




How urban ‘informality’ can inform response to COVID-19: a research agenda for the future

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Received: 22 June 2020 / Accepted: 29 December 2020 / Published online: 12 January 2021
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Abstract In the era of increasingly defined *ontological insecurity* and uncertainty driven by the ravages of COVID-19, urban informal settlement has emerged as a source of resilience. Indeed, the effects of a pandemic transcends its epidemiological characteristics to political economy and societal resilience. If resilience is the capacity of a system to adapt successfully to significant challenges that threaten the function or development of the human society, then *ontological insecurity* is about the lack of such capacity. Drawing on Keith Hartian’s understanding of ‘*informality*’ of spaces, this policy brief attempts to identify and frame a research agenda for the future. The agenda would assist future researchers and policymakers provide responses that appropriately recognize groups and actors that define the urban informal space.

Keywords Informal urban settlements · Research agenda · Formalization of the informal · Ontological insecurity · COVID-19

This note belongs to the Topical Collection “Seeing Clearly Through COVID-19: Current and future questions for the history and philosophy of the life sciences”, edited by G. Boniolo and L. Onaga.

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1 Introducing the agenda

This policy brief focuses on the relationship between *ontological insecurity* of COVID-19 and the resilience or vulnerability of the urban informal settlements in Nairobi, Kenya. It proceeds to develop a research agenda underpinned by the narratives of ‘*resilience*’ and ‘*vulnerability*’ as discernible in Kenyan urban informal settlement policy discourses and as related to the management of COVID-19. The current COVID-19 management strategies and interventions tend to assume that any attempt to control the pandemic is philosophically feasible only if it is compatible with the *blanket rules* of social distancing. Consequently, these rules are applied across geographical spaces without taking into consideration the settlement nuances in urban spaces. The formal settlement is a form of space that is legally sanctioned, regulated through state intervention and marked by regular work of the residence. In contrast, the informal settlement is often considered to be a problematic and an unregulated settlement outside the legal sanction of the state (Hart 1973).

However, the tenacity of the otherwise marginalised group of informal settlers who embody resilience amidst socio-economic, political and geographical exclusion is a *silver lining* that is yet to be tapped into by policy makers and researchers working on dynamics of urban spaces. The aim of this brief is to outline a research agenda proffering an alternative model of intervention to a *reductionist approach* often employed by policy makers across urban areas. The major challenge with a *reductionist model* of intervention is that it is unable to show the fullness of urban space, is limited in understanding the deep nuances of urban differentiation and misses out on the complexity of the livelihood depicted by the urban poor. Moreover, existing literature on urban intervention tends to view and analyse the so-called *formalization of the informal* (Banks et al. 2020) as a transformation agenda (housing, hygiene and labour market) within slums.

In as much as this approach has the potential of securing livelihoods of the residence, it tends to narrow its focus, intervention and analysis of urban informality to class (the poor vs the rich). In fact, most of the analysis narrows the studies of informal urban to those who live, work, and access services through unregulated channels. Such endeavours not only raise moral questions of essentialising the *informality of things*, but can also lead to misguided diagnosis of the problem. Despite the fact that urban informal space can be all these, it is obviously more than this. Moreover, this is evident when managing a respiratory disease (COVID-19), that thrives on human–human interaction, regardless of class. The artificial boundaries across class and spatial domains as well as the oversimplification of the formal-informal binary tend to mask the broader issues of political economy. In other words, the *reductionist model* that continues to shape the COVID-19 response mechanism in urban spaces of the global south tends to neglect the pre-existing inequalities, groups and actors that define the urban informality.

In this brief, we aimed to develop a research agenda for the future management of COVID-19 and other unforeseen pandemics in the informal urban areas. The

choice of Nairobi as our study area is informed by various geospatial features, key among them: (1) the informal settlements in Nairobi account for over 50% of the city's total population; and (2) this huge population is however only concentrated in roughly 5% of the residential area of the city (UN-HABITAT 2019). This problematic relationship between space and population density has far reaching implications on the spread of a contagious disease. Elsewhere, our modelling study on the management of COVID-19 has shown close relationship between environmental factors and transmissibility of the disease (Onditi et al. 2020). Indeed, the authors of this brief have previously spent time simulating a model of intervention appropriate for informal urban dwellers based on a combination of expertise in various fields, ranging from political science to international relations to medicine. There is however need for further research to unravel the philosophical orientation of the society during a pandemic, and the following section attempts to frame questions that would guide such an agenda in future.

