

Junior medical researchers: A neglected community with great academic potential

To the Editor: Medical research capacity development is a national priority to improve healthcare in South Africa (SA).^[1] The 2011 National Health Research Summit set a target of training 1 000 doctoral candidates in health sciences over the next 10 years.^[2-3] We advocate revitalised research training opportunities for junior clinicians to help achieve this target and to contribute to the creation of a thriving medical research network across SA. We acknowledge the need for community input to overcome challenges such as funding, adequate supervision and the time periods required to fulfil quality clinical and research training. We have created an organisation, the Junior Clinicians Research Initiative of South Africa (JUCRISA – www.jucrisa.co.za), to build a supportive community for junior clinicians who would like to be involved in research. We welcome support from the SA medical community to develop this movement further.

Challenges. While efforts have been made to provide structured research programmes for undergraduate health science students,^[4] little has been done for junior medical graduates (medical interns, community service medical officers (CSMOs) and junior medical officers). At present, medical graduates complete 3 years of public service in various medical fields, often in settings not conducive to academic development. An additional impediment is the perception that part-time studies such as the undertaking of honours or master's degrees are prohibited during this period. Junior clinicians usually have little training in research proficiencies, leading to missed opportunities for otherwise motivated and capable graduates.

Rural research: A unique opportunity. SA's healthcare has the unique challenge of the HIV/tuberculosis syndemic intersecting with an increasing burden of non-communicable disease and trauma.^[5] During CSMO training, junior clinicians are posted to rural areas where the need for medical personnel is dire and the above challenges are often at their greatest. Rural populations and healthcare sectors are seldom studied despite the value of clinical research in this setting. An example is the 2004 extensively drug-resistant tuberculosis outbreak in the rural Msinga area of KwaZulu-Natal, served by the Church of Scotland Hospital. Had it not been for the research initiated by the clinicians of this small hospital (later built on by the University of KwaZulu-Natal in collaboration with Yale University), the true burden of this fatal disease might have gone unchecked for many years.^[6] Junior clinicians are uniquely positioned to contribute towards filling critical knowledge gaps in such areas.

Suggestions for creating an environment conducive to junior clinicians' research capacity development:

1. Engage the Department of Health (DoH), the Health Professions Council of South Africa (HPCSA) and academic institutions to actively encourage research training and involvement for junior clinicians. The creation of an academic track for internship and community service is one potential solution.
2. Obtain clarity from the HPCSA and DoH, as published policy, on whether research and part-time postgraduate studies are officially permitted during internship and community service.

3. Incentivise and promote the pursuit of academic health sciences careers in SA for all medical graduates interested in such a career path. An incentive could be that undertaking postgraduate dissertation-based studies, e.g. a PhD, immediately after undergraduate studies be considered as community service.^[4]
4. Implement a pilot study to test the feasibility of linking research projects to interns and CSMOs:
 - Create a limited number of specific internship and CSMO posts for medical graduates who wish to pursue a career in academic medicine.
 - Link these junior clinicians to feasible research protocols designed by willing supervisors at academic institutions.
 - Provide ongoing support and training throughout the internship and CSMO years to bring these studies to completion.

We hope to initiate discussion around this matter and the benefits it can bring to the SA health sector.

J Bovijn

Medical intern, Tygerberg Hospital, Cape Town, South Africa
info.jucrisa@gmail.com

A Jacobs

Global Health Research Fellow, Imperial College London, UK, and previous medical officer, Department of Medicine, Groote Schuur Hospital, Cape Town, South Africa

M T Boswell

Community service medical officer, Tshwane District Hospital, Pretoria, South Africa, and Department of Immunology, School of Medicine, Faculty of Health Sciences, University of Pretoria

E du Bruyn, L Bovijn, N Berkowitz

Research medical officers, Clinical Infectious Diseases Research Initiative, University of Cape Town, South Africa

1. The South African Health Improvement Plan. 2009. http://www.healthlink.org.za/uploads/files/ks_1V2_10pointplan.pdf (accessed 19 August 2015).
2. Mayosi BM, Mekwa NJ, Blackburn J, et al. National Health Research Summit Report: Strengthening Research for Health, Development and Innovation in South Africa. 2011. <http://www.rmchsa.org/wp-content/uploads/2014/04/National-Health-Research-Summit-Report-2011.pdf> (accessed 19 August 2015).
3. Purposeful support for health research in South Africa. *S Afr J Sci* 2012;108(5/6):Art. #1268, 1 page. [<http://dx.doi.org/10.4102/sajs.v108i5/6.1268>]
4. Katz A, Futter M, Mayosi B. The intercalated BSc (Med) Honours/MB ChB and integrated MB ChB/PhD tracks at the University of Cape Town: Models for a national medical student research training programme. *S Afr Med J* 2013;104(2):111-113. [<http://dx.doi.org/10.7196/SAMJ.7639>]
5. Mayosi BM, Benatar SR. Health and health care in South Africa – 20 years after Mandela. *N Engl J Med* 2014(14);371:1344-1353. [<http://dx.doi.org/10.1056/NEJMs1405012>]
6. The Msinga experience. 2009. <http://www.kznhealth.gov.za/tbsinga.pdf> (accessed 19 August 2015).

S Afr Med J 2015;105(11):884-885. DOI:10.7196/SAMJ.2015.v105i11.10179