Introduction

In just less than a decade, Africa has been overwhelmed with three notable health epidemics – the Ebola outbreaks in West Africa (2014) and later in the Democratic Republic of Congo (2018), and the current COVID-19 pandemic. In each of these outbreaks urban areas have been the epicenter - with over half the world’s population currently living in urban centers, transmission rates are high. Illustrating this, are the current COVID-19 figures that are being reported in Sierra Leone. As of today (30.04.2020) over 65% of cases reported in the country are in Western Urban, which encompasses Freetown.

In Africa, predictions estimate that by 2050, at least one billion of the continent’s population will be urban, with a significant proportion living in informal settlements (Güneralp et al 2017; CSIS 2018). Therefore, the risk of further health outbreaks in urban centres is increasing and something cities across the continent are actively and will continue to grapple with.

Informal settlements are a major feature of most cities in sub-Saharan Africa. They are also at the heart of health inequalities in many cities. Learnings from previous epidemics highlight, that particularly vulnerable to these epidemics are informal settlements. They are impacted in a number of different ways, further elaborated on in this brief. In Freetown, while the Ebola Virus Disease (EVD) affected several places, the most affected areas were the sprawling slum-like informal settlements and a number of peri-urban areas. Informal settlements were most affected because of the
very nature of their characteristics: Many are without access to reliable and essential urban services such as water, health care, sanitation and electricity. Furthermore, a significant share of residents live in poor housing and overcrowded conditions that have weak infrastructure and lack basic services.

Life in informal settlement is a matter of survival, with most households living ‘hand-to-mouth’ and residing in unstable and hazard prone areas of the city that have been deemed unsafe. Unsurprisingly, these challenging conditions in addition to mistrust in government, conflicting messages about the disease, poor literacy rates and poor mediums of communication, posed significant difficulties in the official response to the EVD. Given these challenges, the 2014 Ebola outbreak did not only highlight the need to focus responses on urban areas but recognized the need for responses to be tailored and pay special attention to the constraints informal settlements face. The questions, however, remain: What is the state of health systems in urban Sierra Leone? What specific conditions put urban informal settlements at risk to disease outbreaks? What specific considerations would need to be taken to limit the incidence of disease outbreaks? And how should the response to health epidemics be tailored to informal settlements. Other questions relate to the prospects for community residents to comply with the health warnings given out by the government and other health sector workers. Through these questions, SLURC aims to provide evidence-based insights for the current COVID-19 response. We do this, by drawing on research from two of SLURC’s on-going studies on the EVD, which are being undertaken in partnership with the Institute of Development Studies (IDS) at Sussex University (UK) and with York University in Canada.

The EVD outbreak: Sierra Leone’s health care systems and the place of evidence in disaster preparedness planning

The EVD outbreak further crippled the country’s already weak healthcare system. When Ebola broke out, just like COVID-19, the country did not have the necessary resources to even conduct diagnosis testing. The pace of transmission of the disease left the government scrambling for support, as health workers fought tirelessly to contain the disease. However, the immediate policy action taken by the Sierra Leone government and the World Health Organisation (WHO) was to urge all to take necessary steps to self-protect from the disease. This included the need to practice basic hygiene i.e. regular washing of hands using soap; following good respiratory hygiene; and, avoiding the touching of eyes, nose and mouth (WHO 2014). Other measures included social distancing; avoiding crowds/gatherings; lockdown, staying at home; and observing and reporting all EVD-related symptoms to the relevant state authorities using a free phone number designated for this purpose. This same guidance has been introduced by the government of Sierra Leone in the wake of the COVID-19 outbreak.

However, what is evident in both cases, is that this policy guidance focusing on preventative measures such as good personal hygiene or the more restrictive lockdown does not take into consideration the day-to-day realities and
The Sierra Leone Urban Research Centre (SLURC), based in Freetown, is a globally connected research centre created through a partnership between the Bartlett Development Planning Unit (University College London) and the Institute of Geography and Development Studies (Njala University) with funding by Comic Relief. SLURC aims to strengthen the research and analysis capacities of urban stakeholders in Sierra Leone; make urban knowledge available and accessible to those who need it, prioritizing residents of informal settlements; and deliver world-leading research in order to influence urban policy and practice.

