

EDITORIAL

Sierra Leone Journal of Biomedical Research (SLJBR) and Partners Building Research Capacity in Sierra Leone

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Despite comprising 12.5 percent of the world's population, Africa accounts for less than 1 percent of global scientific research output (1, 2, 11-12). Scientific production, infrastructure, and research is growing in some African countries with Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa, Tunisia, Mozambique, Rwanda, and Zambia accounting for the highest number of authors (4). However, Sierra Leone and vast majority of African countries still lack access to the tools and skills that would help them increase research publication output. Researchers in Sierra Leone and many African countries are still impacted by limited access to local and external funding mechanisms, high cost of publication fees, weak research infrastructure, lack of nurturing and mentoring programs, viable ways to disseminate research in the global community (3,4-7). For instance, the number of quality manuscripts submitted by Sierra Leonean authors to SLJBR accounts for less than five percent of the journal publication from 2018 to 2023.

Promoting and nurturing research for health in Sierra Leone is fundamental for health systems strengthening, promoting local and global health securities and well-being of the population. Building research capacity in Sierra Leone and Africa is a core component of global health securities and is crucial for

several reasons. First, Africa carries 20-30% of the global disease burden (4) and considering epidemics and our mobility, nowhere is safe and no one is disconnected. Second, Africans represents the oldest and most diverse genomes, which can help shed light on diseases that affects humans in Africa and across the world. Third, it will curb the brain drain of African STEM scientists and allow Africa to benefit from its talent at home (8-10). Fourth, increase research publications enables utilization of the data into packets of information that informs policy decision making. Finally, research is a vital driver of socio-economic growth, which can allow Africa to take greater ownership and leadership in health and developmental well-being (2,3,4).

Considering the above significance of research nationally and internationally, the Sierra Leone Journal of Biomedical Research (SLJBR) and partners African Journal Partnership Program (AJPP), United States Centers for Disease Prevention and Control (USCDC), and Sierra Leone Field Epidemiology Training Program (SL FETP) implemented by African Field Epidemiology Network (AFENET) embarked on series of scientific manuscript writing and peer review workshops in Sierra Leone. The manuscript writing workshops targeted junior faculty at the Universities and health professionals from the Ministry of Health and partner

organizations. The peer review workshop targeted senior researchers from the Universities and professionals from the Ministry of Health and partner organizations. The specific aims of the workshops were to promote biomedical and public health scientific research output as well as the documentation and dissemination in journals locally and internationally. To achieve this aim, we utilize the following high-level strategies; 1) training in academic research writing, authorship, and publication process for Sierra Leonean authors, young and seasoned investigators to achieve publication success, and 2) create platform for mentoring and nurturing talents through opportunities for networking and collaborations. The overall objectives were to, 1) strengthen health system through basic and operational research in Sierra Leone, 2) increase quantity of Sierra Leonean authors in biomedical and Public Health research, 3) increase global competitiveness of published articles by improving or enhancing quality of submitted manuscripts, 4) promote documentation and dissemination of experiences in Public Health from the laboratory to the field, and 5) help promote Public Health decision making, management, research, and development in Sierra Leone.

The workshops were facilitated by expert professional researchers drawn from local Universities, USCDC, AFENET, London School of Hygiene and Tropical Medicine (LSHTM), SLJBR partner journal Lancet Global Health, and the Ministry of Health and Sanitation. The expected outcomes were that participants, 1) gain insights into the art of manuscript writing for scientific journals and at least 10 manuscripts draft are expected to

be submitted for publication in SLJBR and other Journals, 2) participants were able to map existing research landscape and building collaborative network of researchers from academia to government and partners, 3) some of the key ethical issues in research and publishing discussed and understood, 4) participants were able to learn how to balance different factors to select an appropriate target journal for their work, 5) define the focus and contribution of their paper, 6) Write a working abstract for their research paper, 7) develop the body of their research paper including the key elements, 8) understand peer review process and be able to critically review articles, and Develop a strategy to achieve publication success.

As a result of these workshops (five in total now) organized by SLJBR and partners (AJPP, USCDC and AFENET) in the cities of Bo, Makeni and Freetown, the SLJBR alone has received over 20 submissions of original manuscripts from participants that are under peer review; over 10 of these submissions have been accepted for publication following peer review. The number of local submissions of manuscripts to SLJBR has increased significantly (greater than 10-fold) over the last few years. At the same time, the quality of the manuscripts submitted has also improved significantly. The number of abstracts of participants accepted to international scientific conferences, symposia, and meetings has also risen significantly. For instance, seven out of seven abstracts submitted to TephNet conference in Panama last year by workshop participants were accepted for the meeting. Similarly, the peer review training of senior researchers has increased the pool of

potential reviewers, resulting in quality of the reviews and turnaround time for decision on manuscript. Overall, despite the numerous research and development challenges in Sierra Leone, efforts by SLJBR and partners in the last two years to promote scientific technical writing and review in Sierra Leone is yielding positive dividends for the country.

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