**Cholera in Lusaka Urban: Unveiling the Epicenter of the Crisis**

## Introduction

Cholera an acute diarrhoeal infection caused by ingestion of food or water contaminated with the bacterium Vibrio cholerae still remains a significant global threat to public health. The fact that cholera is an indicator of inequity and lack of social development makes it a development issue apart from being a health one (Awofeso and Aldbak 2018; Uwishema et al. 2023). Cholera has proven to be particularly resilient in urban settings marked by intricate socio-economic, infrastructural, and environmental dynamics. The stakes are high, and the consequences of cholera outbreaks are profound, affecting not only the health of individuals but also the economic and social fabric of communities. Estimates made in 2015, indicate that over one million cases in 44 African countries resulted in an economic burden of US$130 million from cholera-related illness (The Conversation 2023).

Though the global burden of cholera is not precisely known because it is largely under-reported due to limitations in surveillance systems, it is estimated that 1.3 to 4.0 million cases of cholera occur each year with 21 000 to 143 000 deaths (Illic and Illic 2023; Ganesan, Gupta, and Legros 2019). Cholera which was before 1817 confined to India's Bay of Bengal is is now endemic in many countries. The first pandemic referred to as 'Asiatic cholera' occurred between 1817 - 1821 (Lippi 2016). The current pandemic is the seventh one. It begun from Indonesia in 1961 and reached Africa and the Americas in 1971 and 1991, respectively (Benamrouche et al 2022; WHO 2023). Africa is reported to have the highest global cholera burden (Olu et al 2023).

The first cholera outbreak recorded in Zambia occurred in 1977. Since then the country has had several outbreaks with the current one having began in October 2023. Lusaka the vibrant capital city is one of the main hotspots of cholera. Cholera has been a persistent and grave public health challenge in the city. As the urban landscape evolves and the population increases rapidly, the incidence of cholera continues to cast a shadow over the well-being of Lusaka's residents. This paper embarks on a comprehensive exploration to answer a crucial question: Where is the real problem with cholera in Lusaka urban?

## Methodology

The study used a mixed-methods approach to comprehensively investigate the cholera crisis in Lusaka Urban. This approach involved both quantitative and qualitative data collection and analysis methods to provide a holistic understanding of the epidemic's dynamics. Geographic Information System (GIS) Mapping: Utilizing GIS technology to spatially visualize the distribution of cholera cases and identify potential hotspots or clusters within Lusaka Urban. Socioeconomic Surveys were conducted to collect quantitative data on socio-economic factors that may influence cholera transmission and vulnerability, such as access to clean water, sanitation facilities, and healthcare services. Additionally in-depth interviews were conduced with key stakeholders, including health officials, community leaders, to gain insights into the underlying

causes and dynamics of the cholera epidemic, as well as perceptions of risk and protective factors. Google forms were employed to get data from sample size of 250 respondents..

**Data Analysis**

Descriptive statistics, chi-square tests, and regression analysis will be employed to analyse epidemiological and survey data and identify associations between variables.

**Results**

Preliminary results suggest that high density areas on the western part of the city were most affected by cholera. These lack proper water and sanitation infrastructure and are homes to people with low incomes. Responses to cholera outbreaks have tended to be more of firefighting than being proactive. There is need to enhance multi-sectoral response.

More analysis is yet to be done.

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