ELSEVIER

Contents lists available at ScienceDirect

# Annals of Medicine and Surgery

journal homepage: www.elsevier.com/locate/amsu



# Commentary

## Nigeria End Malaria Council: What to expect



ABSTRACT

Following the World Health Organization 2021 report of Nigeria being the leading country among the four African countries responsible for half of the malaria mortality all over the world, the President of Nigeria, on August 16, 2022, inaugurated the Nigeria End Malaria Council to reduce the malaria burden in the country, serves as a platform to solicit funds for promoting malaria elimination in the country and to ensure the good life and wellbeing of the people. National End Malaria Council is an intervention that has been tested with proven track records of progressive success in malaria control and reduction in the countries where it has been established. With the establishment of the Nigeria End Malaria Council, we can be expectant of a malaria-free country in no time if the aims and objectives of the council are sustained and effectively carried out.

#### 1. Background

Malaria is endemic in about 32 countries in Sub-Saharan Africa, and these countries are responsible for almost 93% of malaria death worldwide. It is a major public health challenge in Nigeria; being one of the countries with the highest burden of the disease. Nigeria (31.9%) is the leading country among the four African countries responsible for half of the malaria mortality all over the world [1]. Globally, there are various interventions, programs, and strategies employed to eradicate malaria. Interventions such as the Roll Back Malaria (RBM) initiative designs for quick malaria detection, treatment, and prevention [2], the WHO Global Technical Strategy for Malaria 2016-2030 to aid malaria eradication [3], E-2025 initiative; another WHO initiative to reduce the spread of malaria in twenty-five countries [4]. In Nigeria, as well as some other African countries, there are various existing programs. strategies, and interventions for malaria elimination. These include the National Malaria Control Program (NMCP), the National Malaria Elimination Program (NMEP), the National Malaria Strategic Plan [5], and the most recently inaugurated Nigeria End Malaria Council in August 2022 [6]. All these are strategies to eliminate malaria in the country (see Figs. 1 and 2).

On August 16, 2022, the President of Nigeria inaugurated a 16-member council known as the Nigeria End Malaria Council. This is not the first time such a council would be established in an attempt to eradicate malaria in Africa. Zambia is the country that first established the council [7,8], and as of 2021, the council has already been launched in Kenya, Eswatini, Mozambique, Uganda, and also announced in South Africa, Cameroon, and Burkina Faso [9].

In this paper, we are looking at the achievements that the African countries that have successfully established the End Malaria Council have made toward malaria elimination through the council and predict their results as the most possible outcomes for Nigeria if the aims and objectives of the council are sustained.

## 2. Who are the End Malaria Council?

The National End Malaria Councils (EMCs) are recognized as public-

private alliances established to advance the fight against the malaria challenge [8]. It is a forum that gathers senior government leaders to support the National Malaria Control Program (NMCP) and guarantee the establishment of the National Malaria Strategic Plan. Individual nations may own or run EMCs, with the National Strategic Plan serving as its framework. Administrative secretaries who plan events and keep track of all activities, such as commitments made, yearly reports, and collaboration with the NMCP, may assist them [8].

The council may consist of people from various national industries, community, public, and private sectors. In 2019, Zambia established a 16-member committee with four members of civil society, five ministers, and five private sector companies and trade associations. The council is led by the health minister. African nations like Kenya, Uganda, Zambia, Mozambique, and Eswatini have EMCs operating and are scaling up their efforts to lessen the malaria burden. Funds and communications campaigns, amongst others, are used to support their responses. To end malaria, EMCs are in charge of soliciting commitments and collaborating with numerous other sectors to obtain the most remarkable results for their nation. The role of EMCs is to mobilize commitments to remove any obstacles preventing the implementation of the national malaria strategic plan (NMSP) [8].

African Leaders Malaria Alliance (ALMA) points out how the EMCs work; EMCs will set up meetings with NMCP to know more about the status of malaria control and elimination efforts, the gaps in operation, and actions that strengthen credible sharing of information. Challenges to the EMCs, such as policy, recommendations, operational gaps, and funding shortages, will be related to and identified by NMCPs. The EMCs will then work with other sectors to solicit commitments through "accountability," "resources," "action," and "advocacy". EMCs track commitments and forward them to the NMCP, which is responsible for seeing that the national strategic plan is carried out. They ensure monitoring and accountability for the support and commitments received from the sectors [8].

