Published in final edited form as:

Lancet Psychiatry. 2018 August; 5(8): 612-613. doi:10.1016/S2215-0366(18)30097-X.

# Building capacity for global mental health research: challenges to balancing clinical and research training

#### Maria A Oquendo,

Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA 19104, USA, mao4@columbia.edu

#### Cristiane Duarte.

Columbia University Vagelos College of Physicians and Surgeons, New York, NY, USA, New York State Psychiatric Institute, Columbia University, New York, NY, USA

#### Lidia Gouveia,

Mozambique Ministry of Health, Maputo, Mozambique

#### Jair J Mari,

Department of Psychiatry, Federal University of São Paulo, São Paulo, Brazil

#### Marcelo F Mello,

Department of Psychiatry, Federal University of São Paulo, São Paulo, Brazil

#### Carolyn M Audet,

Vanderbilt University Medical Center, Nashville, TN, USA

#### Ilana Pinsky,

Columbia University Vagelos College of Physicians and Surgeons, New York, NY, USA, New York State Psychiatric Institute, Columbia University, New York, NY, USA

### Sten H Vermund,

Yale School of Public Health, Yale University, New Haven, CT, USA

# Ana O Mocumbi, and

Instituto Nacional de Saúde, Maputo, Mozambique, Universidade Eduardo Mondlane, Maputo, Mozambique

#### Milton L Wainberg

Columbia University Vagelos College of Physicians and Surgeons, New York, NY, USA, New York State Psychiatric Institute, Columbia University, New York, NY, USA

During the development of research capacity in lowincome and middle-income countries (LMIC), an unexpected challenge arises in specialties underrepresented in these countries' medical schools: the few available specialists are needed for both research and clinical practice. This conflict occurs in many specialties and settings, and many initiatives have been launched to address it.<sup>1,2</sup>

Oquendo et al. Page 2

Psychiatry is one specialty affected by this challenge. Although psychiatric training is available in most countries around the globe, many countries do not have psychiatry departments or graduate training programmes. In Africa, this is the case for more than 20 countries, many of them large and populous.<sup>3</sup> Medical graduates in LMIC who are interested in psychiatry often pursue education abroad at great personal expense, leaving their country for years, at substantial cost to the country.

Mozambique currently has no psychiatric training capacity, and the mental health-care system is in development. Located in sub-Saharan Africa, with a population of nearly 26 million, it had 20 psychiatrists (13 of them Mozambican) and 109 masters-level psychologists as of Dec 1, 2017. The Mozambique Ministry of Health has approached this problem with creativity, as it often has<sup>4</sup> since independence,<sup>5</sup> by training non-physicians to perform medical tasks (eg, training advanced technicians for surgery and general medicine). In 1993, before the terms task-shifting or task-sharing were coined,<sup>6,7</sup> Mozambique created a training programme for psychiatric technicians to identify and treat neuropsychiatric and substance-use disorders under psychiatric supervision. A total of 275 psychiatric technicians are now deployed across all 128 Mozambican districts. The availability of technicians permits the development of the health-care system, ideally by use of implementation science methods to ensure that scant resources are used wisely. To achieve this progress, further training focused on implementation science research and leadership is needed for the aforementioned psychologists and psychiatrists.

Mozambique's Ministry of Health, Universidade Eduardo Mondlane, and Mozambique's Institute for Health Education and Research have partnered with investigators from USA-based universities (Columbia, Pennsylvania, Vanderbilt, and Yale), and the Federal University of São Paulo, Brazil, to train implementation scientists, with funding from Fogarty International Center and the US National Institute of Mental Health. The Ministry of Health selects trainees, with input from US principal investigators. To date, about 50% of Mozambican psychiatrists and 2% of psychologists are in the implementation science research training programme, while also supervising psychiatric care in Mozambique. Ultimately, trainees will retain this dual clinical and research role. The programme also supports obtaining PhDs at the Federal University of São Paulo, without requiring relocation to Brazil, thereby paving the way for trainees to join local medical school faculties where a medical degree does not suffice to qualify for faculty status.

However, the programme is confronting an unexpected problem. The clinical faculty of the highincome country that provided essential training does not necessarily share enthusiasm for implementation science training. These important mentors have invested extensive effort to develop expert clinicians, and might view the shift towards research as abandoning clinical training. Furthermore, despite supporting trainees' masters research theses during clinical training, the faculty might not value publishing such theses, which is crucial for trainees to develop a publication record.

This potential tension places trainees in an awkward position. Do they stay true to their clinical training and focus on care delivery, as their original mentors envisioned, or do they embrace a systems approach to developing strategies to deliver mental health care, using

Oquendo et al. Page 3

implementation science? Should they aim to deliver or supervise direct care, or should they complement such care with methods that improve the health-care system and enhance the likelihood of an academic career for themselves?

