abstract

This paper reviews the influence of COVID-19 pandemic on Nigerian cities. It is essentially a result of a review of literature and shared experience from residents of major Nigerian cities. A random sample of residents of the major cities was taken for telephone interview and their responses were used as basis for discussion. Nigerian cities were found to be vulnerable to the pandemic due to their high population density, inadequate housing for the urban poor and prevalence of slums, economic fragility, inadequate green areas, lack of access to big data and ineffective regional and territorial Planning among others. Recommendations were made on how to flatten the curve of the infection and were categorised into

Introduction

Coronavirus disease 2019 (COVID-19) is an illness caused by novel Coronavirus (Hong, Wang, Chung, & Chen, 2020; Huang, et al., 2019; Guo, et al., 2020; Zuo, et al., 2020) characterised by high fever, severe acute respiratory syndrome Coronavirus 2, Pneumonia, Cold and Cough among others symptoms(Yue, et al., 2020). This virus was first identified following an outbreak of respiratory illness in Wuhan City of Hubei Province in China(Li, et al., 2020). It was reported to WHO on the 31st of December 2019 and was declared as global pandemic on the 11th of March 2020(Li, et al., 2020). Sequel to this declaration, cities all over the world began to adopt measures for curbing the

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emergency phase; which include measures to prevent further spread, initial recovery phase; which include measures for cushioning the effects of the pandemic on the vulnerable groups and re-opening of cities and lastly full recovery phase which include measures for fortifying cities and their economies against future occurrence.

Keywords: *Nigerian Cities, Crossroad, COVID-19, Pandemic, Rages On*

Spread of the pandemic. Incidentally, measures employed to flatten the curve of infection started impacting significantly on social and economic structure of Nigerian cities and exposed their vulnerability to disasters. These measures include total shut down of cities, closure of social and economic activities (Shehu & Rao, 2020) and the attendant profound reduction in the number of persons moving around the cityscape as work from home has now become the new norm. Other measures include limitation or restriction of public transit for both local and inter-state movements, use of facemasks, introduction of social distancing (a kind of human setbacks of 2m), self-isolation and self-disinfection through frequent wash of hands among other measures.

The impacts of this pandemic on cities worldwide are monumental and unprecedented. The closure of cities and limitation of movements has had profound negative influence on commerce and productive capacity of cities in developed, transitional and developing countries(Nicola, et al.,2020;Ozili & Arun, 2020), hence endangering both their macro and micro economies. This is in addition to threatening public safety and livability. World bank projects that about 100 million people worldwide will inexorably sink into poverty with 49 million sinking into extreme poverty as a result of COVID-19 (Roser, Ritchie, & Ortz-Ospina, 2020). Many of whom according to the World Bank will be urban daily wage earners who eke a living from informal sector and residents of Slums whose living condition has been excruciatingly poor even before the pandemic. It is estimated that about 1 billion people who live in slums and informal settlements worldwide have limited access to basic services such as Health Care, Water, Transit, Sanitation and Waste management (Beardsley & Werthmann, 2008). This group is worse hit by city lockdown as restriction of movements has further exacerbated their constrained access to these services. It is noteworthy that 75% of the 1 billion

people living in slums are found in developing countries of Asia, Latin America and Africa (Montgomery & Hewett, 2005; Marx, Stoker, & Suri, 2013). These regions are more endangered and exposed to COVID-19 infections because of their densely populated slums.

It is frightening to note that almost half of the world population live in slums (Lamba, 1994; Davis, 2004; Sclar, Garau, & Carolini, 2005; Marx, Stoker, & Suri, 2013)with Asia having the highest figure of five hundred and fifty-four (554) million slum dwellers (Davis, 2004; Ooi & Phua, 2007) followed by sub-Saharan Africa whose figure stood at Two hundred (200) Million as at 2010 (Kimani-Murage & Ngindu, 2007). Sub Saharan African's result is most startling as about 61.7% of its urban population lived in slum as at 2010(Cotton, 2013;Fox, 2014)and the figure keeps increasing. This is evident from the 36% increase in the number of slum residents to 923 million people in 1990 and 1 billion people in 2012(Fox, 2014). At the current rate of occurrence, the number of persons living in slum could reach 2 billion by 2030. This is a serious threat to the actualization of sustainable development goal of improving the lives of at least 100 million slum dwellers by year 2030. The disturbing reality is that Sub Saharan African slum dwellers may find it difficult to adapt to measures such as total lock down of cities, restriction of Movements and social distancing employed to arrest the spread of COVID-19. This is because they are largely daily wage earners who have to go out daily to feed their families, who do not have any social safety net, who live in crowded slums without basic services, who share toilet, kitchen and other sanitary facilities and who do not have facilities for self-quarantine or self-isolation.

