Investigation of Malaria by Microscopy among Febrile Outpatients of a Semirural Nigerian Medical Center: What Happened to Malaria Control Programs?

Dear Editor,

I read with great interest the distinguished study by Michael *et al*.[1] published in the January–June 2019 issue of the *Nigerian Journal of General Practice*. The authors assessed how common malaria was among febrile patients attending a semirural medical center in Nigeria. On employing microscopy, they found that the malaria prevalence was worryingly high (65.5%).[1] Accordingly, they suggested the need to review or modify the current malaria control programs in Nigeria employing more comprehensive strategies to lessen malaria-related morbidity and mortality.[1] I presume that the study results ought to be interpreted cautiously. The authors mentioned few study limitations including the following; it was a hospital-based study; the actual prevalence of malaria might be underestimated as many patients might be treated at primary health-care posts; and it could not exclude participants who could not confirm the use of antimalarial drugs at home.[1] I presume that the following methodological limitation might cast additional suspicions on the study results. It is related to the diagnostic laboratory tool employed in the study. It is explicit that microscopy using Giemsa-stained blood film has been the cornerstone in the diagnosis of malaria for many decades. In 1993, the rapid diagnostic test (RDT) kits were introduced into the clinical setting. In a recently published Nigerian study on the diagnosis of malaria, comparing the accuracy of microscopy and three RDT kits, while employing nested polymerase chain reaction (PCR) as the reference diagnostic standard, revealed interesting results.[2] The prevalence of malaria was 25.95% as detected by microscopy; the prevalence found among the RDTs was 22.90%, 15.20%, and 54.80% for CareStart, SD Bioline PF, and SD Bioline PF/PV, respectively. However, PCR yielded a prevalence of 32%.[2] The study recommended routine diagnosis of malaria by the combination of both microscopy and a RDT kit of high sensitivity and specificity to complement the errors associated with either of the methods.[2] I wonder why Michael *et al*.[1] did not follow that recommendation in their study methodology. I presume that if they employed that methodological protocol, more precise results might be obtained.

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Conflicts of interest

There are no conflicts of interest.

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