Letters to the Editor

Global Research Report on Africa-Muza Gondwe Dear Editor,

I was very pleased to read about Malawi's publication output in Thomson Reuters' Global Research Report: Africa that was published in April 2010¹.

".... other countries with limited resources are making notable and effective contributions of a high standard. Other analyses show that Malawi, with one-tenth the annual research output of Nigeria, produces research of a quality that exceeds the world average benchmark while Nigeria hovers around half that impact level."

In reference to a comparison of publications with Gross Domestic Product (GDP), "The real leaders are Tunisia and Malawi with very different economic bases but strong relative productivity in both cases."

The report assessed publication output in the Web of Science database between 1999 and 2008. The Web of Science indexes 10,000 of the highest impact journals from all scientific disciplines – from clinical medicine and engineering to arts and humanities. No surprises there - South Africa, Nigeria and Egypt are Africa's publishing powerhouses. The report further reveals that Africa only publishes a dismal average of 27,000 papers per year equivalent to the publication output of The Netherlands.

It is Malawi's pole position in quality of publications and comparison of publications with GDP that really interested me. It is gratifying that Malawi produces research that is of higher quality than the international standard but Thomson Reuters fails to describe exactly what this quality standard is. Is quality referring to publication in high impact factor journals, type of study e.g. double blind randomized clinical trials, or the study's research focus and its concomitant implications?

What would a closer analysis of Malawi's data reveal? Thomson Reuters do make two important observations first that "...the UK which is a co-author on no less than 45% of research publications from Malawi" and that secondly, Malawi is one of the sites for the Wellcome Trust major overseas programs. So my initial excitement might have been slightly premature if we scrutinize the data further. A paper published in the Malawi Medical Journal in September 2008 reveals that only 21% of papers from Malawi indexed in Medline between 1996 and 2006 had first authors of Malawian origin². Therefore overseas partners (Wellcome Trust, Johns Hopkins, University of North Carolina all with major clinical research programs) should receive the credit for tipping the scales in favour of Malawi considering we have a modest GDP of 4.27 billion USD and a Government that budgets on average 0.03% for research.

There is much to be gained in North to South collaborations: access to modern facilities, technical expertise, and opportunities to publish in reputable Northern journals. But going beyond publishing for publishing sake (for tenure, international prestige, or as a funding requirement) — what has been the impact of this upsurge in research in Malawi? Is there a way to the connect dots between health care, policy and research? Are the trajectories for research capacity strengthening translating into visible local outputs? And as a

keen science communicator the burning question for me-are research findings communicated locally and to what extent does the public, media, and government engage with these results?

References

1.http://researchanalytics.thomsonreuters.com/m/pdfs/globalresearchreport-africa.pdf

2.Gondwe M, Kavinya T (2008). An analysis of Malawi's scientific publication output. Malawi Medical Journal; 20(3): 90-92

Acute leukemia and aggressive lymphoma treatment in adults: It is time for Malawi to move forward- *Yohannie Mlombie*

Dear Editor,

I note that a case report published recently has several troubling aspects to it.

The case report does not provide all the information obtainable in Malawi which would provide reasonable support for the diagnosis of a Burkitt's lymphoma/leukaemia and did not discuss differential diagnoses. The blasts in the peripheral blood film could also be malignant or reactive² immunoblasts. Hence, with the information available, the following diagnoses are also possible:- diffuse large Bcell lymphoma, immune thrombocytopaenic purpura (ITP), thrombotic thrombocytopaenic purpura (TTP), Evans syndrome, severe infection (especially viral), other immune disorders etc. As such Antimicrobials or CHOP or steroids with or without HAART may have been the required therapy for this case as further evidenced by signs of improvement reported by the authors on the treatment that the patient received.

Other troublesome aspects of this case include:

- 1. There is no report of bone marrow findings.
- 2.The authors appear confused between lymphoblastic lymphoma/leukaemia despite the availability of WHO diagnostic criteria.³
- 3. A white cell count of 4.2 and a neutrophil count of 1.6 are both within normal limits in a female patient in the African population⁴ and yet the authors asserted that the patient presented with pancytopaenia and they also entertained the possibility of recurrent bacterial infections in the patient on account of neutropaenia.
- 4. The authors did an LP at a low platelet count of 21 in a patient with retinal haemorrhages.
- 5.Despite retinal haemorrhages on fundoscopy most likely as a result of thrombocytopaenia, a high red cell count on CSF cytology and convulsions; a CT-scan of the head was not done.
- 6. There was use of non-standard cytotoxic chemotherapy (vincristine and dexamethasone only, for a working diagnosis of Burkitt's lymphoma) as therapy outside a clinical trial.

This case report illustrates the casual approach to diagnosis that results from undue emphasis on palliative care. Where options for definitive treatment are available for eligible patients, diagnostic procedures are likely to be more thorough. It is time Malawi moved forward towards establishing at least one basic centre that can manage adult patients with acute leukaemias (and hence very aggressive lymphomas).

References

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- 3. Borowitz MJ, Chan JKC. (2008) WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues. B lymphoblastic leukaemia/lymphoma, not otherwise specified. IARC Press, Lyon.
- 4. Lawrie D, Coetzee LM, Becker P, Mahlangu J, Stevens W, Glencross DK. Local reference ranges for full blood count and CD4 lymphocyte count testing. S Afr Med J. 2009;

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