All Nigerian cities including the major cities of Abuja, Lagos, Kaduna and Port-Harcourt have shut down due to COVID-19 pandemic. The concern now is the impacts of the lockdown on the residents of Mpape, Kuchigoro and Kpaduma slums in Abuja, Ajegunle, Bariga and Makoko Slums in Lagos, Rigasa, Badikko and Kabala slums in Kaduna and the residents of the water front slum in Portharcourt and host of other slums and informal settlements across the country. Water front slum of Portharcourt alone has a population of 480,000 people who live on daily wage mainly from informal economic activities (Izeogu, 2014). These people must go out daily to feed their families. It is easy to imagine the impacts of caging these people at home on their wellbeing and the economy of Port-Harcourt. Many of these people live in shared shelter and

among others, they share toilets, kitchen and sanitary facilities. Maintaining the protocol of 2m human setback in these densely populated slums is an arduous task. Achieving this uphill task in most cities in Nigeria, it will require re-planning and allocation more public space as well as undertaking slum improvement programme.

The paper is aimed at discussing the influence of COVID-19 pandemic on Nigerian cities with a view to devising Urban Planning strategies for coping and living with the pandemic as Nigeria re-opens.

Methodology

This paper was written essentially from review of literature and shared experience from residents of major Nigerian cities. A random sample of residents of the major cities was taken for telephone interview and their responses provided the frame for this paper.

Literature Review

Influence of COVID-19 on Nigerian Cities

City design is influenced by socio-economic, cultural and technological development of the society (Bibri & Krogstie, 2017). Cholera epidemic of the 19th century has had great influence on cities and urban design by entrenching consideration for lightning and air as integral part of urban design. Mass production of cars has had great influence also on gentrification into the suburbs and crime in Africa has had its influence on the design of residential fence and evolution of neighbourhoods gates.COVID-19 pandemic too is not without some imprints on cities especially those of developing countries. The following are the influence of the pandemic on cities in Nigeria.

Influence on Public Transit

Ridership of public transport has significantly reduced due to restriction of movements (Gossling, Scott, & Hall, 2020) and will further reduce as a result of the introduction of 2m human setback. Commercial buses in Abuja and Lagos have already reduced the number of passengers they carry per trip in compliance with the social distancing protocol and increased the cost of travel. This is in spite of reduction in the price of petrol. More public vehicles will be needed to carry the excess passengers. Cities like Port-Harcourt and Abuja have witnessed drop in public transit ridership as working from home

and walk to work philosophy gather momentum. Nigerian cities may witness a rise in pedestrianisation of street and clamour for space allocation to cyclists along thoroughfares. This may affect future highway design and give credence to smart city or E-city movements.

Influence on Urban Density and Space Organisation

Fear of COVID-19 infection is already creating ambivalence and fear for densely populated neighborhoods among urban dwellers in Nigeria. Coronavirus spreads faster in densely populated areas(Lipsitch, Swerdlow, & Finelli, 2020), this explains why markets and worship centres were first to shut down. Nigerian Cities may begin to witness less crowded city centres and neighbourhoods and more crowded suburbs as this pandemic may trigger sprawling of development and activities to less densely populated fringes and suburbs. This may lead to offshoot of sub-centres that may flatten the crowd that characterize the CBD and gentrification of the suburbia. This development, will no doubt, influence future space organisation and urban planning and will influence commuting distance, cost of public transport and cost of providing essential services. The Pandemic may also threaten urban planning models like transit oriented development, smart growth and new urbanism that emphasises smart growth, mixed land uses and densification of development. Nigerian cities may witness more space allocation for Offices, Shops, Restaurants, Banks, Hospitals, Schools, Worship centres and relaxation areas in order to meet the protocol of social distancing. This may warrant preparation of strategic plan or review of city Master plans to host these new lifestyles and realities.

