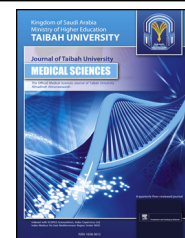




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Letter to the Editor

## Cabo Verde's malaria-free certification: A blueprint for eradicating malaria in Africa

Deborah O. Shomuyiwa, B'Pharm<sup>a</sup>, Olalekan J. Okesanya, MPH<sup>b,\*</sup>,  
Inibehe I. Okon, MBBS<sup>c</sup>, Olabode Ekerin, Bsc<sup>d</sup>, Emery Manirambona, MBBS<sup>e</sup> and  
Don E. Lucero-Prisno III, PhD<sup>f</sup>

<sup>a</sup> Faculty of Pharmacy, University of Lagos, Lagos, Nigeria

<sup>b</sup> Faculty of Laboratory Hygiene and Epidemiology, University of Thessaly, Volos, Greece

<sup>c</sup> Department of Neurosurgery, Hospital of the Babcock University, Ogun State, Nigeria

<sup>d</sup> School of Public Health, University of Port Harcourt, Port Harcourt, Nigeria

<sup>e</sup> College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda

<sup>f</sup> Department of Global Health and Development, London School of Hygiene and Tropical Medicine, London, UK

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### Abstract

The World Health Organisation (WHO) officially certified Cabo Verde as a malaria-free country in January 2024, marking a key milestone in world health and demonstrating the efficacy of comprehensive malaria control programs. Cabo Verde is only the third country in the WHO African region to have achieved this designation, highlighting the potential for other nations to successfully eradicate malaria. Despite encountering hurdles like drug-resistant strains and COVID-19 disruptions, Cabo Verde's success after years of strategic planning and multisectoral collaboration highlights the value of long-term public health initiatives. To emulate this achievement, African countries must take a holistic approach that includes strong leadership, effective monitoring systems, and community engagement. Leveraging current resources and embracing breakthroughs, such as the recent introduction of malaria vaccinations, will be critical to achieving a malaria-free Africa. Countries that integrate socioeconomic development into malaria eradication efforts might reduce the

burden of malaria on vulnerable communities while also driving progress towards larger development goals. Cabo Verde's success serves as an example of the continent's malaria fight, emphasizing the significance of long-term vigilance, adaptability, and collaborative action in realizing a common goal of a malaria-free future.

**Keywords:** Africa; Cabo Verde; Certification; Disease eradication; Malaria; Public health

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Dear editor,

Cabo Verde's recent certification by the World Health Organisation (WHO) as a malaria-free country in January 2024 marks a remarkable milestone in the advancement of global health.<sup>1</sup> This milestone demonstrates Cabo Verde's dedication and success in combating one of the most devastating diseases in human history. As only the third country in the WHO African region to attain this certification, following Mauritius in 1973 and Algeria in 2019, Cabo Verde's success is a testament to the effectiveness of comprehensive malaria control strategies.<sup>2</sup> The significance of this feat cannot be overstated, especially given the African continent's huge malaria prevalence. In 2021, Africa accounted for a staggering 95% of globally reported malaria cases and 96% of associated

\* Corresponding address: Faculty of Laboratory Hygiene and Epidemiology, University of Thessaly, Volos, Greece.

E-mail: [okesanyaolalekanjohn@gmail.com](mailto:okesanyaolalekanjohn@gmail.com) (O.J. Okesanya)

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mortality, underscoring the urgency of efforts to combat this debilitating disease.<sup>3</sup>