Nigeria established the Nigeria End Malaria Council (NEMC) on August 16, 2022, to increase its dedication and commitment to eradicating malaria transmission and threats. The promotion of healthy living will be one of the NEMC's duties [6]. The NEMC will ensure that the

https://doi.org/10.1016/j.amsu.2022.104690

Received 6 September 2022; Accepted 10 September 2022 Available online 15 September 2022

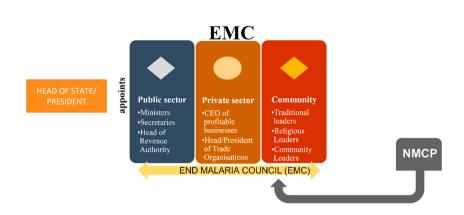


Fig. 1. A diagram identifying various sectors of the EMC [11].



Fig. 2. A diagram showing the activities of the End Malaria Council [16].

objectives of the current national malaria strategy plan (2021–2025) are met with the minimum possible limitations and impediments [10].

## 3. Current malaria elimination programs in Nigeria

There has been a lot of improvement in the fight against malaria in Nigeria, even as pertaining to national and community development. Essential malaria control investments have been made in the last decades in Nigeria through the National Malaria Strategic Plan (NMSP), partnership and implementation. Transcending history, the Roll Back Malaria (RBM) was founded in November 1998 to mobilize resources and actions against malaria globally [12]. It was launched in April 2000 in Abuja Nigeria bringing together multilateral, bilateral, non-governmental and private organizations for partnership locally and globally to provide financial resources, commodities and technical

support to RBM interventions in Nigeria. It made a clear pledge – to halve death from malaria by 2010 as well as a marked reduction to pre-elimination levels at the end of 2020 [12].

Key strategies included – confirmatory test using Rapid Diagnostic Tools (RDT); encouraging the populace to habitually utilize preventive measures; effective Artemisinin-based Combination Therapy following the discouraged use of Chloroquine due to resistance [13]; and strengthening governance and coordination of all stakeholders for effective programme implementation towards an 'A' rating. To further give credence to the commitment of the Government of Nigeria towards the goal of elimination of malaria, the Federal Council on Health renamed the National Malaria Control Programme (NMCP) as National Malaria Elimination Programme (NMEP) [12]. Unfortunately, the fight against malaria remains "a tug of war" in Nigeria in spite of the periodical strategy review. Nigeria was omitted by WHO from the list of countries that achieved the 2020 milestone of reducing malaria incidence and deaths [14].

Notable advancement to the global elimination of malaria is the discovery of the RTS,S malaria vaccine to reduce infant mortality from the disease in Africa. According to WHO (2021), the vaccine scaled clinical trials against *Plasmodium falciparum* and has been administered in three African countries – Ghana, Kenya and Malawi. The next steps for the WHO recommended vaccine will include funding decision from the global health community for broader roll out and its adoption as part of the national malaria control strategy [15]. On the heels of the vaccine's success, there are strong indications that the vaccine will soon be available to sub Saharan African countries. Deliberate strategies to achieve these plans led to the inauguration of the National End Malaria Council in Nigeria [6].

# 4. What to expect from Nigeria End Malaria Council

The recently established End Malaria Council in Nigeria is a positive move. As a result of this development, there are rising hopes that this council will ensure that malaria is eradicated in Nigeria. Since malaria incidence and prevalence have fluctuated in Nigeria over the past ten years, it is still crucial to eradicate the disease in order to protect public health.

The mobilization of the End Malaria Fund (EMF) was the next step that some African nations that had established their EMC took [16]. Beyond the fact that it is one of the council's duties to gather financial, and service commitments, it is crucial moving forward in the fight against malaria. The End Malaria Fund is established to supplement and bridge a nation's limited resources for the NMSP's implementation and the battle against malaria [16]. The EMF may be established as a council subcommittee, with a few members given control over that duty. The

EMF will enable the National Strategic Plan (NSP), which needs sufficient resources, to be implemented smoothly Little to no funding of malaria epidemics will lead to nothing but unrealized goals [16].