Influence on Air quality

Every evil, regardless of its depth, has its positive features. Total shutdown of cities and restriction of movements may have impacted positively on air quality. Urban residents now breath fresh air due to restriction of automobile activities and closedown of industries. For instance, in India, people of Jalandhar have been able to see the snowcapped Himalayan 200 miles away due certainly to improvement in visibility (Ramasamy, 2020). In China, restrictions of movements and travel limitations have had impacts on industrial and automobile emissions (Isaifan, 2020). This is evident from 15-40% reduction in industrial outputs and 35% in automobile emission (Isaifan,

2020; Wang & Su, 2020). In Nigeria, the long queue of automobile traffic that define commuting to work in Lagos, Abuja and Port-Harcourt has fizzled due to shutdown of these cities and the limitation of movements has kept industrial workers at home leading to cut down of production. These scenarios may have had significant impacts on air quality in the country. However, human droplets by COVID -19 patients may have contaminated the air as well but this may not significantly to cause any concern as the virus does not float in the air. Although this new clean and fresh air is not sustainable, it may provide a springboard for advocates of workable streets to launch their campaign. In Liverpool and Lima for instance, streets were closed to cars, allowing their use for bicycles and Pedestrians and 10% of roads in Oakland and California were also closed to automobile traffic allowing pedestrian and bike to use them(Honey-Roses, et al., 2020). This trend and the desire for clean air may redefine future city planning in Nigeria.

Influence on the Urban Poor

Nigerian urban poor are the most endangered because they live in life threatening condition in slums and informal settlements with limited access to essential social services (Amao, 2012). The urban poor are the hawkers, hustlers, burstlers, cobblers, frizzlers, cocotte, artisans and other strugglers who survive on the informal sector and who have to go out every day to feed their families. This group has been disengaged from their livelihoods and exposed to unprecedented hunger and deprivation by Cities lock down. The Nigerian urban poor is not on any social safety net as the N-Power programme of the Federal Government is not inclusive enough to give him succor and even the palliative promised by the Ministry of Humanitarian Affairs couldn't reach most of them. For the first time in a very long time, Nigerian cities have witnessed a reduction in human footprints occasioned by withdrawal of this group from the streets. Their withdrawal apparently has implications on free flow of traffic, waste generation and street security among others. The future of Nigerian cities may witness attempts by government to lay these urban poor off the streets by exposing them to some form of sedentary entrepreneurship and providing for them low-cost housing that will keep them close to their work place to allow them walk to work.

Influence on Food Security

COVID-19 pandemic has resulted in hike in food prices across the major cities of Nigeria due to cut in supply chain resulting from ban on interstate movements. This has caused profound hardship on the urban poor and exposed the disaster vulnerability of Nigerian cities as they do not function as complete systems because they are detached from their food supply. Future city planning may witness exploration of possibilities for localizing food chain by massively investing in urban agriculture. This may require land use re-organisation and space allocation for urban agriculture as well as securing of peri-urban land for agricultural activities.

Influence on City Resilience

As engine and drivers of economic growth, cities are more at risk with respect to the impact of COVID-19 pandemic. Nigerian cities are homes to about 100 million people (Idowu, 2013) and account for more than 50% of the country's GDP(Oyedepo, 2012). Experiences during total lockdown of cities in Nigeria have exposed their vulnerability and lack of economic resilience. Soon after the declaration of lockdown and consequent closure of the economy, many employees of private outfits including banks began to lose jobs, entrepreneurs began to close their firms and laid off staff, Revenue from government agencies and outfits began to dwindle, widespread poverty became imminent and recession already looming in the horizon. The country witnessed reduction in consumption due to closure of public places such as Hotels, eateries, restaurants, relaxation points and events centres among others. This has had great influence on cities and even rural economy. There may be call for more investments in cities especially in Agriculture and manufacturing to strengthen cities capacity in production and employment of labour.

