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| 120 | Abstract | The rising recognition of mental health as a critical driver of morbidity and mortality worldwide demands advanced training opportunities for investigators in global psychiatry and mental health. Despite the great need, there remains a shortage of advanced training opportunities and clearly defined career paths for trainees in global mental health clinical research in the USA. This educational case report describes a new National Institute of Mental Health (NIMH)-funded clinical research fellowship in global mental health at Massachusetts General Hospital. The fellowship aims to address gaps in training opportunities for clinical researchers in global mental health in the USA. This report describes the new fellowship program, discusses challenges and lessons learned in the first 2 years of its implementation, provides initial metrics for its success, and includes future directions for refining the program and developing other similar training opportunities. | |
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COLUMN: EDUCATIONAL CASE REPORT

Massachusetts General Hospital (MGH) Global Psychiatric Clinical Research Training Program: a New Fellowship in Global

Mental Health

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driver of morbidity and mortality worldwide demands advanced training opportunities for investigators in global psy-15 chiatry and mental health. Despite the great need, there re-16 17 mains a shortage of advanced training opportunities and clearly defined career paths for trainees in global mental health 18 clinical research in the USA. This educational case report 19 describes a new National Institute of Mental Health 20 21 (NIMH)-funded clinical research fellowship in global mental 22 health at Massachusetts General Hospital. The fellowship 23 aims to address gaps in training opportunities for clinical researchers in global mental health in the USA. This report 24 describes the new fellowship program, discusses challenges 25 and lessons learned in the first 2 years of its implementation, 26

Abstract The rising recognition of mental health as a critical

provides initial metrics for its success, and includes future

directions for refining the program and developing other sim-

[1, 2]. Despite this need, there is a paucity of cross-cultural training opportunities, experienced mentors, and established career pathways for clinical investigators committed to global mental health [3]. Given the unique skills needed to conduct global clinical research in resource-limited areas, formal training programs are necessary to ensure culturally sensitive, collaborative, and ethical approaches. The Massachusetts General Hospital (MGH) Global Psychiatric Clinical Research Training Program, funded by the National Institute of Mental Health (NIMH), was launched in 2012 to develop independent and productive clinical investigators in the USA who are committed to global mental health clinical research in resource-limited settings. This report describes the specific components of the fellowship and the first 2 years of its implementation.

Q3 30 Keywords

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The growing recognition of mental health's contribution to morbidity and mortality worldwide requires greater attention to training clinician scientists to deliver and evaluate mental health interventions in resource-limited, international settings Primary Aims

The goals of the fellowship follow key priority areas for global mental health outlined by the NIMH [4], including the following:

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ilar training opportunities.

- Massachusetts General Hospital/Harvard Medical School, Boston, MA 02114, USA
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- Stellenbosch University, Stellenbosch, South Africa
- Addis Ababa University, Addis Ababa, Ethiopia

- Recruiting high-quality trainees, including psychiatry residents, clinical psychology, and public health candidates, with motivation and potential for independent clinical research careers
- Providing fellows with the financial support, scientific mentorship, didactic training, and supportive institutional environments (domestically and abroad) to develop productive independent research careers in global mental health
- 3. Developing a cadre of clinical researchers who are committed to long-term global improvement of mental health



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- in international areas, and who are able to work collaboratively across disciplines and borders
- Addressing the national shortage of globally oriented researchers in clinical psychology, psychiatry, and public health to address mental health in resource-limited, international settings

Overview of Training Program

Following the stated goals, the program aims to prepare fellows for clinical research careers in global mental health, following completion of their doctoral program or psychiatry residency. Fellows receive up to 3 years of support under the supervision of faculty mentors and program directors. Didactic lectures, research seminars, elective coursework, travel to international sites, and attendance at scientific meetings supplement mentored clinical research.

Thematic Areas

The program focuses on eight thematic areas central to global mental health: psychotic disorders, mood disorders, child mental health, behavioral medicine, HIV mental health, health services research, trauma/complex emergencies, and food insecurity. The thematic areas leverage strengths of the faculty, interest of potential trainees, and priority research areas at the international collaborating sites. Thematic areas allow for matching of trainees with proposed mentors and intend to increase the feasibility of productivity and movement towards a career developmental award (e.g., from NIMH). Areas of research currently being conducted by fellows include integrating substance abuse treatment into HIV primary care using a task shifting/sharing approach in South Africa, developing and testing interventions for people living with severe mental illness in Ethiopia, and examining factors influencing risk and resilience for psychopathology in youth in multiple resourcelimited settings.

Learn-by-Doing Approach

The program focuses on a "learn-by-doing" approach—immersion of fellows in a global area through involvement in research projects at an international site under the guidance and supervision of domestic and international mentors. Core skills are built to (1) develop productive international collaborations, (2) work with governmental and non-governmental organizations and academic institutions abroad, (3) develop research questions that are clinically and culturally relevant to identified community and public health needs, (4) create a clinically relevant and achievable research proposal, (5) map a timeline for conducting an international study, (6) select

appropriate methodologies, (7) establish leadership roles in an international research team, and (8) engage with international mental health policies and plans. Fellows' primary commitment is to global psychiatric clinical research for the majority (e.g., 90 %) of their training time. Within the remaining time, fellows have the opportunity to conduct clinical work to meet ongoing requirements for licensure depending on their field of specialization and/or pursue other non-NIH research and teaching.

Didactics and Guest Speaker Series

On-the-ground experiences are supplemented by a weekly didactic seminar and elective coursework at various Harvard-affiliated institutions. Program faculty and leaders in global mental health provide core program didactics to fellows during 90-min weekly training sessions. Didactics are supplemented by a monthly global psychiatry dinner seminar with a larger institution-wide audience. Didactics aim to provide guidance on a range of topics including scientific/grant writing, ethical considerations in global research, and case studies of implementing international research projects. Financial and grants management training is also included as training for subsequent principal investigator (PI) responsibilities.

