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## Chronic conditions and COVID-19 in informal urban settlements: a protracted emergency

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### ABSTRACT

COVID-19 has forced a reckoning about how we live, and in particular how exposure to disease risks are unevenly distributed. This contribution explores connections between the COVID-19 pandemic, chronic disease and conditions of chronic crisis among the urban poor. We suggest two issues in urgent need of attention in the long and short term are: 1) the underestimated burdens of chronic disease among the urban poor, and 2) the chronic states of crises which contribute to these chronic conditions and their under-recognition. We contend that the burden of 'pre-existing' conditions in informal settlements is under-diagnosed and poorly managed in communities. In order to address these burdens, for COVID-19 and beyond, we must recognise they are a product of the protracted crisis which is everyday life for many of the urban poor, for whom illness is one of the many everyday struggles and consistent quality care is out of reach. For many people living on the margins, crisis is the norm, yet both this and its impacts on health are underestimated; for change to be realised, this must be the starting point.

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As COVID-19 swept across the world, it revealed forms of precarity and inequality that had been underappreciated if not overlooked entirely. The initial messages were simple: wash your hands and practice physical distancing. But it soon became clear that following these instructions was impossible for many people, in particular for the nearly one billion people who live in informal urban settlements which are characterised by inadequate housing and sanitation infrastructure, and often high population density, mostly in low and middle income countries (LMICs). The economic implications of control measures meant they were either forced to break them, or be left without livelihoods or food. These forms of vulnerability were unmistakable and have been much commented on. However, as of August 2020, one thing *has not* become clear: the extent of epidemiological vulnerability in these informal settlements, that is, the number of people who would be especially susceptible to the disease given their age or underlying health status. This uncertainty reflects the limited evidence on chronic disease in informal settlements in LMICs. In this contribution we argue that the burdens of chronic disease and their causes among the urban poor are likely to be under appreciated, and that this needs to change, starting with a greater appreciation of people's everyday experiences. We explore how these conditions and their drivers are an illustration of the 'slow violence' in informal settlements where structural but slow forms of harm

pervade everyday life in ways which are overlooked and ignored (Nixon 2011).

From early on in the pandemic, the data showed that COVID-19 was most serious for people over 70 and those with pre-existing health conditions. The conditions associated with poor outcomes were: cardiovascular disease, diabetes, chronic respiratory disease, hypertension and cancer. In countries with strong health and information systems, there is good data on these conditions, and there is also a good understanding of their bio-social causal pathways and distribution. However, their prevalence in informal urban settlements has not been extensively explored.

The lack of good evidence on health and other aspects of demography is a long-term challenge in informal settlements and there is limited information on everyday health risks, burdens of disease or their determinants (Satterthwaite *et al.* 2019). Data is lacking because censuses and national health surveys either do not collect data from informal settlements to begin with, or do not disaggregate by urban and rural, let alone by settlement characteristics. As a result, health data in informal settlements are patchy, with some cities such as Mumbai, Dhaka and Nairobi – and specific settlements within these cities – contributing disproportionately to the evidence base (Friesen *et al.* 2020). Beyond these cities there are large gaps. A few countries have dedicated urban health institutions which collect local data and monitor

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health trends in informal settlements to share with city authorities, for example the Belo Horizonte Observatory for Urban Health in Brazil, but these are outliers. Elsewhere, the dearth of data makes COVID-19 risks hard to gauge and itself enhances vulnerability.

There is likely to be great variation in underlying burdens of chronic and non-communicable disease (NCD) due to the heterogeneous socio-spatial and economic environments across cities and countries. Some evidence has suggested their prevalence is low, for example, studies in a Nairobi settlement found limited cardiovascular disease (Vusirikala *et al.* 2019). However, elsewhere, rates of NCDs have been found to be higher in 'slum' settings than 'non-slums' as in Cape Town in South Africa (Smit *et al.* 2016) and Salvador in Brazil (Snyder *et al.* 2017) suggesting there is cause for concern. The relative burdens of disease in Harare, Bangkok, Lima, and Lagos will not be the same.