2 How to frame the right questions for an urban research

The ancestry of our argument is rooted in James's (1890) philosophy of the mind and the brain. The two are inseparable. The problem however is that current *reductionist models* applied in the management of COVID-19, see the various components of life as separate entities. Yet, as rightly put by Lisa Barrett (2019), human emotions, cognition and the socio-economic surrounding are complex systems of life, and they cannot be separated from life science. For instance, how do you explain the exponential spread of COVID-19 in more advanced nations compared to the global south, yet majority of the population in developing nations can rarely afford sanitary facilities that are crucial for the prevention of the pandemic. Even within urban areas of the global south, the rate of transmission among slum dwellers did not rise to levels that were initially predicted. Yet, by all scientific standards, the unprecedented inequalities in urban areas in the global south predispose them to heightened risks of transmission (Ouma et al. 2020).

Our research agenda presents a possible solution to this philosophical lacuna that involves 3 sets of social problems with an assortment of research questions.

The first question concerns the '*formalization of the informality*,' in the context of a pandemic. The transmissibility of COVID-19 and the socio-economic disruptions that were triggered by the pandemic simply magnified the existing fault lines in the social fabric of the society. Rather than cautioning the most vulnerable slum dwellers, the *reductionist approach* to the control of the pandemic edged slum dwellers further on to the periphery. Blanket rules characterized by curfews, partial lockdown, and work-from-home, instituted by the state were inconsistent with the socio-economic realities of the slum dwellers. Hence, these social dimensions of health present an interesting conundrum and potential lacuna for research into the impact of imposing '*formal*' policies in an '*informal*' environment: How do you ensure the pandemic management strategy in urban slum connects with the socio-economic and political realities of the residence?

Secondly, the geospatial analysis of the pandemic is crucial in advancing the knowledge of how factors such as location, time and human behavior can influence on the rate of transmission. To our knowledge, such a study would be the first to provide insight on the link between geography and the pattern of transmission as well interventional strategies. Along this line of thought, a number of research questions are suggested (1) are there differences in transmission of the pandemic between urban and rural setting? (2) Does the behavior of residents from various urban setting (formal and informal) influence the transmission and response to the pandemic? (3) is the intensity of transmission influenced by the pattern of social, gender and class inequalities?

Finally, like any other crowded city in the global south, slum dwellers in Nairobi live in crowded single-roomed -low-quality shanties. Several people are forced to share run-down, even at times, overflowing toilets and bathrooms while children have to play in a polluted environment. More often, the residents are crumpled in the tinny homes with multi-generational family members that poses a serious threat to the vulnerable population: children, women, and old age citizens. Outdoor infrastructure can be instrumental in minimizing casualties whenever a disaster strikes. However, in the urban slum areas, lack of accurate data on the slum residents and unrestricted entry and exit, makes surveillance difficult. Yet, public surveillance has been hailed for flattening the COVID-19 transmission curve in countries such as China and Korea. Therefore, important questions informing future research endeavors should address the following (1) decongesting slum spaces through modern urban planning tools as a pre-emptive measure against the dangers of asymptomatic cases (2) designing case management tools in tandem with the local livelihood activities and assets (3) Intervention framework entail social safety nets as a strategy to enhance access.

3 Concluding remarks

Our thinking of future research and policy agenda on this subject was motivated by the limited attention that potential negative impact of the blanket public health intervention has received in the current COVID-19 crisis. Moreover, the consistent application of the weak *reductionist approach* and its impact on residents of informal settlements raises both moral and practical questions that require attention. The brief acknowledges the weaknesses of this model in regard to the various sectors in the informal settlements. Based on this observation, we recommend increased microanalysis of policy implications on different segments of the society in a *holistic* approach. In essence, the researchers and policy makers working on dynamics of informal urban space should be able to see both the ‘forest’ and the ‘trees.’

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