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Letter to the Editor

Health emergency and disaster risk management: A case of Zimbabwe's preparedness and response to cyclones and tropical storms: We are not there yet!

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ABSTRACT

Cyclones and tropical storms are important threats to public health faced by countries worldwide as they are associated with infectious disease outbreaks, unsafe food and water to mention a few. To help meet these challenges, the World Health Organization encourages countries to strengthen their capacities for health emergency and disaster risk management incorporating measures for prevention, mitigation, preparedness, response and recovery. In this letter, we unpack the case of Zimbabwe's preparedness and response to cyclones and tropical storms. Zimbabwe has been hit by several cyclones and tropical storms in the past two decades of varying magnitude and public health impacts. While the state of readiness and nature of response has improved over the years, we discuss the preparedness for and response to the 2019 Cyclone Idai to highlight the gaps that remain.

Dear Editor

Since the turn of the millennium, the Southern Africa region has been hit by at least 30 cyclones, with Cyclone Eline (2000), Japhet (2003), Dineo (2017), Idai (2019) tropical storm Chalane (2020), cyclone Eloise 2021 causing considerable damage in Zimbabwe. Most of the cyclones and storms in the region have resulted in fatalities and destruction of infrastructure [1–4]. Research evidence points toward climate change as one of the main drivers of the cyclones being experienced in the region. This means the region will remain prone to such disasters, likely at increased frequency and intensity for as long as the climate change threat persists [2,3]. While the state of readiness and nature of response has improved over the years, this letter will focus on the preparedness for and response to the 2019 Cyclone Idai to highlight the gaps that remain.

Cyclone Idai made landfall in Zimbabwe in March 2019 affecting approximately 270 000 individuals [5,6]. In the early days of the cyclone impact assessment, an estimated 340 deaths were reported, with more than 330 individuals reported missing [2,7]. Our literature review could not establish the final number of deaths related to the cyclone. Due to the strong, sustained, and destructive winds, the cyclone resulted in widespread damage to buildings, other infrastructure, and agricultural activities [7]. The threat of recurrence of such disasters in Zimbabwe is ever-present as evident by the December 2020 tropical depression Chalane and January 2021 cyclone Elosie [4,8].

Although there have been other cyclones in the past, Cyclone Idai had a more substantial impact than the other cyclones as it did more damage to water supply infrastructure systems and health facilities leaving many communities vulnerable to waterborne diseases such as cholera and typhoid [2,3] As a result of the destruction of the road network the affected areas were inaccessible for more than two weeks rendering it difficult for aid to reach some of the areas [3,7]. As a result, the survivors of Cyclone Idai are still living in tents 21 months after the cyclone and there are no clear plans to relocate them to locations less prone to flooding [7]. The squalor at the camps characterized by inadequate water and sanitation put the survivors of cyclones and tropical storms at risk of contracting waterborne infectious diseases.

While the Zimbabwean Directorate of Civil Protection has made some notable strides in documenting and executing the is the Disaster Risk Management (DRM) for adverse weather-related disasters such as cyclones and tropical storms, the experience of Cyclone Idai proved that a lot still needs to be done. For instance, there is a need to disseminate early warnings nationally with special emphasis on the to-be affected communities. Evacuation protocols and command centers should also be put in place well in advance [8]. Plans for rapid distribution of food relief should be well laid out. Other relief aid such as temporary shelters, water, and sanitation items, child protection-related supplies, should be properly planned to avoid a public health crisis. Emphasis should also be placed on waste management and general hygiene measures. The Cyclone Idai preparedness and response had all these factors but were limited in coverage.

Firstly, we recommend proactive immunizations against cholera, typhoid, and measles especially in the cyclone and tropical storm-prone regions. Secondly, in light of the current COVID-19 pandemic, it is also imperative to make provisions that allow for prompt resettlement of people in high-risk areas. The resettlement structures should allow for adherence to COVID-19 guidelines to prevent outbreaks. Thirdly, we call on the government to strengthen a multi-sectoral approach that includes the private sector emergency response in disaster preparedness efforts. Further, national budget reassignments coupled with improved health service provision methods can play a critical role in disaster preparedness and management [9]. Lastly, the government of Zimbabwe should provide cyclone and storm emergency kits to individuals in cyclone-prone areas and also support the construction of houses that are resilient to climate disasters [9,10].

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