

**Guest Editor, Sandrine Lecour**

Professor and Head of Cardioprotection Group, Hatter Institute,  
Department of Medicine, University of Cape Town, South Africa.

## Developing writing skills is critical in cardiovascular research training

It is now well established that Africa is undergoing a more rapid increase in the prevalence of cardiovascular disease (CVD) than other continents such as North America and Europe, at least in part, due to rapid urbanisation and a westernised lifestyle.<sup>(1)</sup> Most importantly, Africa is also facing its own challenges with different types of risk factors, etiology and forms of CVD compared to other continents. There is an urgent need for cutting-edge research aimed at achieving a better understanding of CVD in Africa and developing adequate therapies for African patients. To ensure that the required cutting-edge research is performed, it is essential to create a skills base capable of delivering such research programmes on the continent.

A critical aspect which is often neglected in the research training of postgraduate students is the need to teach scientific communication skills. Over the past few years, the South African Heart association has provided an excellent platform to facilitate the teaching of these scientific communication skills. Through the creation of its cardiovascular research interest group (South African Society for Cardiovascular Research) in 2009, the South African Heart Association has offered the possibility for cardiovascular research postgraduate students to attend and contribute to various national and international workshops and events that aim specifically at facilitating the active oral participation and training of postgraduate students.<sup>(2)</sup>

Unfortunately, the development of writing communication skills is often neglected during the curriculum of our postgraduate programmes. Basic and clinical researchers registering for a PhD degree will rapidly realise that publishing during the PhD is critical if they wish to pursue an academic career. It is often debated what the minimum number of publications should be during an MPhil or PhD degree. The numbers mentioned across the globe are generally considered to be 1 for a MPhil and 3 for a PhD. These numbers will depend on several factors, including the type of research project, the success of the research project and the standard of the academic journals to which the article will be submitted. At times, aspects of confidentiality also play a role e.g. when patent registration is pending or when research performed in collaboration with industry impacts on the timing of reporting the results. Furthermore, the success of the project cannot be predicted at the start of the PhD and disappointment is often experienced during the course of the study when research does not always go according to plan.

Within the first months after registration of a Masters or PhD degree, students devote most of their time searching for the updated literature related to the research project, with the objective to write their research project proposals. It is often at this stage that the student suddenly discovers that the scientific writing style differs significantly from the classic English writing style.

In fact, the student is taught, by the supervisors and/or through an organised course at their University, to think and write critically, facing the challenge to correctly balance both descriptive and critical writing in the research proposal. The approval of this proposal by the supervisors and the Head of Department will subsequently be validated by the University Doctoral Degrees Board and the student will officially be entitled to pursue the degree for which he or she has registered.

Recently, the SA Heart Journal has initiated a new feature namely considering manuscripts featuring research hypotheses. The editorial team believe that this type of submission from young researchers and postgraduate students will largely contribute to the training and development of their scientific writing skills. As publishing in the SA Heart Journal is free of charge, the young researcher and his or her co-workers will not have to spend precious research money on this initiative. The student, the supervisors and the academic institution will all benefit from publishing in the journal for various reasons, including:

- Submission of a research proposal in the format of a research hypothesis article allows the project to be peer-reviewed at an international level. The young researcher and his or her supervisor will therefore receive critical feedback from experts in the field.
- The student will learn to understand the process for submitting an article in a peer reviewed journal, from the required format of submission to the standard format used to reply to reviewers.
- The publication of the research hypothesis in the SA Heart Journal will secure the ownership of the work and facilitate the dissemination of the research within the local and international scientific community.
- Once published, the article will be referenced in google scholar and is therefore freely available online.
- The journal is recognised by both the Department of Education (allowing for subsidy from the Department of Education for authors affiliated to academic institutions) and the Academy of Sciences of South Africa. The editorial team is currently making every effort to expand the listing of the journal, including PubMed listing in the future.

The SA Heart Journal editorial team strongly believes that encouraging students and young researchers to submit their research hypotheses, or mini-reviews, to the journal will lead to improved writing communication skills in Africa as it will assist the authors in overcoming the challenge of writing the thesis and submitting original research articles to peer reviewed journals towards the end of the degree.

**Conflict of interest: none declared.**

## REFERENCES

---

1. Mayosi BM, Flischer AJ, Lalloo UG, Sitas F, Tollman SM, Bradshaw D. (2009). The burden if non-communicable diseases in South Africa. *The Lancet*, 374(9693):934-947.
2. Lecour S, Sluijter J. (2017) European and South African research collaboration (2017). *The European Heart Journal*, 38(13):930-931.