Published in final edited form as:

Acad Psychiatry. 2016 August ; 40(4): 723–726. doi:10.1007/s40596-015-0453-3.

Building a Global Mental Health Research Workforce: Perspectives from the National Institute of Mental Health

Pamela Y. Collins¹ and Beverly A. Pringle¹

Pamela Y. Collins: pamela.collins@nih.gov

¹National Institute of Mental Health, Bethesda, MD, USA

The last two decades have witnessed a growing acknowledgment of the importance of research on mental health in the global health context. The 1995 edited volume, *World Mental Health* [1], the 1996 publication of the *Global Burden of Disease Study* [2], and the *2001 World Health Report* [3] powerfully utilized mental health data or underscored the role of research in achieving gains in mental health around the world. By 2007, the World Health Organization and the Global Forum for Health Research released their report on research capacity for mental health, demonstrating the dearth of mental health research from low- and middle-income countries, in particular, as well as the need to bridge the gap between research, practice, and policy [4].

That same year, the *Lancet* special issue on global mental health galvanized the global mental health community, outlining concrete actions to advance the field [5]. The series *Call to Action* underscored the importance of research as a means to expand the global evidence base and to make the case for mental health care delivery reform, especially in low- and middle-income countries (LMICs) [5]. At the time, however, medical students and residents from high-, middle-, and low-income countries, alike, would have noted a dearth of funding to support research training focused on global mental health themes. Despite this, by 2009, new global health programs at universities were rapidly appearing in the USA and providing more opportunities for training in global health [6], but few had well-developed mental health components—either research or clinically focused.

At the National Institute of Mental Health (NIMH), a reevaluation of the institute's role in global health research was also underway. By mid-2009, NIMH began reorganizing the Office for Special Populations and the Office of Global Mental Health to create the Office for Research on Disparities and Global Mental Health (ORDGMH) in 2010. Consistent with the NIMH mission, the new office underscored (1) the critical need to mount an inclusive global effort to expand research—and the capacity to conduct research—on preventing and treating mental illness, (2) the centrality of eliminating disparities as part and parcel of this effort, and (3) the value of recognizing that local contexts around the globe share commonalities that can provide insights into equitably reducing the suffering associated with mental illness. An explicit goal of ORDGMH was to create a research career path in global mental health for US investigators, while also supporting research capacity building in low-

and middle-income countries as a route to building high-quality collaborative research. To achieve this goal, ORDGMH expanded collaborations with the Fogarty International Center (FIC)—the NIH center tasked with supporting and facilitating global health research and research training—and, where indicated, developed new targeted initiatives for research capacity development in mental health. In this article, we briefly describe NIMH activities in support of global mental health research training and future directions for research training in global mental health.

Building a Pathway to Independence in the USA

In July 2010, as a first effort to engage young US investigators and understand their needs for research training in global mental health, ORDGMH hosted a workshop, *Research Careers in Global Mental Health*. To our knowledge, this was the first time graduate students, medical students, post graduate trainees, and junior faculty congregated in the USA to discuss needs and opportunities for global mental health research career development. The workshop enabled trainees to ask questions and learn from each other—as well as researchers, funders, and global non-governmental organizations (NGOs)—about how to use research to solve problems in global mental health and how to chart a pathway to such a career. Workshop participants were most concerned about how to locate timely information about funding and training opportunities, access to mentors in global mental health, where to join networks for people interested in global mental health, and how to establish and sustain collaborative research activities. Participants also discussed the challenges of gaining field experience overseas while in medical school, residency, other training programs, or as a junior faculty member.

ORDGMH took steps immediately to respond to trainee needs. To facilitate communication of NIH activities, ORDGMH established two publically accessible listservs, *Global Mental Health* and *GMH Careers*, and a newsletter, *Global Tracks*, to disseminate news relevant to the community. Pursuing ways to establish mentoring relationships and facilitate access to networks, NIMH and Wellcome Trust cosponsored a workshop on global mental health mentorship at the 2011 World Congress of Mental Health in Cape Town, South Africa. The program enabled competitively selected applicants to formally exchange research ideas with global mental health research mentors around topics explored in the Grand Challenges in Global Mental Health [7]. The mentees benefited from participation in a large international meeting attended by clinicians, researchers, and advocates, which provided them the opportunity to learn about a range of mental health research activities around the world. ORDGMH staff recognized the importance of scientific meetings for networking opportunities, and that same year took steps to ensure the participation of early-stage investigators in all NIMH-sponsored global mental health workshops. This remains ORDGMH's practice.