For more information about SLURC, please visit: http://www.slurc.org/

Living conditions of informal settlements. The fact is that they are unable to implement these measures, due to their unstable living conditions. Therefore, understanding the living conditions of informal settlements is essential in supporting effective health epidemic responses.

There is a lack of understanding of how informal settlements operate and function, in part because of their inherently complex and fluid nature. Moreover, because of their illegal status, many lack place-based data which makes it difficult to develop evidence-based policy decisions. In Freetown much of the existing data by government is not disaggregated across places or neighbourhoods, and therefore does not provide a detailed understanding of the variances across the city (Macarthy and Koroma, 2016). This hampers prospects to develop preparedness and response plans that are targeted. Besides, even in non-emergency situations, inhabitants of informal settlements are not involved in the design of community health interventions that affect their lives. While community-based groups (for example FEDURP) and a number of other organisations (for example SLURC, CODOHSAPA, COMAHS) have been working to collect settlement-based data to inform health programming, epidemic response planning and decisions on the health challenges in those settlements, it is rarely used/referred to by city authorities (Macarthy et al 2018). This lack of state responses results in informal settlements turning to informal health providers as their first point of contact, especially for illnesses such as headaches, fevers, coughs and malaria. In fact, evidence suggests that traditional medicine is equally as valued as formal healthcare provision. Moreover, because of the limited access to health facilities which in most cases are in poor conditions, some health problems are never diagnosed through formal healthcare systems and remain untreated, directly affecting the residents’ quality of life. This is the case especially among older people who lack sufficient care and do not have consistent support from their close relatives and associates.

However, these informal health systems are usually ignored in epidemic response plans, in part due to a lack of understanding of the issues. Therefore, understanding how healthcare is provided in informal settlements is pertinent, so that an effective response can be developed for informal settlements. A starting point is to understand health seeking behaviors of residents and how the living conditions further contribute to ill-health. In addition, it is essential to understand the diffused nature of the settlements as it will further uncover barriers to the response, as several challenges are not easily seen or noticed. Currently, there still exists a lack of data on urban health in Freetown and a lack of understanding of how health epidemics are exasperated by the complex environmental and social factors of deprivation in informal settlements. Without this, there will be limited success for an effective response within informal settlements.

**Key Lessons on how to contain epidemics that meet the needs of all**

In the long run, the increase in health epidemics combined with rapid urbanization is set to exert enormous pressure on city authorities to provide more land for housing, essential urban services and address the complex factors which underpin the vulnerability of informal settlements. The scale of the problem and the limited understanding of how to deal with this challenge is at the heart of the current difficulties faced in implementing prescribed public health measures to contain the COVID-19 pandemic.

Key learnings from the Ebola epidemic show, that while the urban poor, who predominantly live in informal settlements, were keen to observe the public health measures set by the government, there were significant limitations in being able to practice them. Three of the measures mentioned above: hand washing, social distancing and lockdown are challenging, if not impossible to implement in informal settlements.
Often described as low-resource settings, most houses in informal settlements are not connected to running water. According to the Mayor of Freetown, 47% of the city’s population does not have access to running water (Goering, 2020). The main sources of water are wells and streams, which are often unhygienic. In addition, most dwellers do not have the means to pay for a regular supply of water. With limited access to clean water, it is inconceivable for residents to strictly adhere to the practice of hand washing. Furthermore, the widespread loss of income owing to the uncertain business climate that epidemics bring, limited households’ ability to purchase hand sanitizers.

Aside from weakening the national economy, the loss of income due to EVD had serious economic effects on the lives of the poor and vulnerable groups. As the demand for goods slowed down, many businesses were forced to either scale down or to cease operating. Jobs were seriously affected especially among wage workers, the self-employed and informal workers as restrictions on travels were imposed. Even today, a substantial number of these people are still unemployed, reflected in Sierra Leone’s high unemployment rate (DTCIDC, 2017). The loss of income and livelihoods induced by the Ebola epidemic posed an unprecedented challenge to the overall achievement of economic growth in the country, which is now further at risk of being crippled by the COVID-19 pandemic. Furthermore, the livelihood of informal workers, who often reside in informal settlements were strongly affected by the government’s imposition of a variety of trade restrictions. Key among these was the closure of markets which is the main source of income for many residents and restrictions on public gatherings which forced businesses such as bars, restaurants and entertainment centres to close.