Mentorship

The program is led by senior faculty with strong track records in global mental health research and practice in collaboration with core local and international faculty. Collectively, senior faculty members and collaborators are PIs or co-investigators on a large number of NIH grants, developmental grants, mentored career development, and other awards with international collaborators. At the start of the fellowship, fellows identify a primary US-based mentor and a broad area of study within one of the thematic areas listed above. The mentees, mentors, and program faculty meet throughout the course of the fellowship typically on a weekly or bi-weekly basis. Fellows visit the proposed international study site two to three times per year to develop relationships with international mentors and collaborators, become involved in secondary data analysis in ongoing projects, and develop an independent research proposal that may culminate in an early career development award. The international mentors, who have strong research records and longstanding relationships with local government agencies, provide fellows with support and expertise in understanding local culture, regulations, mental health systems, areas of research and clinical priority, and ethical and appropriate approaches to clinical research.



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Feedback and Review Process

Throughout the duration of the fellowship, fellows participate in a monthly research-in-progress seminar with mentoring faculty, where fellows provide in-depth updates on the status of their ongoing projects and provide critical feedback to peers. Fellows also receive standardized feedback every 6 months through individual meetings with program directors and mentors, which consist of a review of progress, problem solving barriers, collaborative international relationships, productivity, and career plans. The larger team of faculty also reviews fellows' progress annually, tabulates fellows' development, and provides guidance on future career options. Fellows also have the opportunity on an ongoing basis to provide suggestions to fellowship directors and administrators for process improvement of the fellowship in both formal and informal contexts.

Fellowship Sites

The primary international research and training sites include the following: (1) Ethiopia (Addis Ababa University), (2) Uganda (Mbarara University of Science and Technology; MUST), (3) South Africa (University of Cape Town, Stellenbosch University), and (4) Barbados (Barbados Nutrition Study). Sites were selected on three major criteria, including the following: the strength of the institutional relationship and commitment to mentoring junior investigators in global mental health, the availability of experienced mentors, and productive research environments, including a strong track record of NIH-funded studies. As the fellowship grows, additional sites will be added based upon these criteria.

Initial Outcomes of the Fellowship

Although still early in the fellowship's development and implementation, there are indications of initial success, including the following: (1) level of interest in the fellowship, (2) fellows' productivity, and (3) capacity building efforts. There has been tremendous interest in the fellowship from the start of its award, including 18 applicants in just 2 years from a wide range of disciplines (for four spots total at any time), including clinical psychology PhD graduates (11), MD psychiatrists (4), and PhDs in other disciplines, including public health and psychiatric epidemiology (3). In total, five fellows have enrolled into the program (two psychiatrists, two clinical psychologists, and one psychiatric epidemiologist), one of whom is starting in June 2015. Regarding productivity, in the past 2 years across the four fellows (two 1st year fellows, two 2nd year fellows), 23 manuscripts have been accepted and 25 manuscripts have been submitted and are under review. Additionally, three NIH career development award proposals (i.e., K awards) are being submitted/resubmitted in 2015.

Capacity Building

Relationships being developed in the fellowship are meant to be bidirectional. Capacity building efforts have included teaching, training, supervision, and mentoring. For example, one fellow taught a statistics course to PhD students in Ethiopia during a 2-month visit, two fellows are co-supervising and co-mentoring PhD students with their local mentor, one fellow is mentoring two local researchers/psychologists in manuscript writing, and two fellows have trained local providers in evidence-based psychological interventions. Additionally, fellows' involvement in capacity building has fostered greater collaboration between the international site investigators and the fellowship faculty, serving to further strengthen the institutional relationships and secure additional funding for research.

Lessons Learned

Although the fellowship is still in its early development, the past 2 years have allowed for initial reflections on its implementation. First, the interdisciplinary nature of global mental health attracts fellows with different backgrounds and different training needs. Although this is true for any training program, it is particularly the case for global mental health where there are such varying disciplines in the field (e.g., psychiatry, public health, clinical psychology). A primary challenge is to identify a unified training program that meets the training for each individual discipline focus and career trajectory. One strategy has been focused on horizontal training and collaboration, encouraging the fellows to leverage unique strengths and skills of other fellows.

Another ongoing discussion has been navigating the optimal amount of time to spend in-country vs. in the USA. Primary components of training include formal coursework and didactics based in the USA and relationship building and exposure to global clinical research settings internationally. It has been an ongoing challenge to balance time in each setting so as to maximize the benefit from both sets of activities. Another travel-related consideration for fellows who maintain a clinical caseload is how to maintain ongoing clinical responsibilities and requirements with regular international travel. Faculty have encouraged fellows to work closely with their US and international mentors to find a balance based upon individual training needs and project demands to plan international travel. Ongoing discussion has also included how to prioritize a dual focus on in-country capacity building and the fellows' training needs. As indicated above, fellows have pursued teaching and/or other forms of capacity building to promote mutual benefits of the relationship for both sites (domestic and abroad), while also maintaining their own clinical research and training responsibilities.



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Conclusion and Future Directions

The high demand from interested candidates demonstrates the need for this type of advanced training program in global mental health. As the fellowship develops, we aim to dedicate resources to understanding what components can maximize the success of trainees in pursuing careers as independent investigators. Ideally, these discussions will occur in conjunction with other training programs being developed (i.e., the Columbia NIMH fellowship in global mental health [5]) to guide ongoing refinement of this new fellowship and area of advanced training in an emerging field.

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