As the Mozambique-US-Brazil research training team considered these problems, the notion that the situation is not unique to Mozambique or psychiatry arose. The team engaged the clinical mentors as key to the implementation science team, co-authoring academic publications—beginning with the aforementioned theses—and participating in local conferences highlighting the importance of both clinical training and implementation science. The goal was to integrate both mentorship teams to limit the tension experienced by trainees who did not wish to disappoint either team.

Integrating two essential elements, clinical and implementation science training, <sup>9</sup> is a challenge in global health research training, as are other well known barriers, such as unavailability of peer support or networks, and a scarcity of robust institutional research environments. <sup>10,11</sup> Time and effort are required to design effective strategies to encourage collaboration between clinical and research mentors. LMIC leadership should define needs and investments, and determine how best to balance clinical and research training without the trainees fearing undesirable consequences, especially when local specialty training is not available. International agencies committed to expanding mental health care globally should acknowledge that conversations about the balance between clinical and research training are crucial to sustained progress. If health-care delivery systems can be rigorously implemented and led by local specialists, it might be possible to shift the conduct of implementation science to epidemiologists or social scientists focused on mental health (when such professionals become available), to permit clinicians to remain involved in care delivery. Ministries of health, which are often led by clinically trained individuals, will have to determine the best path for their respective countries.

# **Acknowledgments**

We declare funding from PALOP Mental Health Implementation Research Training (grant no D43 TW009675), PRIDE SSA—Partnerships in Research to Implement and Disseminate Sustainable and Scalable Evidence Based Practices in sub-Saharan Africa (grant no U19MH113203), National Institute of Mental Health (Bethesda, MD, USA), and Fogarty International Center (Bethesda, MD, USA). MAO received royalties for the commercial use of the Columbia Suicide Severity Rating Scale, Honorarium for APA President position (2014–2016), and her family owns stock in Bristol Myers Squibb.

# References

- 1. Luitel NP, Jordans MJ, Adhikari A, et al. Mental health care in Nepal: current situation and challenges for development of a district mental health care plan. Confl Health 2015; 9: 3. [PubMed: 25694792]
- 2. Kaddumukasa M, Katabira E, Salata RA, et al. Global medical education partnerships to expand specialty expertise: a case report on building neurology clinical and research capacity. Hum Resour Health 2014; 12: 75. [PubMed: 25547168]
- 3. World Health Organization, World Psychiatric Association. Atlas: Psychiatric education and training across the world 2005 http://www.whoint/mental\_health/publications/atlatlas\_psychiatric\_education\_training/en (accessed March 15, 2018).

Oquendo et al. Page 4

4. Mocumbi AO, Carrilho C, Aronoff-Spencer E, et al. Innovative strategies for transforming internal medicine residency training in resource-limited settings: the Mozambique experience. Acad Med 2014; 89 (8 suppl): S78–82. [PubMed: 25072585]

- Noormahomed EV, Carrilho C, Ismail M, et al. The Medical Education Partnership Initiative (MEPI), a collaborative paradigm for institutional and human resources capacity building between high- and low- and middle-income countries: the Mozambique experience. Glob Health Action 2017; 10: 1272879. [PubMed: 28452653]
- Bedelu M, Ford N, Hilderbrand K, Reuter H. Implementing antiretroviral therapy in rural communities: the Lusikisiki model of decentralized HIV/AIDS care. J Infect Dis 2007; 196 (suppl 3): S464–68. [PubMed: 18181695]
- 7. Culwell KR, Vekemans M, de Silva U, Hurwitz M, Crane BB. Critical gaps in universal access to reproductive health: contraception and prevention of unsafe abortion. Int J Gynaecol Obstet 2010; 110 (suppl): S13–16. [PubMed: 20451196]
- 8. Sweetland AC, Oquendo MA, Sidat M, et al. Closing the mental health gap in low-income settings by building research capacity: perspectives from Mozambique. Ann Glob Heal 2014; 80: 126–33.
- 9. Sweetland AC, Oquendo MA, Carlson C, Magidson JF, Wainberg ML. Mental health research in the global era: training the next generation. Acad Psychiatry 2016; 40: 715–20. [PubMed: 26497971]
- 10. Schneider M, Sorsdahl K, Mayston R, et al. Developing mental health research in sub-Saharan Africa: capacity building in the AFFIRM project. Glob Ment Healt (Camb) 2016; 3: e33.
- 11. Hanlon C, Eshetu T, Alemayehu D, et al. Health system governance to support scale up of mental health care in Ethiopia: a qualitative study. Int J Ment Health Syst 2017; 11: 38. [PubMed: 28603550]