There was also the issue of food security. The EVD had its toll on farming activities in rural areas. This together with declining food imports owing to global travel restrictions on Ebola affected countries created significant food shortages in the country. In most informal settlements, rising food prices, shortages in food supplies and the loss of income caused significant everyday challenges for households.

Social distancing, as mentioned above is one of the key preventative policy measures to combat epidemics, however because informal settlements are densely populated places, with houses and rooms being clustered together, it is difficult to implement this. In some informal settlements, it is common to find single rooms with up to seven occupants (Macarthy et al., 2017). It is also common to find over ten families dwelling in a single house. This makes social distancing almost impossible to implement in the majority of informal settlements, without significantly disrupting the lives of the residents. Particularly during the EVD epidemic, unless the infected person was quickly moved to a holding centre, it was difficult to separate infected persons from eating and sleeping in the same room with other household members. Similarly, it was difficult to assign separate toilet/shower facilities to the sick, since these are often communal. Social distancing can also be problematic to impose in markets where people buy essential goods, as buyers and sellers from different places converge making these spaces very crowded.

The above illustrates the problematic nature of a lockdown for informal settlements - most residents live ‘hand-to-mouth’ and do not have access to credit facilities or insurance nor do they have significant savings - therefore informal settlement residents are unable to adequately prepare for a lockdown. Often, they also have large families, live in crowded houses, making the potential for transmission higher, especially if they are confined to this overcrowded space for an extended period of time. Furthermore, a lockdown can have negative effects on businesses and lead to a loss of income, which has significant implications on the national economy (World bank 2015). These challenges were observed in the first 3-day lockdown imposed by the government of Sierra Leone in April and will undoubtedly be observed in the upcoming 3-day lockdown, starting Sunday, 4th May. However, what this brief puts into question is not only the feasibility of implementing the lockdown, but the long-term socio-economic consequences. A key question therefore remains, whether given Freetown’s context, lockdown is really the right approach or whether a partial lockdown, which allows access to basic goods and services, accommodates for the day-to-day realities of large parts of the urban population.

Despite these challenges, lessons from the EVD response show that a lockdown can create the ideal condition to ensure social distancing and hence, reduce transmission since it does not only prevent people from moving about aimlessly or from visiting friends and relatives but it also deters them from converging in cinemas, bars, clubs, markets, football pitches, churches and mosques. A key observation however was that in conditions of emergency and insecurity, residents of informal settlements can develop creative means and solutions to safeguard their community from the risks associated with epidemics. One example to reduce transmission was to set up roadblocks at all entry points of the informal settlement (e.g. in Dworzak) and diagnose people with high temperature through infrared thermometers. If diagnosed, people were isolated for treatment. Another example, which has also been adopted during the COVID-19 outbreak, is community sensitization. Driven by individuals in the community, Cockle Bay, an informal
settlement located in the western area of Freetown, organized a 3-day community sensitization training in collaboration with Foundations for the Future and Social Work Sierra Leone. This allowed the community members to understand and ask questions related to COVID-19. In effect, these examples show the importance of local ownership in public health emergencies and also emphasizes the need to include communities in response preparedness to achieve good health results.

**Conclusion**

This piece has attempted to draw learnings from the Ebola epidemic to guide responses to COVID-19 as it continues to take root in informal settlements in Sierra Leone. It has focused specifically on the capital city, Freetown which is one area that was severely affected by the EVD. The relevance of focus on Freetown is because the city has the highest number of suspected COVID-19 cases in Sierra Leone. The piece has argued that as the number of cases grow in Freetown, including in informal settlements, more attention needs to be paid to the constraints informal settlements face in implementing preventative measures. Because of health emergency planners limited understanding of the fluidity of settlements; the spatial variances; and, the complex social and environmental factors that trigger ill health, the preventive measures prescribed by the government do not take into consideration the key challenges faced by the residents. The Mayor of Freetown is working hard to change this, by engaging with informal communities and understanding their day-to-day constraints. As a result, she is looking at informal settlement upgrading and relocation as potential solution (Goering, 2020). While these indeed might be solutions, they are undoubtedly longer-term plans that require mobilization of resources and coordination efforts. If these policies are implemented in a rushed manner it can lead to more complex and longer term problems down the road. We therefore encourage more rapid research and evidence to support ongoing efforts to manage and fight COVID-19 in informal settlements that can be implemented in the short to medium term.

**References**


