

THE UNIVERSITY OF BRITISH COLUMBIA  
School of Population and Public Health



James Mather Building  
5804 Fairview Avenue  
Vancouver, B.C. Canada V6T 1Z3  
Tel: 604-822-2772  
Fax: 604-822-4994  
Website: [www.spph.ubc.ca](http://www.spph.ubc.ca)

January 6, 2009

Dear Dr. Sally Murray and Review Committee,

Re: Submission entitled: *"Assuming our global responsibility: Improving working conditions for healthcare workers in low-and-middle income countries."*

As you know, concern about the health and well-being of healthcare workers is global, especially in Africa, where risk of acquiring infectious diseases at work is high. A recent outbreak of an Arenavirus in South Africa has highlighted the need to protect the health of healthcare workers worldwide.

The primary objective of the interdisciplinary South African-Canadian collaborative initiative described in this very brief submission is to reduce the transmission of infectious diseases in healthcare workers and healthcare workplaces in low-and-middle-income countries by linking occupational health and infection control. *Open Medicine's* commitment to global health leads us to believe that this submission will make an excellent addition to your Analysis and Comment category, or of course, any other category of *Open Medicine*, if appropriate. This editorial style piece is concise, however, we would be pleased to elaborate if desired.

The information contained within has not been published or submitted for publication elsewhere, and none of the authors have conflicts of interest. We look forward to hearing from you.

Sincerely,

Annalee Yassi MD, MSc, FRCPC  
Tier 1 Canada Research Chair and Professor,  
Global Health Research Program,  
School of Population and Public Health  
University of British Columbia  
430 -2206 East Mall

Vancouver BC, V6T 1Z3  
Canada

**Assuming our global responsibility: Improving working conditions for healthcare workers  
in low-and-middle income countries**

Yassi A<sup>1</sup>, Rees D<sup>2,3</sup>, Bryce EA<sup>1,4</sup>, Spiegel J<sup>1</sup>, Ndelu L<sup>5</sup>, Nophale LE<sup>6,7</sup>, Dybka L<sup>1</sup>, Kruger W<sup>6</sup>,  
Schoon M<sup>8</sup>, and others\*

1- University of British Columbia, Canada; 2- National Institute for Occupational Health, South Africa; 3- School of Public Health, University of Witwatersrand, 4- Vancouver Coastal Health, Canada; 5- National Department of Health; 6- Department of Community Health, University of the Free State; 7- Department of Health, Free State; 8- Pelonomi Hospital, Free State,

\*we thank our many colleagues from across South Africa and British Columbia, Canada, who are actively participating in this project and share the sentiments presented in this editorial.

**Contact Information:**

**Annalee Yassi** MD, MSc, FRCPC

Tier 1 Canada Research Chair, Global Health and Capacity-Building,  
Global Health Research Program, College of Interdisciplinary Studies;  
Professor, School of Population and Public Health and Department of Medicine,  
University of British Columbia  
430 -2206 East Mall , Vancouver BC, V6T 1Z3, Canada  
tel: 604-822-6962, fax: 604-822-9010; cell phone: 604-916-6764.

**Author Emails:**

Annalee.Yassi@ubc.ca, david.rees@nioh.nhls.ac.za, Elizabeth.Bryce@vch.ca, Jerry.Spiegel@ubc.ca, NdeluL@health.gov.za, gngmlen.MD@ufs.ac.za, lyndsay.dybka@ubc.ca, gngmwhk.MD@ufs.ac.za, schoonm@fshealth.gov.za

Amid heightened efforts to stem the tide of health professional migration to high income countries (HICs),<sup>1 2</sup> there is increased focus on the need to improve working conditions in source countries. South Africa, for example, with less than 7 doctors per 10,000 people, has an estimated 150 doctors emigrate per year.<sup>3</sup> Of those who stay, more than 60% work in the private sector, serving less than 20% of the population.<sup>Error: Reference source not found</sup> South African health workers experience fear and frustration treating patients with tuberculosis (TB) and blood-borne diseases, often in difficult work environments<sup>4</sup>; and it is now well-established that health workers are at higher risk for numerous infectious diseases.<sup>5</sup> In mid-October 2008, this was dramatically highlighted when following the arrival in Johannesburg of an index case from Zambia, three deaths occurred from hemorrhagic fever caused by an Arenavirus, all healthcare workers (a paramedic, a cleaner and a nurse)<sup>6</sup> with disease acquisition through occupational exposure to blood and body fluids.

The recently-released draft *WHO Code of Practice on the International Recruitment of Health Personnel*<sup>7</sup> noted that improving the social and economic status of health personnel, their living and working conditions, their opportunities for employment and their career prospects is needed to retain a skilled health workforce. So what have HICs been doing to improve working conditions in source countries?

