

Mozambique determines priority actions in wake of cyclones to improve future response using after action reviews (AARs)

Case Study



Abstract

In 2019, two severe cyclones hit Mozambique. Occurring six weeks apart, they affected 1.7 million people, caused fatalities, and destroyed health facilities, civil infrastructure, and crops. The degradation of sanitation facilities following the cyclones led to a cholera epidemic in the country, with 7,053 cases and 8 deaths reported. Following this, Mozambique conducted an After Action Review (AAR) to document lessons from the response to the two events and to better prepare for future natural disasters and emergencies. The AAR was used to critically analyze the health sector's contribution to the multisectoral response and coordination during and after the cyclones. The AAR recommended priority actions in leadership and partner coordination, information planning and management, health operations and technical expertise, and support for operations in logistics, finance and administration. It also showed that the country had a robust flood-warning system that mitigated the effect of the storms to some extent.

Description

Process and outcomes

Context: Mozambique is prone to natural disasters, including floods, tropical storms, droughts and earthquakes. In the past 30 years, over 46 cyclones and floods occurred in Mozambique. About 60% of its population live along the coast and are vulnerable to cyclical tropical storms.

The JEE and NAPHS: In 2016 Mozambique undertook a Joint External Evaluation (JEE) and used its results to develop a National Action Plan for Health Security (NAPHS). The country had already invested in its National Institute of Health, a national public health institute under the country's health ministry.

The Cyclones: On the night of the 14th of March 2019, Cyclone Idai hit central Mozambique near Beira City. Cyclone Idai affected 1.5 million people, with close to 400,000 forced to flee from their homes due to subsequent flooding, rain and devastating winds. Cyclone Idai killed 603 people, injured 1,641 people, and destroyed 90% of infrastructure in Mozambique's fourth-largest urban center, Beira City. This included the partial or total loss of many health facilities, schools, churches and

industries. There were also disruptions to access and trade, water and energy supply, crop production and displacements of more than 100,000 people.

Almost six weeks later, on the 25th of April 2019, Cyclone Kenneth struck in the Cabo Delgado Province of Mozambique, affecting 286,000 people, injuring 94 people and killing 45 people. Health infrastructure, schools and access roads were damaged again. Due to the degradation of sanitation facilities, cholera epidemics ensued. This resulted in 6,771 cases and 8 deaths in Sofala Province and 282 cases and zero deaths in Cabo Delgado Province.

The response: On the 13th of March 2019, Mozambique declared a state of national emergency that lasted until the 7th of June 2019. In the wake of Idai and Kenneth, the Government of Mozambique established a robust flood-warning system, with support from partners. Additionally, communities were already able to deal with the recurring floods, with local people moving their belongings to a place of safety when the cyclone alerts were sounded. This level of readiness helped mitigate, to some extent, the impact of these deadly cyclones.

The post-cyclone AAR results: In November 2019, Mozambique conducted an After Action Review (AAR). This post-cyclone AAR brought



together all stakeholders from the central and district levels, including local NGOs and partners. Discussions led to a number of conclusions, as well as a set of priority recommendations.

AAR results showed that it was possible, with the support of partners, to mobilize resources and effectively respond to the impacts of both cyclones. This included containing the cholera outbreak and providing essential services to displaced populations.

However, despite previous cyclones and existing contingency plans, the health-related rules and procedures to follow in the event of major emergencies were unknown to technicians at provincial level; similarly, the general impact of cyclones was also unknown. The AAR also showed that poor communication in the first days of the calamities made it difficult to coordinate activities. Additionally, response activities were implemented in various areas without due consideration to the contribution of health professionals.

The AAR recommendations: These were focused on four areas: leadership and

partner coordination, information planning and management, health operations and technical expertise, and support for operations in logistics, finance and administration. Specifically, the AAR called for elaboration of a Public Health Emergency Management Manual, inclusion of logistics activities within provincial contingency plans, the training of logistics personnel in emergency procedures (e.g. training in basic life support for emergency cases), coordination in the acquisition of products suitable for infection control and water purification, and psychosocial and financial support to health professionals affected by the event.

Way forward

The experiences gained and the lessons learnt during the response to Cyclone Idai served as a suitable basis for planning the response to Cyclone Kenneth. The AAR findings would be used to update the business continuity plan of the WHO country office in Mozambique, in December 2020, and further support improving the resilience of Mozambique's health system.

Lay Summary

Mozambique conducted an After Action Review (AAR) in 2019 following two cyclones that devastated the country. The post-cyclone AAR in Mozambique showed that the country has a robust flood-warning system that, to some extent, mitigated the effect of the storms. The AAR results are being used to critically analyze the health sector's contribution to the multisectoral response and coordination

activities during and after the cyclones. Urgent actions included addressing potential degradation of sanitation facilities in the country, after the storms had led to cholera epidemics in the past. Key recommended actions included improving leadership and partner coordination, information planning and management, health operations and technical expertise, and support for operations in logistics, finance and administration.

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