These activities helped to stimulate interest in global mental health research, increase the flow of information, and facilitate new collaborations, but they did not contribute to reducing gaps in the pathway to independence as a global mental health researcher. The Fogarty Global Health Program for Fellows and Scholars is one NIH program in which NIMH participates that offers opportunities for medical students and residents to gain field

experience and generate pilot data by spending a year overseas engaged in mentored research. That experience alone, however, is usually not sufficient to prepare residents for independent research activities, though it may influence career trajectories [8]. For psychiatrists, one route to a research career can be found in post-residency institutional fellowships (using NIH's T32 mechanism) that typically provide up to 3–4 years of fellowship training, equipping fellows with training in research design and data analytic methods as well as individual and group mentoring. Over the past 3 years, NIMH has helped to fill that gap by funding three institutional fellowship programs focused on global mental health at Massachusetts General Hospital, Columbia University, and Johns Hopkins University. Nevertheless, many psychiatric residents enter fellowship training without a Ph.D. or previous formal research training, so the post-residency fellowship may be the first extensive, structured research training experience for psychiatrists. NIH mentored career development awards (K-series grants) provide an opportunity for further maturation as a researcher in the context of a junior faculty position. NIMH launched a global mental health K award initiative 2 years ago as a means of stimulating research training and offering an additional source of funding as early-stage US investigators prepare for independence.

Enhancing Collaboration by Strengthening Research Capacity Building in Low-and Middle-Income Countries

In tandem with expanding opportunities for investigators in the USA, NIMH increased its support of research training in LMICs, in part through collaboration with the Fogarty International Center (FIC). Research grants are ideal platforms for building on-the-ground research capacity in LMICs while supporting the conduct of much needed mental health research. The FIC program, *Global Brain and Nervous System Disorders across the Lifespan*, integrates structured research capacity building into grant requirements. Over the past decade, it has become a test bed for developing and systematizing training, mentorship, and research infrastructure in mental health and neuroscience areas where nascent research enterprises and research cultures are taking hold. The most recent call for proposals added for the first time an encouragement to develop research networks and evidence-based policies as part of a grant's capacity-building component.

NIMH co-funds other FIC initiatives specifically focused on research training in LMICs. The projects that arose from the program, *Chronic, Non-Communicable Diseases and Disorders Across the Lifespan*, launched in 2010, foster institutional research training in LMICs in collaboration with US institutions. Mental health projects in Mozambique, Turkey, South Africa, India, Egypt, Tajikistan, Azerbaijan, and Kosovo—to name a few—train young psychiatrists and PhDs in topics including suicide prevention, implementation science, child mental health, developmental disabilities, intervention research for schizophrenia, and migrant health. Beginning in 2010, the Medical Education Partnership Initiative (MEPI) supported foreign institutions in sub-Saharan African countries receiving President's Emergency Program for AIDS Relief (PEPFAR) funding to develop or expand and enhance medical education, increase the number of new health care workers, and build clinical and research capacity in Africa in order to retain medical school faculty and clinical professors. NIMH investments in Kenya and Zimbabwe have facilitated research training

and psychiatric faculty development [9]. Notably, two new FIC programs will strengthen research training and early career development for junior faculty members in LMICs: the second iteration of the MEPI program and the new Emerging Global Health Leader Award, both of which NIMH will help support.

