



Dengue Fever Crisis in Somaliland: Overview of Reported Cases and Impacts

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ABSTRACT:

Dengue fever remains a significant public health concern worldwide, and Somaliland is no exception. Since October 2023, a notable surge in Dengue fever cases has been observed, with 2635 reported cases documented within the region. Among these cases, 734 individuals tested positive for Dengue fever using rapid diagnostic test (RDT) kits. This brief report to the Editor provides an overview of the Dengue fever outbreak in Somaliland, focusing on the reported cases, geographical distribution, and impact on affected communities. The most affected districts, including Hargeisa, Boroma, and Gebiley, are identified as hotspots of Dengue fever transmission, highlighting the urgent need for targeted intervention strategies to control the outbreak and mitigate its consequences.

Keywords: Dengue Fever, Boorama, Gabiley, Hargiesa, Public Health, Transmission.

Introduction :

Dengue fever, caused by the Dengue virus and transmitted primarily by Aedes mosquitoes, poses a significant public health threat in many parts of the world, including Somaliland. Despite efforts to control its spread, Dengue fever outbreaks continue to occur, leading to substantial morbidity and mortality. Understanding the epidemiological characteristics of Dengue fever outbreaks is crucial for effective disease surveillance and control. In this review, we analyze the recent Dengue fever outbreak in Somaliland, focusing on the reported cases, diagnostic methods, geographical distribution, and impact on affected communities.

Reported Cases:

Since October 2023, a total of 2635 cases of Dengue fever have been reported in Somaliland. These cases represent a substantial increase compared to previous years, indicating the emergence of a significant outbreak within the region. Among the reported cases, 734 individuals were confirmed positive for Dengue fever using rapid diagnostic test (RDT) kits. The use of RDT kits has facilitated the timely diagnosis of Dengue fever, allowing for prompt medical intervention and patient management[1].

Geographical Distribution :

The outbreak of Dengue fever in Somaliland has exhibited a spatial distribution, with certain districts experiencing a higher burden of cases compared to others. Hargeisa, the capital city of Somaliland, has been identified as one of the most affected districts, reporting a significant number of Dengue fever cases. Other highly affected districts include Boroma and Gebiley, where clusters of Dengue fever cases have been observed. The geographical distribution of Dengue fever cases underscores the need for targeted surveillance and control measures in hotspot areas to prevent further transmission[2].

Impact on Affected Communities :

The Dengue fever outbreak has had a considerable impact on affected communities in Somaliland. Beyond the physical symptoms experienced by individuals infected with Dengue fever, the outbreak has strained healthcare resources and infrastructure, particularly in districts with high case counts. Health facilities in Hargeisa, Boroma, and Gebiley have faced challenges in managing the influx of Dengue fever patients, highlighting the need for enhanced healthcare capacity and resources to address the outbreak effectively[3]. Additionally, the socioeconomic impact of Dengue fever, including loss of productivity and increased healthcare expenditures, has further exacerbated the vulnerability of affected communities[4].

Implications

The Dengue fever crisis in Somaliland necessitates immediate action to strengthen healthcare capacity, mitigate socioeconomic impacts, and implement targeted intervention strategies in hotspot areas. This requires allocating resources for medical supplies and personnel, providing economic support to affected communities, and enhancing vector control measures and surveillance. Additionally, comprehensive public awareness campaigns are essential to educate individuals about Dengue fever prevention. Addressing these implications calls for coordinated efforts from local authorities, healthcare professionals, and community leaders to effectively control the outbreak and protect the population's well-being[5].

Recommendations

- I. **Enhanced Surveillance and Reporting Systems:** Strengthening the surveillance and reporting systems for infectious diseases, including Dengue fever, is essential for early detection and response to outbreaks. Implementing real-time monitoring mechanisms and improving data collection and analysis will enable health authorities to track the spread of Dengue fever more effectively and allocate resources accordingly.
- II. **Vector Control Measures:** Implementing comprehensive vector control measures is paramount to reducing the transmission of Dengue fever in affected areas. This includes environmental management to eliminate mosquito breeding sites, the use of insecticides, and community engagement to promote mosquito control practices. Emphasizing the importance of personal protection measures, such as using mosquito repellents and wearing long-sleeved clothing, can also help minimize the risk of mosquito bites.
- III. **Healthcare Capacity Building:** Strengthening healthcare infrastructure and capacity in regions affected by Dengue fever is crucial for providing timely and adequate medical care to patients. This involves ensuring the availability of diagnostic tools, medical supplies, and trained healthcare personnel to diagnose, treat, and manage Dengue fever cases effectively. Additionally, establishing designated Dengue fever treatment centers or wards can help streamline patient care and reduce the burden on existing healthcare facilities.
- IV. **Public Awareness and Education:** Launching targeted public awareness campaigns and educational initiatives is essential for raising awareness about Dengue fever, its symptoms, transmission, and preventive measures. Engaging with local communities, schools, and healthcare providers to disseminate accurate information and promote behavior change can empower individuals to take proactive steps to protect themselves and their communities from Dengue fever.
- V. **Collaborative Efforts and International Support:** Encouraging collaboration and coordination among relevant stakeholders, including government agencies, non-governmental organizations, and international partners, is critical for a comprehensive response to the Dengue fever outbreak in Somaliland. Leveraging international support, technical expertise, and financial resources can strengthen the capacity of local health systems to effectively control the outbreak and mitigate its impact on affected communities.
- VI. **Research and Innovation:** Investing in research and innovation to better understand the epidemiology, transmission dynamics, and risk factors associated with Dengue fever in Somaliland can inform evidence-based interventions and strategies for disease control and prevention. This includes conducting epidemiological studies, vector surveillance, and vaccine development research to address the unique challenges posed by Dengue fever in the region.

By implementing these recommendations in a coordinated and sustained manner, stakeholders can work together to mitigate the impact of the Dengue fever outbreak in Somaliland and protect the health and well-being of its population.

Conclusion :

In conclusion, the recent outbreak of Dengue fever in Somaliland represents a significant public health challenge, requiring urgent intervention and response measures. The reported cases, diagnostic methods, geographical distribution, and impact on affected communities outlined in this review underscore the need for coordinated efforts from healthcare authorities, public health agencies, and community stakeholders to control the outbreak and mitigate its consequences. Targeted surveillance, vector control, and public awareness campaigns are essential components of an integrated approach to combating Dengue fever in Somaliland and safeguarding the health and well-being of its population.

Conflict of Interest: None

Funding : None

Abbreviations

RDT rapid diagnostic test

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