

## **COMMENT**

## Global Pediatric Research Investigator: Andrew Ssemata

Andrew Ssemata<sup>1</sup> and Chandy John<sup>2</sup>

Pediatric Research (2020) 88:356; https://doi.org/10.1038/s41390-020-1028-x

I grew up in Nakawa division, East of Kampala, the capital city of Uganda. I hold a Masters of Science in Psychology of Health and Illness from Aston University, Birmingham in the United Kingdom and a Bachelor of Community Psychology from Makerere University, Kampala. I have participated in child health, HIV, and malaria research at Mulago National Referral Hospital, Kampala. I gained interest in pediatric research when I joined the Makerere University—University of Minnesota Cerebral Malaria Research Collaboration, now known as Global Health Uganda.

After my first degree, I served as a home health visitor for the Pathogenesis of cognitive/neurologic deficits in central nervous system malaria (PI—C.J.). We aimed to establish the areas, frequency, and severity of cognitive and neurologic function affected by cerebral malaria and to identify the immunologic/inflammatory and genetic factors associated with cognitive and neurologic deficits in children in children of different ages (18 months–4 years, 5–12 years) with cerebral malaria.

After my second degree, I served as a clinical trial coordinator for the Acute vs. Delayed Iron Therapy: Effect on Iron Status, Anemia and Cognition (PI—C.J.). The study sought to assess whether delaying iron treatment until after malaria-related inflammation is reduced leads to improved iron status, hemoglobin level, and neurocognitive outcomes. I also supported a clinical trial titled Acute vs. Delayed Iron: Effect on Red Cell Iron Incorporation in Severe Malaria among Ugandan children aged 6–36 months (PI–S.C.). The study sought to identify the sequencing of antimalarial treatment and iron therapy that results in the greatest red cell iron incorporation at the time of initial iron supplement administration and to determine whether long-term hematological recovery is impacted by immediate vs. delayed iron.

I later joined the Department of Psychiatry, Makerere University for a doctoral degree studying the effect of severe anemia and Iron therapy timing on cognitive and behavioral outcomes among Ugandan children below 5 years. This is important as iron deficiency and malaria coexist in sub-Saharan Africa and frequently lead to severe anemia, cognitive impairment, and mortality among children below 5 years of age.

I have completed an honorary research fellowship at Aston University and Birmingham Children's Hospital, Birmingham UK supported by Commonwealth Scholarship Commission and remain involved in child and adolescent health projects in Uganda while working on finalizing my Ph.D. My research career benefits from the enriched multidisciplinary research mentorship from renowned experts in malaria, iron deficiency, and neuropsychology, and has been key fulfilling my research interest in infectious diseases and neuropsychology. My interest is to look further into possible local and simple interventions to improve neurocognition in children after malarial illness.



## **AUTHOR CONTRIBUTIONS**

A.S. wrote and drafted the commentary. C.J. edited the manuscript and was the senior author on the recent publication.

## **ADDITIONAL INFORMATION**

Competing interests: The authors declare no competing interests.

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

<sup>1</sup>Makerere University College of Health Sciences, Kampala, Uganda and <sup>2</sup>Indiana University School of Medicine, Indianapolis, IN, USA Correspondence: Chandy John (chjohn@iu.edu)

Received: 3 June 2020 Accepted: 10 June 2020

Published online: 22 June 2020