What make Nigerian Cities vulnerable to COVID-19 infections?

Nigerian and indeed African cities are vulnerable to spread of COVID-19 pandemic due to the following reasons.

- Nigerian cities are densely populated and the virus is said to spread faster in densely populated areas. Although it has been proven that the spread of COVID-19 is not directly proportional to density of population as exemplified by Hong Kong where in spite of high

population density of 60,000 persons per KM2, it has contained COVID-19 more effectively than many European and American cities with far less population density. High population density among Nigerian cities is peculiar because it is domiciled in poor neighbourhoods and slums where access to essential services such as water is slim and facilities are often shared. Urban Planners must wake up to the challenges of ensuring inclusive and equitable provision of essential services.

- There is housing shortage in Nigeria especially among the urban poor. Inadequate housing supply in cities can heighten the spread of the pandemic. In a city like Kano for instance, where in some neighbourhoods, a single room can be shared by up to 10 persons, how possible is it for a COVID-19 patient in such shared room to observe self-isolation? Even the human setback of 2m cannot be observed. This scenario is common across cities in Nigeria including Abuja, the Federal Capital.
- Cities in Nigeria do not give emphasis to provision of adequate green areas, urban parks and watershed and Nigerians are culturally inclined to visiting one another even during the moments of shutdown. One area that would have provided relief to urban population during the pandemic is public parks and organised open spaces. Such places would have served as meeting points but visitors are instead ushered into their host's apartments. This exposes many urban residents to the risk of infection. Innovative Urban planning should integrate Grey, Green and Blue infrastructure to support the creation of convivial livable green areas in cities.
- Nigerian cities are cities without data. There is no statistics on population movements, fertility, mortality, travels, traffic, GDP, health, industry, Agriculture, Tourism and economic base. There is no reliable statistics on the aggregate number of COVID-19 infection, city-based infection, average daily infection, number of reported cases, number of deaths and recovery among others. Nigerian cities are in a state of higgledy-piggledy with respect to data repository on health. Many of these cities have failed to harvest big data in order to plan for socio-economic development. Nigerian cities must learn from the experiences of South Korea where data model on COVID-19 was developed and people on self-quarantine at home were asked to use

self-diagnostic Apps that connect them with medical personnel and launched several Apps that transmit information about their health and the spread of the COVID-19 pandemic(Anderson, Heesterbeek, Klinkenberg, & Hollingsworth, 2020). In Seoul and Goyang in the Republic of South Korea, innovative contact free, drive through testing method was used in parking lots where motorists roll down their car windows and get rapidly tested. This will help in not only curbing the spread of the virus but also reducing the cost of containing the pandemic.

- Nigerian cities are not integrated into a holistic city system with their surrounding towns and villages as subsystems. In order words, there is no effective territorial or regional planning connecting and coordinating activities and movements of people, food, goods and services across city or metropolitan regions in Nigeria. This has resulted in supply cut and consequent hike in the prices of food items particularly during the shutdown as demand for food outstripped its supply. Urban Planning must embrace territorial and regional planning to integrate cities with regional economies, energy, transport network and food production so that in the event of emergency, cities can be self-reliant.

Recommendations for flattening the curve of COVID-19 spread among Nigerian Cities

In the midst of COVID-19 pandemic, many possibilities from sewer monitors through epidemic skyscrapers were contemplated by urban planners on how to insulate cities from being host to the pandemic. Now that COVID-19 has infiltrated cities in Nigeria and the momentum of spread seems upheld, Urban Planners in Nigeria must devise strategies for preparing cities to cope and live with the pandemic as they re-open. These strategies can be unfolded in three phases as follows;

- Emergency phase which must embody measures articulated to prevent further spread and transmission of the pandemic and measures that will provide care for the infected persons;
- Initial recovery phase must include measures for cushioning the effects of the pandemic on cities, vulnerable groups and measures necessary to re-open cities and

- Full recovery phase must include all measures necessary for fortifying cities and their economies against future pandemic.

