

## An evolutionary learning pharmaceutical laboratory for cost-saving eradication of malaria in sub-saharan through phytobiotechnology

**Kenneth Yongabi Anchang**

Catholic University School of Medicine and Health Sciences, Cameroon

The World Health Organization (WHO) has acknowledged that “Science still has no Magic bullet for malaria and many do doubt that such a single solution will ever exist.” In this presentation, focus on the extent of the malaria burden as a global health challenge, particularly in sub-Saharan Africa (SSA), is discussed. Current and past intervention strategies are reexamined in the light of myths, sociocultural issues plaguing the sustained use of Long Lasting Insecticide treated bed nets is highlighted. In this study, emergence of *Plasmodium falciparum* malarial to Artemisinin based combination therapy and sulfadoxine/pyrimethamine is presented as well as anti-vector resistance, challenges with vaccines technology, cost barriers militating against effective eradication of the disease. We conclude this study by presenting the results of the in vitro effect of a peptide of 12kDa isolated from the aqueous extract of moringa oleifera seeds and beta glucan isolated from sporophore of *Ganoderma lucidum* both used in local healing formulae in across Africa, inhibiting the development of *Plasmodium berghei* in lab mice. The potential application of Phytopharmaceuticals and nutraceuticals in the treatment of malaria in Sub-Saharan Africa is emphasized. An Evolutionary Learning Pharmaceutical Laboratory (ELPLab), consisting of a systems approach for cost effective innovations for the possible eradication of malaria is also proposed.

### Biography

Kenneth Yongabi Anchang is a Professor of Public Health infectiology with specialty in tropical infectious diseases and public health engineering at the School of health and medical sciences, Catholic University of Cameroon. Kenneth did his Ph.D. in Chemical Engineering (Biomedical) at the University of Adelaide, Australia and a Doctor of Science, and Msc in Clinical infectious diseases and clinical/medical microbiology and naturopathic Medicine in Nigeria and in the USA respectively. He has more than 50 publications in many local and international journals, one book and three scholarly book chapters spanning through phytopharmaceuticals, infectious diseases, clinical microbiology and bioengineering. Part of his pioneering work on Phytobiotechnology concept was published in the UNESCO enclopaedia of life Support Systems in 2009. Furthermore, his research works in this area has been translated into community projects in Africa where Kenneth built the first ecological water filtration unit in Cameroon using Phytodisinfectants filter system for generating clean water to local school Children and set up a local clinic and laboratory for screening phytoproducts from plants and macro fungi in Cameroon for the treatment of HIV/AIDS, malaria and some neglected tropical diseases. He mentors several students at undergraduate and post graduate since 2005 in Nigeria where he was lecturer at ATB University, Bauchi for 5 years and presently now in Cameroon. He is also an honorary fellow at the University of Wisconsin- Madison in the USA. He is Director of research at the Phytobiotechnology research Institute of the Catholic University of Cameroon, Bamenda.

yongabika@yahoo.com