Countries that have launched the EMC Council like Zambia, Eswatini, Kenya, Uganda, and Mozambique boast of various investments from different sectors in support of their quest for malaria-free countries. More than \$23 M has been invested into these countries' national malaria programs through the councils, also, various media campaigns have been geared towards malaria sensitization, education, advocacy, and elimination through the councils [17]. For example in Zambia through the Zambia End Malaria Council, FLAME, which is the acronym for Faith Leader Advocacy for Malaria Elimination coalition was established. This is to integrate faith communities and religious leaders into its malaria elimination programs to promote unity, a oneness of voice, and adoption as well as the implementation of policies toward malaria elimination in society. Since its creation, the coalition has continuously strengthened its malaria advocacy in different districts, wards, and provinces of the country [18]. This demonstrates one of the possible outcomes to expect from the NEMC as long as the council focuses on and sustains its aims and objectives of establishment.

Another landmark achievement of the EMC in Zambia is the mass drug administration and delivery of insecticides in the North-western province. Over \$300,000 was donated by a private sector member and through the in-kind support of the public sector member and some other private sector members, resources were mobilized for the success of the project [18,19]. Furthermore, in Eswatini through the council, finance was mobilized for the purchase of antimalarial drugs and commodities during the nationwide stock-out [19]. All of these put no pressure on their governments as the structure and system that support these countries' malaria elimination programs in the EMCs are in place. It is certain that as these countries progress with the goals of the EMC, the WHO malaria goal will be achieved far before 2030. The same can be achieved with the Nigeria End Malaria Council. The support and multi-sectoral financial commitment through the council will fasten the effort of malaria elimination programs in the country thereby making the goal of malaria elimination in Nigeria a reality without additional budget from the government.

Additionally, Kenya has employed an innovative idea in fighting malaria by deploying biolarvicide drones to kill mosquito breeding sites and bushes in Bussia, the most endemic area in the country, through the support received by the Kenya End Malaria Council. The integration of technology to fight malaria in the country is a result of the synergy between the country's Malaria Youths Army and the Kenya End Malaria Council. The initiative that started in Bussia is rapidly spreading to other western counties of the country till the region and the country as a whole are malaria-free [20]. This again shows what can be achieved in Nigeria with the inauguration of the EMC in the country. The majority of Nigerian youth are technology savvy and with sustainable and consistent investment through the council in technology, Nigeria may experience a drastic reduction in malaria cases and mortality.

# 5. Conclusion

In conclusion, there is an obvious need to intensify the effort to reduce the malaria burden in the country. National End Malaria Council is an intervention that has been tested in five African countries with proven track records of progressive successes in malaria reduction. With the council inaugurated as part of malaria elimination intervention in the country, we can be expectant of a malaria-free country soon.

## Ethical approval

Not applicable.

#### Sources of funding

No funding received.

## **Author contributions**

TO Sokunbi conceptualized the idea, drafted the outline, coordinated the writing and editing of the paper. JO Omojuyigbe and HA Bakenne contributed to writing and editing of the first draft.

YA Adebisi supervised the writing of the paper, edited the first draft and implemented the changes in the final draft.

All authors approved the publication.

#### Trail registry number

- 1. Name of the registry:
- 2. Unique Identifying number or registration ID:
- 3. Hyperlink to your specific registration (must be publicly accessible and will be checked):

#### Guarantor

Taiwo oluwaseun Sokunbi.

#### Consent

Not applicable.

#### **Declaration of competing interest**

Authors declare no conflict of interest.

