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# Urbanization and the Increasing Threat of Infectious Diseases in Africa: Preliminary Observations

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#### Abstract

The paper reflects on the link between infectious diseases and urbanization in a typical West African city. It contends that urbanization in Africa has proceeded at an alarming rate without due consideration of the consequences. Urban growth has occurred without adequate planning and sensitivity to the carrying capacity of the urban spatial space. Thus, urban growth in most of Africa replicates urban blight, squatter settlements, slum housing, squalid socio-physical environment, and significant risks of infectious diseases. Urbanization as it occurs now exposes urban dwellers to infectious diseases risks and predisposes the urban environment to pandemics originating from within and outside the continent. The paper proposes for more nuanced, specific, and delimited empirical studies of the nexus between urbanization and epidemic risks.

### Introduction

The paper is the outcome of a reflection on an ongoing empirical study of the nexus between threat of infectious diseases and rapid urbanization utilising a cosmopolitan urban centre in West Africa. As the UN (2018) observed, an estimated 4.2 billion or 55% of the population of the world currently reside in urban areas. Even though Africa is presently the least urban continent in the world, it is without doubt one of the most rapidly urbanising areas in the world. As a matter of fact, even though an earlier estimate of the UN (2014) captures both Asia and Africa as the least urbanized regions of the world, it projected that the percentage urban growth rate in these regions would exponentially increase to 64% and 56% respectively

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by the year 2050. Therefore, a world region like Africa has the potential of becoming the epicentre of global urbanization. But this urbanization has occurred without adequate planning and sensitivity to the carrying capacity of urban centers or cities in the continent. In such a situation, these urban centers while ostensibly portending the good life may have imperilled the social and health conditions of citizens.

Therefore, one argues that rapid urbanization in Africa has been synonymous with increasing threat of infectious diseases and health risks. Given their parlous health institutions and weak governments, African countries are hardly equipped to avert or mitigate infectious diseases especially those with roots outside the continent like the current COVID-19. In other words, while urbanization has grown in leaps and bounds overtime, the process of urbanization has equally generated deleterious impacts driven by the nature of urbanization in the continent and more crucially the response of the government and public institutions to the realities of rapid urbanization.

Urbanization or the city as a social and physical reality has been examined from different approaches or perspectives including the morphology of the city, multiple challenges of typical city life as well as the city as embodying distinct ways of life (from rural areas) or what has been captured in the notion of urbanism. This notwithstanding, the city is without doubt a social construct i.e., it is a form of human community and social organization (see, Hatt and Reiss, 1961). So, the city portends peculiar symbiotic and commensal processes of exchange and interchange between human beings and groups in it. These processes are in turn regulated and determined by the peculiar context of the urban area and institutions and forms of organizations emblematic of the city.

While there have been efforts towards apprehending the nexus between urbanization and health or infectious diseases (see, Neiderud, 2015; Banu et al., 2013; Penrose et al., 2010), there is no doubt that in the face of regular pandemics and unending bouts of infectious diseases, more knowledge cannot be amiss. In view of the above, the paper depending essentially on the integrative review of extant literature and documents raises pertinent observations on the nexus between rapid urbanization and the risk of infectious diseases in the continent.

Even though Africa seems to be the least affected region of the world by the current COVID pandemic, there can be no denying the fact that this situation may have been produced by locational factors and nature rather than a robust health system or adequate planning. Therefore, there is no gainsaying the need for continuous interrogation of the connection between urbanization and health in the continent as this would not only provide insights for action and public policy but equally improve human knowledge in this critical area. As knowledgeable observers have pointed out, the current pandemic is the not the first in the world and cannot be the last.

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# Theorising the Link between rapid Urbanization and Infectious Diseases

The extant literature contains robust viewpoints on the likely connection between urbanization and infectious diseases and epidemics (see, Reyes et al, 2013; Neiderud, 2015; Gubler, 2004; Alirol et al, 2011 etc.). Equally, several studies in the literature focus on the African scenario (see, Aliyu and Amadu, 2017; Oloruntoba et al, 2014).