ORDGMH began its own global research capacity building activities with the *Collaborative Hubs for International Research on Mental Health* in 2011 and 2012 [10]. This effort to increase the research base on delivery of evidence-based mental health care in LMICs spawned five regional hubs across Africa, Latin America, and Asia. Each involves a multidisciplinary group of investigators and collaborators in multiple countries, where they conduct mental health services research, build research infrastructure, and develop regional research capacity using webinars, short courses, structured in person and online mentoring, mini-research grants, and writing workshops to prepare research grant applications and manuscripts for publication. A more recent initiative, *Research Partnerships for Scaling Up Mental Health Interventions in LMICs*, calls for implementation research to assist LMICs in their efforts to scale up sustainable, evidence-based mental health interventions and thereby eliminate the mental health care treatment gap. Such scale-up efforts require infrastructure and partnerships, especially among researchers, mental health service users, mental health care providers, and government agencies. Accordingly, this initiative requires research partnerships and activities that build and sustain capacity in two areas: the conduct of implementation research and the use of science-based methods and information to develop mental health policies and programs. We hope to fund grants under this initiative in 2016. A map of global mental health research and research capacity-building efforts from 1990 to 2014 can be found at <http://www.nimh.nih.gov/responsive/map.shtml>.

The Promise of Global Mental Health Research

Mental illnesses, as a group, are the leading causes of disability worldwide [11] and will cost countries, families, and affected individuals an estimated \$6 trillion over the next 15 years [12]. Moreover, through co-occurrence with other chronic diseases and associated poor health outcomes, mental illnesses contribute to the deaths of approximately 8 million people annually [13]. Why respond to such immense problems with research? Moon and colleagues observe that research and development is an integral function of a robust global health system and should be accompanied by agenda-setting; finance and resource allocation; implementation and delivery of services; and monitoring, evaluation, and learning [14]. The tremendous disparity in health research investment between HICs and LMICs led the Commission on Health Research and Development to assert 25 years ago that research guides action, leads to new interventions, facilitates informed planning and resource utilization, and enables development in LMIC contexts, thus playing a pivotal role in strengthening the public's health [15].

The urgent needs in global mental health research require a truly global research workforce and free flow of ideas across local and national borders to solve these critical health threats. Consistent with the pressing needs, the approach at NIMH has been to focus research investments on the immediate problems of inadequate access to care in LMICs. The Collaborative Hubs described above exemplify an initiative that creates research capacity-

building opportunities for people in LMICs while also expanding collaborative research training opportunities for individuals in the USA—all working on innovative means of care delivery. For answers to the broader array of research questions relevant to global psychiatry, our participation in initiatives like the Global Brain and Nervous Systems Disorders across the World enables us to support the development of researchers across diverse LMICs who, through training in neuroscience, genomics, and clinical trials, may help uncover the mechanisms underlying mental illness and treatment responses.

In addition, if global research training will have truly global impact, the following issues must be addressed.

1. Develop a mental health research workforce that is able to facilitate translation of innovation from low- to high-income countries as well as from high- to lower-income country contexts with the goal of solving shared problems globally. How is this best accomplished? One aim of our global K award is to train a new cadre of leaders in global mental health research who are able to consider a range of variables (cultural context, economic resources, health system characteristics) and determine how and when multi-directional translation can occur and where it is appropriate.
2. Recognize that the goal is to increase the public health impact of research, thereby transforming lives. In the context of global mental health research, where the research participants tend to be vulnerable populations, the role of the psychiatric researcher does not end with the publication of an academic paper. Research funders and mentors can encourage trainees to gain skills that equip them to work with and communicate with key stakeholders who play a role in research uptake [16]. In particular, this added skill set could include learning to engage community stakeholders, journalists, decision-makers, and policymaking organizations before, during, and following the completion of research activities in order to increase the chances of intervention adoption or the policy impact of research. Puteh and colleagues describe the interplay of new policies to eradicate shackling of psychiatric patients and case-finding activities in Indonesia [17].
3. Cultivate the values of true collaboration among researchers from differently resourced settings. The flow of research funding remains inequitable. Although funding of mental health research in LMICs has improved since the 1990 publication by the Commission on Health Research that noted the scarcity of research investment in LMICs [15], chances are that investigators from high-income institutions enter collaborations with a greater share of infrastructure and funding resources. Teams must be sensitive to the associated power dynamics in these contexts [18]. A critical aim of global mental health research training will be to establish communication and practices that ensure equitable opportunities for publication, grant writing and awards, and leadership in collaborative research settings.
4. Include the full breadth of mental health research in the global research training enterprise. While providing equitable access to evidence-based care is

