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Expanding the Pipeline: The New York University School of Medicine–University of Ghana School of Medicine and Dentistry Psychiatric Education Initiative

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Abstract

As many low- and middle-income countries (LAMICs), Ghana is affected by a severe shortage of mental health specialists: there are 11 practicing psychiatrists for a population of 25 million. The pipeline for Ghanaian psychiatrists remains restricted for the foreseeable future given the low expressed interest in the field by junior medical trainees. The few senior psychiatric specialists are overextended with clinical and professional duties leaving them with minimal time to teach and mentor trainees. This limits opportunities for mentorship, modeling, teaching, and curricular development, leaving trainees with little exposure to psychiatric practice, and therefore, little motivation to enter a highly stigmatized and underresourced field. To support the training of Ghanaian medical students in psychiatry, the New York University School of Medicine–University of Ghana School of Medicine and Dentistry (NYUSOM-UGSMD) Psychiatric Education Initiative, and the NYU Global Mental Health Elective were formed (1) to provide educational support to medical students and residents at UGSMD and (2) to provide a sustainable international experience for NYUSOM residents with a strong interest in leadership in global mental health and underserved populations.

Keywords

international; curriculum development

INTRODUCTION

In the last decade, a growing movement has shed light on the worldwide disparities in mental health care [1–4]. Fundamental to this discourse is capacity building, particularly in low- and middle-income countries (LAMICs), to address the treatment gap and improve the quality of life for individuals suffering from mental illness. The development of a robust mental health care workforce in LAMICs calls for the creation of meaningful long-term

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local and global partnerships [5]. One component of the World Health Organization Mental Health Action Plan 2013–2020 is the development of partnering relationships between academic and research institutions in developed and developing countries to facilitate human resource development [2]. The *twinning process*, wherein institutions in high income countries (HIC) and LAMICs partner to address common goals by sharing their resources and time has been proposed as one such model to addressing global disparities [5]. Much of the work in global capacity building to date has focused on training lay persons and paraprofessionals [4, 6, 7]; however, there is a role for training high level professionals, including medical students, residents, and psychiatrists [5].

As global mental health as a clinical and scholarly endeavor has become more prominent, interest has also surged among psychiatry residency training programs [5, 8, 9]. A number of adult residency programs offer international experiences in the provision of clinical care, teaching, and research [8, 10–12]. In response to the growing popularity of global health opportunities, a discussion about the ethics of sending residents for short-term clinical rotations and research particularly in differently resourced settings has raised concerns about continuity of care, the need for quality supervision, and institutional reciprocity [10, 13, 14]. As residency training programs develop international opportunities, there is an ongoing tension between fostering opportunities for truly service-oriented work versus medical tourism.

We report on the New York University School of Medicine Residency Training Program in Psychiatry’s international educational partnership and elective course for residents, which seek to address the task of capacity building through tele-education and a committed institutional partnership with the University of Ghana School of Medicine and Dentistry Department of Psychiatry.

AN OVERVIEW OF THE GHANAIAAN MENTAL HEALTH SYSTEM

In Ghana, a lower middle-income Sub-Saharan African country, the hurdles faced by the mental health system are emblematic of the challenges faced by developing countries worldwide. There are 11 practicing psychiatrists in Ghana serving a population of approximately 25 million. Primary care physicians, community psychiatric nurses, and other mental health workers provide most of the psychiatric care. Additionally, patients and their families often turn to faith-based healing camps for mental health or “spiritual” complaints [15–17]. Moreover, mental health is a particularly low public health priority. Approximately 6% of the national health budget is dedicated to mental health, which is insufficient for operating expenses [18].

Given the major resource shortages in the Ghanaian mental health care system, it is not surprising that the country suffers from a severe mental health treatment gap: an estimated 98% of those with a diagnosable condition are not seen [19]. Approximately 2.8 million Ghanaians (or 13% of the population) are affected by mental illness, of which roughly 2.2 million are considered mild-moderate cases and 650,000 (3%) considered severe [19]. Only 1.17% of Ghanaians with mental disorders receive treatment [19].

PSYCHIATRIC TRAINING IN GHANA

The country's first department of psychiatry was established in 1962 with the inception of the UGSMD. The program's first psychiatric training site, Accra Psychiatric Hospital (APH), is Ghana's oldest standing psychiatric facility. In 2003, the Ghanaian government established the Ghana College of Physicians and Surgeons (GCPS), the country's first national postgraduate medical college for training in medicine, surgery, and related specialties including Psychiatry. A primary impetus behind the creation of the GCPS was to address the "brain drain" that the country suffered as a result of sending many of its physicians abroad for postgraduate training. The GCPS included a faculty of psychiatry and the introduction of a psychiatry residency training program. Other training sites were added, including Korle Bu Teaching Hospital (KBTH) in Accra as well as Ankaful Hospital and Komfo Anokye Teaching Hospital (KATH).

The current training structure includes a minimum of three years of psychiatry residency in order to sit for the GCPS Membership (specialist) examination. Following residency, another two years of training including a dissertation are required for the award of a fellowship, which entitles the specialist to be appointed as a consultant (attending) psychiatrist.