However, from the perspective of theory, the environmental risk transition thesis (see, Smith, 1990) seems germane in apprehending the nexus between urbanization and health. Thus, one can adopt this orientation in teasing out the relationship between urbanization and infectious diseases even from an empirical standpoint. As posited by Smith, environmental factors that lead to ill health can be grouped under modern or traditional. In this scheme, the main environmental sources of traditional ill health are factors located at the household level (these include issues of sanitation, water, ventilation, air pollution etc.). As these traditional factors are taken care of through development, there emerges what can be called modern environmental causes of diseases which exist at the community or group level (e.g., pollution, toxic chemicals, effluents, urban air quality etc.). Equally, as society tackles these modern diseases or their causes, another transition occurs increasing the influence of environmental hazards (see, Smith and Akbar, 2003; Holden and Smith, 2000).

In effect, the above theory posits a three-stage transition in the emergence of epidemics in human society. But interesting here is that urban factors and the urban environment produces and reproduces pathological and social factors that are culpable in the emergence of global epidemics and fostering of infectious diseases.

## **Explaining the Nexus**

In Africa, rapid urbanization has also implied rapid growth in squalid living and the generation and regeneration of urban slums and ghettos. It is interesting to note that slums and ghettoes at a conservative estimate may make up one-third of the urban areas in the continent. Urban slums have grown with urbanization in Africa and despite half-hearted urban redevelopment efforts, these city hovels have persisted. These areas of residence are heavily characterised by general blight and pockmarked with poor physical infrastructure, environmental squalor, poor housing, and general decay. Thus, they are also areas of high disease prevalence. Uncoordinated, and unplanned urbanization have meant the growth of city hovels and concomitant high risk of infectious diseases including pandemics in the continent.

In Africa, the menace of malaria for instance is related to the unhealthy or squalid en-

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vironments and the obvious poor sanitation in most urban cities. Given this reality, urban slums are also logically urban areas with high rates of infectious diseases. Such health problems as diarrheal infections (cholera) have been seen as more prevalent in urban areas with high population densities (see, Lawoyin et al., 1999; Banu et al., 2013; Penrose et al., 2010; Osei and Duker, 2008) than otherwise particularly in the developing parts of the world. Also, tuberculosis is an ailment related to high population density and overcrowded housing (see, Hayward et al., 2003; Lienhardt, 2001; Burzynski and Schlunger, 2008). Therefore, the erosion of quality living environment and dearth of amenities generated by rapid and unplanned urbanization are largely conducive to the generation and spread of infectious diseases.

It would be pertinent to note that even though the urban slums and ghettos may be the originating points of infectious diseases these diseases have no real physical barrier especially in the light of interconnections of transport, commerce, and labour mobility in the typical African city. Therefore, an infectious disease with roots in the slums can easily find its way through human hosts into other areas of the urban city. As a result, efforts towards urban redevelopment, gentrification and improving public health for the marginal and vulnerable members of the society should be rightly conceived as in the long-term interest of all members of the society.

### **Concluding Observations**

Unlike chronic diseases, infectious diseases pose dire threat over large populations in urban cities. According to Chan (2010: iv), "looking beyond the bustling marketplaces, skyscrapers and big city lights, today's cities across the world contain hidden cities, masking the true lives and living conditions of many city dwellers. Certain city dwellers suffer disproportionately from poor health and these inequities can be traced to differences in their social and living conditions. No city is immune to this problem". In effect, there is not only rapid urbanization but equally and simultaneously rapid proliferation of conditions injurious to health. This is perhaps more so the case in the developing parts of the world.

The contention in the paper is that there is undeniably a clear and tangible link between rapid urbanization and infectious diseases risk especially in the developing nations of Africa. While this contention is not by any means novel, it raises the need for more nuanced and continuous study of this evolving and dynamic linkage. Therefore, more empirical studies of this nexus especially in highly urbanised cities in Africa focusing in detail on those areas occupied by the less privileged or vulnerable are needed as the world prepares to cope with periodic epidemics and pandemics now and again. Such envisaged studies should tease out the triple nexus between urbanization, poor housing, and epidemic risk in specific cities in the

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continent. The environmental perspective as envisioned by Smith (1990) and other theories of its ilk may be helpful in this quest.

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