

# Experimenting with mentoring “junior” authors to encourage scientific publications in Malawi

Adamson S. Muula<sup>1,2</sup>

1. Editor in Chief, Malawi Medical Journal ([www.mmj.mw](http://www.mmj.mw))  
 2. Professor and Head, Department of Public Health, School of Public Health and Family Medicine, The Kamuzu University of Health Sciences (formerly College of Medicine of the University of Malawi)

*“Many physicians would prefer passing a small kidney stone to presenting a paper.”* Anonymous

The conclusion that there is lack of, or inadequate numbers of scientific publications coming out of Africa compared to the continent’s human population or worse still, land mass, is what those with a reasonable grasp of English refer to as “no brainer”, meaning it doesn’t require any effort to conclude. Depending on which data sources one uses and for which time period, many people agree that not more than 2% of all (global) scientific articles come out of Africa<sup>1-3</sup>. For some awkward reasons, sometimes these data are disaggregated between North and sub-Saharan Africa.

The reasons for the limited annual number of scientific publications have (previously) been presented, but not so much discussed or evaluated comprehensively. And in part, there lies the scarcity of solutions to this age-old problem. We have also not so much discussed why it matters that Africa speeds up progress in joining the rest of the international community. Written differently, what are scientific publications for? What purpose do they serve over and above career progression in academic ivory towers? We may also need to do a root-cause analysis as to how or why Africa finds itself in this situation. And for those who are classically inclined, they may use the Socratic way of knowing. Why are things the way they are?

The common reason given for the dearth in scientific publications from Africa is funding. In an environment most described as “resource-limited” or “developing”, few people can fault anyone from making such conclusion. And there is some merit in the conclusion. Funding. Much of the overt research funds in Africa are from high-income countries; thank you very much. The research dollars allocated from local resources are largely unrecorded. Yet, research funding from (usually) the United States and Europe to Africa cannot meet all the research needs of the continent. We can debate on whether the international community (defined as non-African) sources should be increased in the spirit of global health.

Next to international funding sources are local or national resources. This is where the future is anchored. African governments, private industry and philanthropists must increase funding allocations to scientific research. Whether this is just wishful thinking among those perched in the ivory towers or is a worthwhile aspiration of many, remains to be seen. Significant amounts of the local research funding

comes from personal funds from students and faculty who may not get fellowships and grants to support their research projects. It is not uncommon to have postgraduate students whose research budgets are from their own salaries, spouses and relatives.

How do we improve the number(s) of scientific publications in Africa? Funding, for sure, must be increased. But what is it that we will do with the funds once we have them? I suspect we didn’t think enough about that because in any case, although we have always wanted more funds, we have also gotten used to the fact that such monies won’t come. So it appears we have not troubled ourselves with attempting to answer such difficult and important questions.

One group of people which has attempted to answer the question as to what shall we do if we had funds to build the academy (including with the capacity or capability of producing high quality scientific articles) is the CARTA Consortium<sup>4,5</sup>. The Consortium recruits fellows from among junior not-yet-with-PhDs faculty of member institutions and takes them through the scientific pipeline from research protocol formulation to their post-doctoral period. In short, CARTA has attempted to answer the question as to what shall we do should we have the funds to build the African academy

The *Malawi Medical Journal* (MMJ) at [www.mmj.mw](http://www.mmj.mw) has learned from different experiences of which its editorial board members and the “journal owners” have been exposed to. Noting that committed and effective manuscript reviewers are the heart-beat of our journal, we have, from time to time, trained our reviewers using funds from the parent university and the African Journal Partnership Programme (AJPP). Furthermore and lately, borrowing from the CARTA model and using some of its resources plus AJPP resources, we have implemented manuscript writing retreats for postgraduate students. We have also interested some young researchers enrolled as fellows through the NCD Brite Consortium 7 funded by the US Government’s National Heart, Lung, Blood and Sleep (NHLBS) Institute to enroll in these retreats.

At these retreat, we bring together upcoming and experienced authors (several are CARTA graduates themselves) for mentorship in scientific journal manuscript writing. We provide some didactic teaching on how to write a title of a journal article, and the other parts of a scientific article following the IMRAD format<sup>6</sup>. Our faculty comprise accomplished authors in the fields of public and population health. We ensure that we have faculty to balance different research approaches: qualitative, quantitative and mixed-methods approaches. At each of the retreats, we also have two to three biostatisticians. Each day, we spend at most three hours of didactic teaching, while the rest of the time is dedicated to one-on-one consultations and individual manuscript writing. Participants send their manuscripts to

faculty overnight for feedback by morning or latest midday the following day. One on one support continues after the retreat until the manuscript is ready for submission to a journal.

The majority of junior researchers participating have had no prior publications. From January to June 2021, we have been able to mentor 67 young scientists, some of whom have been able to complete and submit their manuscripts; several of which are published in this supplement. We are assured that many other manuscripts will be submitted to relevant other journals; and we believe they will be published and add to the scientific literature from Africa, south of the Sahara! In doing what we are doing, we want to learn, and if possible demonstrate, that deliberately-designed writing retreats, following tried and tested models such as the CARTA<sup>5,9</sup> example, can be used to improve scientific publications in Africa. We plan to count. How many will have attended our writing retreats by the end of 2021, and how many articles would have been published by the end of 2022. We are also using the CARTA model to inform the implementation of the NCD Brite work referred to elsewhere<sup>10</sup>.

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### Conflict of Interest

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