

Letter

30 June 2022

The Editor,

We read with interest the paper by Bulamba et al.¹ and congratulate them on producing such an informative overview of anaesthesia in Uganda. We felt it would be helpful to clarify some aspects of the Ugandan anaesthesia workforce which might help other countries in the region and strengthen our own efforts to improve anaesthesia care for our patients. Namibia has only just qualified our first cohort of Master of Medicine (MMed) anaesthesia physicians (a four-year University of Namibia programme) and we were interested to learn that about a third of your graduates have left the country.

Regarding the nearly 100 physician specialist anaesthetists trained in Uganda, we would like to know how many were Ugandans and of those who left, what percentage were Ugandan?

We are aware of the enormous effort involved in training specialists and to lose one-third is a great loss to the country. You alluded to financial reasons as a major driver, and that work environment (colleagues and surgical caseload variety) was a

reason to stay. What was not clear was what percentage of those who remained worked entirely for the state, and how many were doing "dual employment" with private work as a way to enhance their salary. How does doing work in private affect their work in the state hospital? Would it be possible to survey the third who have left to find out why they left and what would have made them stay or return? At least most stayed in Africa, with only about 15% going to high-income countries outside Africa.

Namibia currently has no non-physician anaesthesia providers, although we used to have in the past. In Uganda they outnumber physician anaesthetists almost 10:1. Would you recommend we and other African countries struggling to recruit and retain physician anaesthetists, look at this cadre to boost anaesthesia provision?

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Reference

1. Bulamba F, Bisegerwa R, Kimbugwe J, et al. Development of the anaesthesia workforce and organisation of the speciality in Uganda: a mixed-methods case study. *South Afr J Anaesth Analg.* 2022;28(3):109-18.

Response Letter

31 July 2022

Dear Editor,

We thank Dr C Terblanche, Dr TNNS Pea and Dr FN Shigwedha for their interest in our article that we recently published in the Southern African Journal of Anaesthesia and Analgesia (SAJAA) on the development of the anaesthesia workforce in Uganda.¹ Dr Terblanche and colleagues, in their letter to the editor dated 30 June 2022, sought additional information and clarification on some areas in our article. We appreciate that this aims to inform their efforts towards anaesthesia workforce development in Namibia, an intended outcome of our publication.

We are delighted to share more insights based on our experience and prior published work done in Uganda.

On the issue of "medical migration", at the time of the study, 90 anaesthesiologists had completed Master of Medicine in anaesthesia training in the country, of which 84 were Ugandan.

27/90 (30%) had left the country since training, of which 22/27 (81%) were Ugandan.

While we agree that it would be essential to understand the reasons for leaving the country, we cannot provide further details since we do not have their current contact details. Anecdotally, however, at least most stayed in Africa, with only about 4/27 (15%) leaving Africa. In their evaluation of the impact of the Association of Anaesthetists of Great Britain and Ireland (now The Association of Anaesthetists), Hewitt-Smith and colleagues found that 4/36 physician survey respondents had left the country but worked in Africa. Unfortunately, they, too, did not investigate the reasons for leaving.²

The question of employment models is one that we previously evaluated in our study on job choices among physician anaesthetists in Uganda, by Law and colleagues. All survey respondents in this study reported working another job besides the government one. No participant worked only for the government, with most working in the private sector to

enhance their income.³ Our study confirms this. We do not yet fully understand the impact of this “dual employment”. However, we can describe how most physician anaesthesia providers share their time between the government and other employers. Most specialists take specific days in private hospitals, covering 12 hour shifts mainly during the day but it is not uncommon for physicians to also cover the night shifts, especially in the private ICUs, without interference with the day working in the public sector. For others, private work will tend to be prioritised, resulting in late reporting or absenteeism in the government hospital. However, we cannot comment on this model’s impact on patient care at government hospitals. However, the government has enhanced salaries for its workers in the financial year 2022/2023, with the entry salary for an anaesthesia specialist (medical officer special grade) from UGX 54 011 544 to UGX 72 858 660 (USD 14 043.30 to USD 18 943.66, 1USD = 3 846.07 on 29 July 2022) gross pay per annum.⁴ We wait to see how this will affect employment and service delivery in government institutions.

Lastly, on the issue of non-physician anaesthesia providers (NPAPs), the authors strongly believe that NPAPs have a crucial role in perioperative care globally. NPAPs have been and continue to be a vital component of our anaesthesia workforce in Uganda. Law and colleagues show the variety of anaesthesia practice models across Africa, with NPAPs constituting a critical component in most countries.⁵ We understand that there cannot be a “one-size-fits-all”; therefore, each country needs to identify its unique needs and plan for its anaesthesia workforce based on those needs. We advocate for a move to “Anaesthesia Care Teams”, constituted of several cadres to deliver perioperative services, as decided by each country. We should not forget that five billion people do not have access to surgery, with lack of anaesthesia one of the reasons for this. For a detailed review of this issue, we recommend “The Need for a Global Perspective on Task-Sharing in Anesthesia” by Lipnick and colleagues, some of whom are authors of our study.⁶

Uganda has depended on NPAPs for a long time, and physician anaesthesia provider numbers bumped up only recently. From this experience, we offer the following insights on the co-existence of physicians and non-physician providers:

1. Physician providers should be at the forefront of training, supervising and mentoring non-physicians from the very start to create and maintain a good relationship between cadres.
2. NPAP models need to have a clear professional and academic career path.
3. To guide the practice of all anaesthesia cadres, there is a need for a clear, gazetted scope of practice applicable in both private and government facilities. However, implementation of the scope of practice can be significantly limited when you have very few anaesthesia providers and high demand for anaesthesia services.
4. Both physician and non-physician groups must recognise the need to work together and support each other in pursuing better perioperative care services. Physicians should play a significant role in leadership and advocacy for the benefit of both groups and the entire population.
5. Anaesthesia training and practice models should be adaptable to changing times.

We want to thank Dr Terblanche and his colleagues for allowing us to expand and provide further insights into anaesthesia workforce development.

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