Emergency Phase

In this phase, the following measures are necessary

- Urban Planners must prioritise support for health care service delivery,
- Cities must ensure regular maintenance of infrastructure such as Transport, water, sewerage, sanitary and communication infrastructure to support the fight against the pandemic.
- It is important to shutdown cities at this stage but it must not be total. It should be district or Neighbourhood specific shutdown rather than holistic. Medical Geographers should partner with Urban Planners to identify neighbourhoods with high rate of infection and get them shut down while those without or with minimal infection rate are allowed to function. This alternation is necessary so that the economies of neighbourhoods that are free from the pandemic can function in order to minimize the impacts on cities. From time to time, the closure can alternate between neighbourhoods depending on severity of infections.
- Cities must keep data depository on infection, its spread, fatality and recovery.
- Urban Planners must also participate in sensitization, provision of palliatives and mobilizing local support in the fight against the pandemic. In Buenos Aires, Argentina, city communication programme was contrived to reach out to affected persons using social network and relocated old, women, children and homeless persons to hotels and other facilities in order to observe social distancing protocol. In South Africa, civil society groups bought grains and processed them into foods and distributed to the urban poor, the physically challenged and the vulnerable group. This is in addition to sharing face masks and disinfectants. In Lima, the republic of Peru, city council has provided temporary shelter and food to homeless persons while in Bangladesh, civil society organisations provide free shuttle services for health care workers and in Nigeria government has identified the most vulnerable group and provided them with palliatives in addition to placing

healthcare personnel on special allowance. Civil society groups and Government agencies in Nigeria provide sanitizers and face masks in addition to stationing disinfectants at points of entry of public places.

Initial Recovery Phase

At this stage, cities must pay attention to gradual opening of the economy. The following measures must be prioritized.

- Cities must open the livelihood of the urban poor who are informal sector workers and who earn paltry and irregular daily wage from the sector. as part of opening their livelihood, Government must create jobs for the group and locate the job close to their homes so they can walk to work. In Mombasa, as part of measures for opening the economy, government has employed about 26,000 from this group to collect wastes, sweep the streets, fumigate public places and distributes Facemasks and disinfectants.
- Cities must also start the process of opening the economy by opening offices, allowing banks operate full services, downward review of tax policy to allow business pick up.
- Government must encourage citizen engagement in whatever programme it launches to revive the economy;
- Government must focus attention on informal settlements and slums and crowded neighbourhoods to limit spread. There must be commitment in the provision of infrastructure in such areas. Water supply, housing, telecommunication, sewerage and Transports are important infrastructure that must not be trivialized at this phase.
- Cities must start preparing to strengthen their capacity for emergency response through provision of adequate essential services, capacity building, financing and boosting economic base and human resource redeployment among others.

Full Recovery Phase

As cities emerge from COVID-19 pandemic, attention must be given to strengthening their resilience and emergency responses. This can be achieved through the following;

- Integrating public health into disaster mitigation and management plan;

- Introducing risk reduction measures through adapted zoning, land use, territorial and innovative regional planning to strengthen city system through integrating cities with local food supply through ground-breaking urban agriculture;
- Review of city master plan to review space allocation for urban activities in concert with social distancing protocol;
- Introduction of smart transportation that will encourage the use of Motorcycle, Bicycle and street pedestrianisation;
- Building a rich data repository for cities by harvesting rich data for planning purposes and
- Re-packaging and introduction of robust mass housing programme and integrated renewal scheme to cater for the urban poor and residents of informal settlement.

Conclusion

COVID-19 became an issue as soon as WHO declared it a global pandemic. Its spread became continental as all efforts to contain and limit its spread to China (its country of origin) were futile. One of its major victims are cities especially those of developing countries as their disaster preparedness and responses are weak. Measures employed to flatten the curve of spread of the pandemic yielded little or no result in Nigeria due to vulnerability of its cities. Their high population density, prevalence of slum and informal settlements, limited provision of essential services, chronic housing shortage, paucity of data repository on population and economic base and inadequate Parks and Green areas have heightened this vulnerability. This is in addition to failure to build an integrated urban system that connect city region with their food supply through territorial planning. This paper recommends measures in three phases namely: Emergency Phase; Initial Recovery Phase and Full Recovery Phase to cope and live with the pandemic as Nigeria re-opens.

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