Despite the availability of psychiatric residency training, the pipeline for Ghanaian psychiatrists remains restricted given low expressed interest in the field by junior medical trainees. The national psychiatric residency cohort consisted of eight trainees in 2014. There are a number of factors contributing to medical student apathy regarding careers in psychiatry. The few senior psychiatric specialists they encounter are overextended with clinical and other professional duties. This in turn limits opportunities for mentorship, modeling, teaching, and curricular development, and negatively impacts trainee motivation to enter a highly stigmatized and underresourced field. Additionally, as in many other LAMICs, students train primarily in physically unattractive, poorly funded, stand-alone public mental health facilities, which limits their exposure to the interdisciplinary medical-psychiatry practice that might encourage an interest in psychiatry [5].

THE NYUSOM-UGSMD PSYCHIATRIC EDUCATION INITIATIVE: PROFESSIONAL WORKFORCE CAPACITY BUILDING

Although the NYUSOM Residency Training Program in Psychiatry offers its residents multiple opportunities to work locally with diverse patients, until recently there were no formal global mental health electives or curriculum. In 2013, the UGSMD department head and NYU residency program director, along with two residents with a dedicated interest in global mental health, initiated a dialogue about developing a potential interdepartmental partnership. In January 2014, two NYU psychiatry residents, accompanied by the NYU residency program director, traveled to Accra to participate in their department's first sponsored international elective. Following discussions about opportunities for a mutually beneficial collaboration, the identified area of need for intervention was psychiatric workforce capacity building. Specifically, the UGSMD Department of Psychiatry leadership requested teaching support for medical students during their psychiatry clerkships.

The *twinning* alliance between NYUSOM and the UGSMD has a historical precedent. For several years, the NYUSOM has sent medical students to Ghana through an international health elective. In addition, the NYUSOM Department of Emergency Medicine has had an ongoing collaboration to improve clinical care and systems building in 2011, and has posted a full-time NYUSOM faculty member on-site at the KBTH. Several other residency programs at NYU-SOM have also sent residents to KBTH. At the undergraduate level, NYU has had a semester study abroad site in Accra since 2004. Finally, NYU has had an established partnership with the University of Ghana to build research capacity via a Fogarty training grant in noncommunicable diseases.

Globally, there are already a number of *twinning* partnerships between HIC and LAMIC academic centers targeting psychiatric training, with examples including the Toronto Addis Ababa Psychiatry Project (TAAPP) [11], the Scotland-Malawi Mental Health Education Project (SMMHEP) [20], and the UK-Somaliland program [21]. The NYU-UGSMD initiative bears a number of important similarities to the previously described programs. All programs emphasize the broad concepts of ethical and efficient collaboration, focusing on transcultural sensitivity, providing teaching support as Western colleagues and not “experts,” ensuring bi-directionality with an emphasis on providing benefit to the African-based institution, program sustainability, and provision of teaching support entirely in the host country to avert brain drain.

However, there are a number of characteristics that distinguish the NYUSOM-UGSMD program as we have tailored our interventions to suit the specific needs of the Ghanaian Department of Psychiatry and the practical resources of NYUSOM. Psychiatric curriculum development as well as lecture preparation and delivery for about 300 UGSMD students yearly is the responsibility of the head of the Department of Psychiatry and a small team of psychologists. The first distinguishing feature is that the NYUSOM-UGSMD partnership has focused on the supplementation and revision of the medical student curriculum, rather than creation of a new curriculum. That is, our curricular intervention is one of renovation rather than new construction. Our aim is to retain the strengths of the extant Ghanaian curriculum and supplement it with cutting edge material, rather than create a new curriculum.

Secondly, due to the large number of Ghanaian medical students, our approach is to use a combination of on-site teaching by visiting NYUSOM residents as well as e-learning provided by a larger subset of NYUSOM residents and faculty. Through the use of both in-person teaching by NYUSOM residents for one month each in Accra, and tele-education sessions held year round, NYUSOM faculty and trainees will provide evidence-based lectures. While in Accra, NYUSOM residents doing the international psychiatry elective spend 50% of their time teaching UGSMD medical students and the remainder of the time engaged in clinical observation. Residents do not directly provide clinical care since they are not licensed to practice in Ghana. NYUSOM residents participating in the elective are also expected to present their work at NYU and to document the experience in a password-protected blog or scholarly paper.

A third point is that an aim of our educational initiative is to help to elevate the Ghanaian medical students' perception of psychiatry as a potential career choice. In addition to strengthening the quality of psychiatric education, we hope to increase morale and lower stigma surrounding psychiatric training as a means of potentially raising trainee interest. We hope that the revised curriculum will generate excitement about a career in psychiatry and bolster the pipeline of future trainees.

The development of lectures has led to challenges about how to meet educational objectives while also addressing cultural issues that arise when New York-based psychiatrists develop lectures for students in Accra. For example, the first lecture we developed was on the mental status exam. While the elements of the exam are universal, components such as abstraction and fund of knowledge complicate direct translation. The final version was reviewed by both NYU faculty with expertise in working with West African populations and UGSM faculty to ensure cultural relevance of the material.

As we move forward, we hope to develop an extensive bank of lectures that can easily be updated and maintained. We also hope to provide live small group sessions via teleconferencing to answer questions, provide case examples, and lead exam review sessions. While one component of the elective experience is in-person teaching in Accra, the ultimate goal is to provide ongoing educational enhancement and collaboration between the departments. We intend to create bidirectional experiences to enable Ghanaian medical students and residents to observe the delivery of mental health care at NYU.

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