British Columbia (BC), which attracts the highest number of South African physicians of all Canadian provinces, is sharing its expertise in controlling infectious disease transmission in healthcare with South Africa. When SARS hit, BC's interdisciplinary collaboration permitted prompt development of guidelines for respiratory protection and communicated these widely across the jurisdiction<sup>8</sup>. South African colleagues invited the Canadians to form an international

partnership to pool knowledge and experience, linking Canadian infection control and occupational health researchers from the University of British Columbia with South African colleagues. A pilot project was initiated at Pelonomi Hospital; workplace assessments were conducted throughout the hospital (using an assessment tool based on work of Canadian team members<sup>9 10</sup> as well as the South Africans). Results (reported elsewhereError: Reference source not found) highlighted the need to improve prevention of blood and body fluid exposure and use of protective barriers (including gloves and masks/respirators). A web-based health information system, entitled *OHASIS* (Occupational Health And Safety Information System) for accurate data collection and reporting of incidents, injuries, risk factors, and prevention measures both at the level of the workplace and workforce was installed. Training workshops were held, including numerous sessions for health and safety representatives, and a day-long workshop aimed at medical practitioners. The lively sessions raised important issues, and were scored highly by participants<sup>11</sup> Evaluations to date have demonstrated improved awareness of occupational risk of communicable diseases, use of personal protective equipment, and adoption of safe work practices.Error: Reference source not found

The experience with international collaboration at Pelonomi Hospital has been extremely positive – with considerable enthusiasm among front-line workers, hospital management, government and the health and safety committees. The *WHO code* encourages recipient countries to assist in improving working conditions in source countries. The Pelonomi hospital project is an example of how this can be achieved.

## REFERENCES

- <sup>1</sup> World Health Organization. World Health Report 2006: Working Together For Health. [homepage on the internet]. 2006. Available from: [www.who.int/hiv/pub/meetingreports/TTRmeetingreport2.pdf](http://www.who.int/hiv/pub/meetingreports/TTRmeetingreport2.pdf)
- <sup>2</sup> Mills E, Schabas W, Volmink J, Walker R, Ford N, Katabira E, Anema A, Joffres M, Cahn P, Montaner J. Should active recruitment of health workers from sub-Saharan Africa be viewed as a crime? *Lancet*. 2008;371:685-688
- <sup>3</sup> Human Sciences Research Council. New human resources plan foresees fewer foreign doctors. [homepage on the internet] 2006. Available from: [http://www.hsrb.ac.za/Media\\_Release-272.phtml](http://www.hsrb.ac.za/Media_Release-272.phtml)
- <sup>4</sup> Unger A, Welz T, Haran D. The impact of HIV/AIDS on health care staff at a rural South African Hospital, 1995-2000. *Int Conf AIDS*. 2002 Jul 7-12; 14. Barcelona, Spain.
- <sup>5</sup> Menzies D, Joshi R, Pai M. Risk of tuberculosis infection and disease associated with work in health care settings. *Int J Tuberc Lung Dis*. 2007;11(6):593-605.
- <sup>6</sup> Foss K, Maphumulo S. "New confirmed case of virus as observation list tops 90." *The Star*. 14 Oct. 2008: A3.
- <sup>7</sup> World Health Organization. The WHO code of practice on the international recruitment of health personnel. 2008. Available at: [http://www.who.int/hrh/migration/code/draft\\_code\\_en.pdf](http://www.who.int/hrh/migration/code/draft_code_en.pdf)
- <sup>8</sup> Yassi A, Noble MA, Daly P, Bryce E. Severe acute respiratory syndrome. Guidelines were drawn up collaboratively to protect healthcare workers in British Columbia. *British Medical Journal*. 2003;326:1394-1395.
- <sup>9</sup> Yassi A, Tennessee M, Arauz V, et al. Healthy hospitals: Protecting healthcare workers and patients from infectious disease transmission by strengthening occupational health and safety in hospitals. *International Commission on Occupational Health*. October 26-28, 2007. Vancouver, B.C.
- <sup>10</sup> Bryce E, Scharf S, Walker M, Walsh A. The infection control audit: The standardized audit as a tool for change. *American Journal of Infection Control*. 2007;35(4):271-283.
- <sup>11</sup> Yassi A, Nophale L, Dybka L, Bryce EA, Kruger W, Spiegel J. Building Capacity to Secure Healthier and Safer Working Conditions for Healthcare Workers: A South African-Canadian Collaboration. *International Journal of Occupational and Environmental Health* Submitted 2008.