In Response

Describing Chronic Malaria Infections

Dear Sir,

How one thinks about a problem is more important than the specific name used.^{1,2}

Immunity implies a binary outcome, whereas tolerance is more indicative of a spectrum of outcomes. The purpose of presenting the old epidemiology data from Africa and Panama was to remind readers that even before molecular methods of parasite detection, malaria was largely a chronic infection with a variety of outcomes. Even under the worst possible conditions, the case fatality rate of falciparum malaria was relatively low as described in my other article in the same issue of *Am J Trop Med Hyg*.³

The practical importance of how one thinks about malaria infections is focused on current efforts to eradicate malaria. Is malaria immunity a hard-won status easily lost when infections are eliminated or does chronic parasitemia create tolerance which maintains an on-going risk of malaria-associated mortality? How one understands such a question is critical to malaria eradication and the commitment of large resources toward this goal.⁴ We should not condemn a large proportion of humanity to live in malaria-endemic areas because of our limited understanding of malaria immunity.

GEORGE DENNIS SHANKS
*Australian Defence Force Malaria and
Infectious Disease Institute
Enoggera, Australia
E-mail: dennis.shanks@defence.gov.au*

This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

REFERENCES

1. Taylor-Robinson AW, 2019. Describing Chronic Malaria Infections. *Am J Trop Med Hyg* 100: 1033.
2. Shanks GD, 2019. Tolerance may be more appropriate than immunity when describing chronic malaria infections. *Am J Trop Med Hyg* 100: 497–500.
3. Shanks GD, 2019. Malaria-associated mortality in Australian and British prisoners of war on the Thai-Burma railway 1943–1944. *Am J Trop Med Hyg* 100: 846–850.
4. Lancet Commission on Malaria Eradication. Malaria eradication within a generation: ambitious, achievable and necessary. *Lancet* (In press).