In the absence of good data, there is limited understanding and action, and outdated or incomplete understandings of causal pathways prevail – especially as these pathways are likely to look quite different to those in high-income settings. In the case of NCDs such as heart disease, diabetes or hypertension, they were traditionally associated with 'lifestyle' and with higher levels of economic development, but they are rising in LMIC countries and have been broadly linked to urbanization (Eckert and Kohler 2014). Yet long running debates about the comparative health advantages of urban or rural life have obscured the dynamics of health and healthcare in informal settlements and how specific social, economic and built environments may foster disease and ill-health. It is increasingly clear that assumptions about improved access to care in urban areas do not necessarily translate into better outcomes in informal settlements (Mberu *et al.* 2016). Relevant dynamics include intense forms of poverty and inequality, inadequate housing and services linked to lack of formal recognition and tenure, and the way these combine to make fertile ground for both infectious and non-infectious disease (Corburn and Riley 2016) which, as COVID-19 is illustrating, can be biologically synergistic. Indeed, there are concerns about the interaction between SARS-COV2 and chronic infectious diseases such as TB and HIV. Many traditional risk factors for heart disease, cancer and diabetes are easily identifiable in some informal settlements e.g. physical inactivity, unhealthy diets, tobacco and alcohol consumption; so too are high levels of indoor and outdoor air pollution (e.g. vehicular traffic, waste burning, cookstoves) which contribute to respiratory diseases. But the complex social and political root causes in each context and their manifestation in the built environment are rarely explored (Smit *et al.* 2016) meaning there is not adequate knowledge or policy to address them (Lumagbas *et al.* 2018).

Too often the perspectives and experiences of people living in informal settlements are overlooked. Our

research into people's illness trajectories and life histories in informal settlements in Freetown, Sierra Leone, show how disease is part and parcel of a landscape of recurrent, protracted, and competing threats to health and wellbeing. People are aware of the health risks posed by their environment, in the air, the water, their food, and by their work but the power to change them can be illusive. For those who are sick, safety nets are stretched to their limits and chronic diseases cause people to teeter on the edge of social and financial collapse. Chronic illnesses regularly go unexplained and unmanaged. It is common for people to have tried multiple health providers, formal and informal, but to never receive a definitive diagnosis. People were discouraged by the costs of care, and transport to receive it, especially when the care received is frequently disappointing. Some people had spent their life savings on treating illness, going from relative wealth to severe hardship. Many with long and unsatisfying treatment histories turned increasingly to drug sellers, and experimented with their own treatments. This could involve borrowing from neighbours, going on recommendations from others who had similar sounding ailments, and going on and off treatments due to expense or availability. Coping with illnesses was set against a backdrop of other daily struggles to survive, to make a living, to provide for children or dependents. Incapacitated people feared being a burden on their partners. Widowed or childless people depended on the good will of neighbours or distant relatives. Many recounted how family members – dealing with their own difficulties – used to visit or send money, but that they no longer did, and nor did they return their calls leading to feelings of abandonment and isolation. Their experiences make clear that, in Freetown at least, chronic diseases are rooted in, and contribute to, lives of chronic precarity and protracted crisis – all of which creates a viscous cycle of under-recognition and inadequate management. In Sierra Leone and beyond, it is plausible that there are many chronic conditions relevant to COVID-19 which are undetected and poorly managed in communities, which could put large numbers of people at risk.

In contrast with spectacular and temporally discrete forms of violence (such as epidemics), 'slow violence' emphasizes pervasive, long-term forms of harm linked to structural marginalisation which are underappreciated or discounted (Nixon 2011). To counter this 'out of sight' harm, the voices of people experiencing the harm, need to be sought out and taken seriously. Coined for environmental justice, it is fitting of the web of political, ecological and social determinants of health in informal urban settlements and the way they (re)produce chronic ill-health. The 'slow violence' of informal settlements includes everyday exposure to poorly managed waste, dust, smoke, fires, floods, disease vectors, long journeys

across cities on overcrowded shared transport which can spread infections, occupational hazards, crime, but also insecurity, stress, lack of accountability, discrimination, abuse, invisibility, exclusion from economic and political power, and an inability to claim and maintain basic rights or services.

Following Vigh (2008), rather than seeing COVID-19 as an isolated event, an episodic crisis to be put into context, it is more fitting to see crises *as the context*. Seen in this way the acute emergency caused by this new pathogen finds deep foundations in the slow, protracted emergencies and violence of everyday life for the urban poor. Worryingly, the pandemic may be worsening the already poor management of chronic disease as health services close or pivot to COVID-19 care (Ahmed *et al.* 2020). It is often said that epidemics can bring about societal transformation, but an epidemic's transformative potential depends on the extent to which it can expand and shift our understandings of the status quo. If COVID-19 is to be a turning point, the slow violence of these 'pre-existing' conditions in informal settlements must be recognised and addressed; and to ensure progressive reform, the place to start is with resident's experiences of negotiating life and health, and with their voices and perspectives which have been ignored.

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**Abu Conteh's** career has spanned teaching, journalism, development and research. He is currently the urban health research lead at the Sierra Leone Urban Research Centre and is studying for a PhD at the Liverpool School of Tropical Medicine. His interests include health systems research and social policy practice to improve health systems governance and accountability for the urban poor. Previously, he worked with Concern Worldwide in Freetown's impoverished communities to improve maternal and child health-care interventions, and to pilot community based health information systems in collaboration with Johns Hopkins University.

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