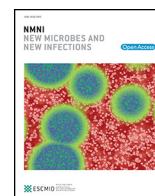


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

New Microbes and New Infections

journal homepage: www.journals.elsevier.com/new-microbes-and-new-infections

Letter to the Editor

What are the challenges and the possible solutions to fight Malaria in the Democratic Republic of Congo?

ARTICLE INFO

Handling Editor: Patricia Schlagenhauf

Keywords

Democratic Republic of the Congo

Malaria

Infectious disease

Global health

Public health

Dear Editor,

In DR Congo, a country where the health system is paralyzed by numerous potentially epidemic diseases, its healthcare system is confronted with malaria which causes a very high number of cases of deaths among people vulnerable to malaria [1]. This high frequency of deaths is caused by the presence of the *Plasmodium falciparum* parasite throughout the national territory of the country and is the cause of serious forms and complications of malaria in DR Congo [2] (see Fig. 1).

On the road to malaria elimination, the DR Congo's healthcare system which is poorly equipped with healthcare equipment, is unable to provide effective care to the malaria vulnerable people. While progress in the fight against malaria depends on the strength of the healthcare system, the level of investment in malaria elimination strategies and other factors, such as environmental determinants as well as the social, demographic, and economic realities of the country [3].

In DR Congo, about 30% of its population lives within 5 km of healthcare facilities while 70% do not have access to health care due to geographic and economic barriers in the country [4]. This shows a concentration of healthcare facilities in high economic income sites compared to low-income areas, resulting in a failure to fill these gaps in the provision of malaria control services. To put an end to the high morbidity and mortality rate of Malaria in DR Congo, the Congolese government should seek public health partners to strengthen its healthcare facilities and equipment in order to provide access to eliminate the

associated risk factors of malaria, strengthening malaria healthcare, especially the primary healthcare centers, for the entire population and ensuring the health security of its population, as well as educating the Congolese population about the complications of malaria. It is also important for the Congolese government to also stimulate investment in the development and deployment of a new generation of malaria control tools and equipment to meet the global malaria targets for 2030. Several new malaria vector control tools and technologies have been submitted to the World Health Organization. If these tools are found to be effective in combating the disease [5], the Congolese government and its Ministry of Public Health should make new recommendations to support malaria control reform. As vector control is an essential component of strategies to combat and eliminate malaria, this should be a priority for the Congolese government because it prevents malaria infection and reduces its transmission. The use of insecticide-treated nets, spraying of insecticides, proper drainage system, and cutting down the bushes, against mosquitoes have been known as the main elements in vector control. Measures should be continued to prevent a recurrence of transmission in DR Congo but, also, the Congolese government should strengthen the improvement of malaria surveillance by mobilizing a medical team to carry out the continuous and systematic collection, analysis and interpretation of malaria data, as well as implementation research on malaria, and the One Health approach in preventing malaria.

<https://doi.org/10.1016/j.nmni.2023.101160>

Received 27 April 2023; Received in revised form 8 June 2023; Accepted 13 June 2023

Article published online: 14 June 2023

2052-2975/© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Rodrigue Fikiri Bavurhe^{*}, Aymar Akilimali^{**}, Bonk Muhoza
Faculty of Medicine, Official University of Bukavu, Bukavu, Democratic
Republic of the Congo
Department of Research, Medical Research Circle (MedReC), Bukavu,
Democratic Republic of the Congo

Chrispin Biamba
Department of Research, Medical Research Circle (MedReC), Bukavu,
Democratic Republic of the Congo
Faculty of Medicine, University of Goma, Goma, Democratic Republic of the
Congo
E-mail address: uwezobiambachrispin@gmail.com.

Malik Olatunde Oduoye
College of Medical Sciences, Ahmadu Bello University, Zaria, Nigeria
E-mail address: malikolatunde36@gmail.com.

Gaston Masimango
Faculty of Medicine, Official University of Bukavu, Bukavu, Democratic
Republic of the Congo
Department of Research, Medical Research Circle (MedReC), Bukavu,
Democratic Republic of the Congo
E-mail address: gastonmasimango03@gmail.com.

Hugues Cakwira
Department of Research, Medical Research Circle (MedReC), Bukavu,
Democratic Republic of the Congo
Faculty of Medicine, Catholic University of Bukavu, Bukavu, Democratic
Republic of the Congo
E-mail address: huguescakyr@gmail.co.

Alain Balume

Faculty of Medicine, Official University of Bukavu, Bukavu, Democratic
Republic of the Congo
Department of Research, Medical Research Circle (MedReC), Bukavu,
Democratic Republic of the Congo
E-mail address: alvinbalume@gmail.com.

Ricardo Bisimwa Rusenyi
Faculty of Medicine, University of Goma, Goma, Democratic Republic of the
Congo
E-mail address: rrusenyi@gmail.com.

Fabrice Kibukila
Faculty of Medicine, Official University of Bukavu, Bukavu, Democratic
Republic of the Congo
Department of Research, Medical Research Circle (MedReC), Bukavu,
Democratic Republic of the Congo
E-mail address: fabricekibukila92@gmail.com.

Olivier Nyakio
Faculty of Medicine, Official University of Bukavu, Bukavu, Democratic
Republic of the Congo
E-mail address: oliviernyakio@yahoo.fr.

^{*} Corresponding author. Faculty of medicine, Official University of
Bukavu, Av. Georges Defour 00, Kadutu, 570, Bukavu, South Kivu,
Democratic Republic of the Congo.

^{**} Corresponding author. Faculty of Medicine, Official University of
Bukavu, Bukavu, Democratic Republic of the Congo.
E-mail addresses: rodfikbav@gmail.com (R.F. Bavurhe),
aymarakilimali@gmail.com (A. Akilimali),
bonkmuhozagasambi73@gmail.com (B. Muhoza).