## References

- [1] World Health Organization, Malaria, Available from: https://www.who.int/ news-room/fact-sheets/detail/malaria. Accessed 18th August, 2022.
- [2] Olorunfemi Emmanuel Amoran, Impact of health education intervention on malaria prevention practices among nursing mothers in rural communities in Nigeria, Niger. Med. J. 54 (2) (2013) 115–122.
- World Health Organization, Global technical strategy for malaria 2016-2030, 2021 update, Available from: https://www.who.int/publications/i/item/9789 240031357. Accessed 18th August, 2022.
- [4] Reliefweb. World, Malaria Report 2021. Available from: https://reliefweb.int/report/world/world-malaria-report-2021. Accessed 18th August, 2022.
- [5] Omosivie Maduka, End malaria for good: a review of current strategies and future novelties for malaria elimination in Nigeria, Malaria World J. 9 (2018) 2214–4374.
- [6] Channels. Buhari Launches Nigeria End Malaria Council in Abuja. Available from: htt ps://www.channelstv.com/2022/08/16/buhari-launches-nigeria-end-malariacouncil-in-abuja/. Accessed 18th August, 2022.
- [7] Zambia National Malaria Elimination Center, End malaria council Zambia, Available from: https://www.nmec.org.zm/emc. Accessed 19th August, 2022.
- [8] ALMA Scorecard Hub, End malaria councils and funds introduction, Available from: https://scorecardhub.org/emc/end-malaria-councils-and-funds-introduction/. Accessed 17th August, 2022.
- [9] ALMA Scorecard Hub, End malaria councils and funds webinar, 19<sup>th</sup> August, https://scorecardhub.org/events/end-malaria-councils-and-funds-webinar/.
- [10] Malaria Consortium, Inauguration ceremony and launch of the Nigeria end malaria council, Available from: https://www.malariaconsortium.org/news-centre/inaugu ration-ceremony-and-launch-of-the-nigeria-end-malaria-council.htm. Accessed 18th August. 2022.
- [11] Worldwide Antimalarial Resistance Network, End Malaria Leadership Council launched at the World Economic Forum 2017. Available from: https://www.wwarn. org/news/news-articles/end-malaria-leadership-council-launched-world-econ omic-forum-2017. Accessed 18th August, 2022.
- [12] Nigeria Federal Ministry of Health, National strategic plan 2014 2020, Available from: https://www.health.gov.ng/doc/NMEP-Strategic-Plan.pdf. Accessed 19th August, 2022.
- [13] O.O. Oladipo, O.A. Wellington, C.J. Sutherland, Persistence of chloroquineresistant haplotypes of Plasmodium falciparum in children with uncomplicated Malaria in Lagos, Nigeria, four years after change of chloroquine as first-line antimalarial medicine, Diagn. Pathol. 10 (2015) 41, https://doi.org/10.1186/ s13000-015-0276-2.
- [14] G.T. Banda, K. Deribe, G. Davey, How can we better integrate the prevention, treatment, control and elimination of neglected tropical diseases with other health interventions? A systematic review, BMJ Global Health 6 (10) (2021), e006968, https://doi.org/10.1136/bmjgh-2021-006968, 2021.

- [15] World Health Organization, WHO recommends groundbreaking malaria vaccine for children at risk, Available from: https://www.who.int/news/item/06-10-20 21-who-recommends-groundbreaking-malaria-vaccine-for-children-at-risk. Accessed 19th August, 2022.
- [16] A.L.M.A. End, Malaria councils and funds, Available from: https://alma2030.org/wp-content/uploads/2020/02/EMC-Background-min.pdf. Accessed 17th August, 2022.
- [17] African Leaders Malaria Alliance, ALMA welcomes the inauguration of Africa's 6th end malaria council, Available from: https://alma2030.org/news/alma-welcome s-the-inauguration-of-africas-6th-end-malaria-council/. Accessed 20th August, 2022.
- [18] Institute for Global Health Sciences, J.C Flowers Foundation, end malaria council, FLAME. All-of-Society Approaches to Malaria Elimination: Examples from Thailand and Zambia. Pages 4-6 Available from: http://malariaeradicationcommission.com/ sites/default/files/lcme-briefing-all-of-society-approaches-to-elimination.pdf Accessed 20th August, 2022.
- [19] SpeakUpAfrica Africa, Countries step up investments to fight malaria, but more needed to reach zero malaria across the continent, Available from: https://www. speakupafrica.org/african-countries-step-up-investments-to-fight-malaria-but-

- ${\color{blue} more-needed-to-reach-zero-malaria-across-the-continent/.}~Accessed~20th~August, 2022.$
- [20] NATION, Drones to help fight mosquitoes as war on malaria intensifies, Available from: https://nation.africa/kenya/news/drones-to-help-fight-mosquitoes-as-waron-malaria-intensifies-3896890. Accessed 20th August, 2022.

Taiwo Oluwaseun Sokunbi<sup>\*</sup>, Jeremiah Oluwamayowa Omojuyigbe, Habib Ademola Bakenne Obafemi Awolowo University, Faculty of Pharmacy, Ile-Ife, 220101, Nigeria

Yusuff Adebayo Adebisi University of Ibadan, Faculty of Pharmacy, Ibadan, 220101, Nigeria

\* Corresponding author. Faculty of Pharmacy, Obafemi Awolowo
University, Ile-Ife, Nigeria.

E-mail address: taiwoemmanuel070@gmail.com (T.O. Sokunbi).