perhaps the most pressing mental health care need in LMICs and some higher-income countries as well, global research training should not be limited to this domain. Training opportunities for global mental health researchers must encompass the entire range of mental health research, from the most basic neuroscience through translational research, intervention development and testing, and implementation and dissemination research. Equally important, research training must cross-fertilize these various research domains to make multidisciplinary research the standard rather than the exception.

In conclusion, building a global mental health research workforce is a relatively new endeavor. The need for growth in this emerging research area is urgent and will require a diverse research workforce. Over the past 5 years, NIMH investments have created a pathway for global research training in the USA that is available to medical students, research fellows, and junior faculty. Parallel opportunities for LMIC trainees continue to emerge through NIH mechanisms and through the efforts of international funders. Scarcities persist, but initial signs of progress are promising and must be nurtured by funders, academic departments, researchers, and stakeholders invested in mental health.

References

1. Desjarlais, R., et al. World mental health: problems and priorities in low-income countries. New York: Oxford University Press; 1995.
2. Murray, C.; Lopez, A. The Global Burden of Disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Boston: Harvard School of Public Health on behalf of the World Health Organization and the World Bank; 1996.
3. WHO. The world health report 2001: mental health: new understanding, new hope. Geneva: World Health Organization; 2001.
4. Sharan, P., et al. Research capacity for mental health in low- and middle-income countries: results of a mapping project. Geneva: World Health Organization & Global Forum for Health Research; 2007.
5. Lancet Mental Health Group et al. Scale up services for mental disorders: a call for action. Lancet. 2007; 370(9594):1241–52. [PubMed: 17804059]
6. Merson, MH.; Page, K. The dramatic expansion of university engagement in global health: implications for US policy: a report of the CSIS Global Health Policy Center. Washington: Center for Strategic and International Studies; 2009.
7. Collins PY, et al. Grand challenges in global mental health. Nature. 2011; 475:27–30. [PubMed: 21734685]
8. Heimbürger DC, et al. Impact of global health research training on career trajectories: The Fogarty International Clinical Research Scholars and Fellows Program. AmJTrop Med Hyg. 2015; doi: 10.4269/ajtmh.14-0705(July)
9. Mangezi WO, et al. Improving psychiatric education and research capacity in Zimbabwe. Med Educ. 2014; 48:1132. [PubMed: 25307672]
10. Collins, P.; Price, L.; Pringle, B. Developing and implementing collaborative research in global mental health: the NIMH Hubs. Consortium for Universities of Global Health 5th Annual Meeting; Lancet Global Health; 2014.
11. Global Burden of Disease Study 2013 Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet. 2015; doi: 10.1016/S0140-6736(15)60692-4
12. Bloom, DE., et al. The global economic burden of noncommunicable diseases. Geneva: 2011.

13. Walker ER, McGee RE, Druss BG. Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis. *JAMA Psychiatry*. 2015; doi: 10.1001/jamapsychiatry.2014.2502
14. Moon S, et al. The global health system: lessons for a stronger institutional framework. *PLoS Med*. 2010; 7(1):e1000193. [PubMed: 20126249]
15. Commission on Health Research for Development. Health research: essential link to equity in development. New York: 1990.
16. Collins, PY., et al. Research priorities, capacity, and networks in global mental health. In: Patel, V., et al., editors. *Global Mental Health Principles and Practice*. Oxford University Press; New York: 2013. p. 425-449.
17. Puteh I, Marthoenis M, Minas H. Aceh free Pasung: releasing the mentally ill from physical restraint. *Int J Ment Heal Syst*. 2011; 5:10.doi: 10.1186/1752-4458-5-10
18. Kohrt BA, et al. Authorship in global mental health research: recommendations for collaborative approaches to writing and publishing. *Annals of Global Health*. 2014; 8(2)