



Letter to the Editor

Re-emergence of cholera outbreak in DRC: A silent fight

Dear Editor,

Cholera is an enteral infection that is caused by ingesting the gram negative rod, *vibrio cholerae*, usually in contaminated food or water. It is mainly linked to insufficient access to safe drinking water and inadequate sanitation [1]. It is characterised by an acute diarrheal disease which in its severe form can lead to loss of fluid, and severe dehydration [1].

Cholera cases are underreported globally, however, an estimated 2.9 million cases and 95,000 deaths occur annually [2]. It is endemic in several parts of the Democratic Republic of Congo with about 189,000 cases annually [2]. Statistics from the National Integrated Disease Surveillance and Response System reveals a total of 18,403 suspected cases of cholera, including 302 deaths (CFR 1.6%) notified in the DRC in 2022 [2]. A spread to as much as 19 of the 26 provinces in the country was also noted [1]. This makes DRC a statistically significant contributor to the global epidemiology of cholera.

In late 2022, a global surge of new cases and cholera-related deaths occurred following several years of decline [2]. For a country with established endemicity, the current outbreak is of great concern as cases had begun to rise. By 4th February 2023, a total of 4386 cholera cases (1009 laboratory-confirmed; 23%) with 16 deaths (CFR 0.4%) have been reported [1,2].

This article aims to identify the predisposing, precipitating and perpetuating factors of the resurgence of the disease in the DRC. We also analyse the current efforts at mitigating the spread and on the backdrop of that, make recommendations on the way forward.

One in ten individuals who contract cholera will experience severe symptoms like watery diarrheal, vomiting, and leg cramps [2]. These individuals experience shock and dehydration as a result of rapid bodily fluid loss. Death could happen within hours without medical attention. In areas with poor water treatment, squalor, and hygiene, cholera is most likely to appear and spread. In brackish waterways and coastal waters, cholera germs can also survive in the environment.

Additionally, individuals who have severe cholera may experience severe dehydration, which may result in kidney failure. Severe dehydration, if untreated, can quickly result in shock, a coma, and mortality. The health of the population in Congo is put at risk by all of these factors, including a rise in mortality and morbidity. The knowledge of how infectious diseases spread and the foundation for contemporary epidemiological research were both shaped by the effects of the disease in Congo. Cholera outbreaks influenced public health progress in terms of technology and medicine [3].

As a result, it is challenging to control a cholera outbreak in Congo as it requires significant resources to launch multisectoral responses and carry out useful epidemiological research. Additionally, the DRC is struggling to meet its enormous medical needs due to limited access to even the most basic healthcare, which makes it difficult for public health professionals to do their jobs. In this article, we analysed the present

situation, barriers, ongoing efforts, and future recommendations for completely eliminating this disease.

The ongoing efforts to control this outbreak include:

1. **Coordination:** A multi-sectoral coordination has been created at the provincial level, and the incident management system (IMS) has been activated at the WHO office. In addition, a budgeted preparedness and response plan involving relevant stakeholders has been developed [3].
2. **Epidemiological surveillance and laboratory:** The North Kivu Provincial Health Division has established a surveillance and laboratory commission with the assistance of WHO and other associates. The relevant workforce has received training in case definition, case investigations, data collection, analysis, and reporting. To inform evidence-based decision making, active case finding, investigation, and data analysis are ongoing [4].
3. **Case management:** In order to improve the clinical care for cholera, fifty-six Oral Rehydration Points (ORP) in Internally Displaced Sites, four Cholera Treatment Units (CTU) and two Cholera Treatment Centers (CTC) have been established. These facilities provide extra 205 bed spaces in addition to existing ones; thereby facilitating the prompt treatment of cholera infected patients [4].
4. **Community engagement and risk communication:** Numerous advocacy meetings with community leaders and political-administrative officials were arranged. Community workers have been educated to promote cholera awareness, and preventative actions are disseminated to affected residents door-to-door and at public gatherings [5].

Hence, public health officials need to understand how cholera is spread; the most effective interventions; and how well the general populace is protecting themselves in order to direct the public health reaction and lessen the effects of cholera on public health. Consequently, it is imperative to take critical steps to combat the effects of cholera, including reaffirming the link between untreated drinking water and the disease and the need to distribute water purification tablets and educate the public on how to use them.

Ultimately, the healthcare system should be strengthened and equipped because it requires more resources and expertise to provide life-saving treatment. Establishing sustainable funding for cholera vigilance and outbreak emergency situations; ensuring the availability of clean water for drinking, sanitation, and hygiene, as well as cholera vaccination, if recommended, for vulnerable communities all necessitate a permanent framework for cross-border collaboration to develop efficient policies and strategies. It is important to stress that community involvement is crucial for effective intervention rollout. Health education techniques that are community-centered and led by local stakeholders

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are essential for gaining the trust of the people, which requires consideration of local sociocultural norms and practices.

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Declaration of competing interest

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