Since 2007, Cabo Verde has pursued malaria elimination through strategic plans focused on prompt treatment, improved diagnosis, and comprehensive case reporting.<sup>4</sup> Despite COVID-19 challenges, the country prioritized vector control, diagnostic quality, and surveillance, highlighting multisectoral collaboration. Cabo Verde's certification as malaria-free after three years of no disease transmission exemplifies the effectiveness of its long-term public health programs, emphasizing focused interventions and robust surveillance.<sup>5</sup> Other African countries like South Africa, Eswatini, and Botswana are also progressing towards malaria elimination, demonstrating potential success with ongoing commitment.<sup>6</sup> Despite hurdles such as drug-resistant strains and pesticide resistance in mosquitoes, the World Health Organization (WHO) aims to reduce malaria cases and deaths by 90% by 2030, stressing the importance of leveraging existing infrastructure and resources for continued efforts in combating malaria and infectious diseases.<sup>7</sup>

To replicate Cabo Verde's success on a broader scale, African countries must adopt a multifaceted approach characterized by strong leadership, adaptable surveillance systems, demand-driven scientific research, capacity building, extensive collaboration, gap analysis, robust healthcare systems, and active community engagement.<sup>8</sup> Gap analysis is crucial for identifying specific elimination needs, while resilient healthcare systems are essential for sustaining progress in the long term. As nations transition towards the eradication phase, effective management of remaining indigenous cases, continued political leadership, and sustained collaboration are critical. Maintaining vigilance, agility, adaptability, and cooperation through collaborative efforts will be instrumental in achieving a malaria-free Africa.

The WHO's guidelines for malaria elimination provide valuable insights and recommendations tailored to different epidemiological contexts.<sup>9</sup> Mass techniques such as mass drug administration (MDA) may be appropriate for areas with widespread malaria transmission, but caution is advised due to potential side effects and the need for community involvement. Targeted interventions, such as targeted drug administration (TDA), are recommended for higher-risk populations, while reactive techniques like reactive case detection and treatment (RACDT) are essential for reducing transmission clusters. Robust surveillance systems and community engagement are critical for effective implementation and long-term progress towards malaria elimination.<sup>9</sup>

The recent availability of malaria vaccines in Africa represents a significant curve in the regional malaria prevention and control measures.<sup>10</sup> In July 2023, the WHO announced that 18 million doses of the first malaria vaccine, RTS,S/AS01, would be allocated to 12 African countries between 2023 and 2025. Cameroon received over 300,000 doses of the vaccine in November 2023 and commenced the first-world mass malaria vaccinations in January 2024. This rollout signifies a significant advancement in malaria prevention and control, especially for children under 5 years old, who are most vulnerable to the disease. To drive sustained progress and equity in vaccine access, Africa must address the financial costs, increased coordination, and collaboration

requirements to ensure the successful implementation of widespread vaccination programs.<sup>10</sup>

Another area to address is integrating socioeconomic development for progress.<sup>9</sup> Malaria disproportionately affects the poorest, exacerbating existing health disparities, with significant reductions in household incomes and heightened economic burdens in regions with high malaria prevalence. Integrating socioeconomic development into malaria eradication efforts is crucial for sustained progress. By addressing both transmission and underlying factors, such as poverty and access to healthcare, we can alleviate the burden of malaria on vulnerable populations. This integrated approach not only drives progress but also eases economic strain, contributing to broader development objectives.<sup>9</sup>

Cabo Verde's accomplishment in malaria eradication serves as a model for Africa's fight against the disease. By prioritizing comprehensive strategies, leveraging existing guidelines, and embracing innovation, African countries can replicate Cabo Verde's success and advance towards a malaria-free future. Sustained vigilance, adaptability, and collective action will be essential in achieving this shared goal.

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#### Conflict of interest

The authors declare no conflict of interest.

#### Ethical approval

Not applicable.

#### Authors contributions

DOS conceived and designed the study, conducted research, provided research materials, collected data, and wrote the initial draft. OJO conceived and designed the study, conducted research, provided research materials, collected data, and wrote the initial draft and the final draft. IIO designed the study, provided research materials, and wrote the final draft. OE conceived and designed the study, and wrote the final draft. EM conceived, conducted research, and wrote the final draft. DELP III conceived and designed the study, and wrote the final draft. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

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