

MEDICAL EDUCATION

Linking Global Health to Local Health within an Ob/Gyn Residency Program

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Abstract

An unprecedented number of medical students and residents express the desire to participate in global health work during their training and beyond. Preparing learners for work in underserved settings makes it more likely that they will continue to work in areas of need. Training programs that focus on global health have been criticized as there is ample work to be done in the US, and often global health work becomes learner-centric, which is difficult to maintain and potentially burdensome and harmful to the host site. In this article, we discuss a curriculum and training program that intentionally prepares learners to work responsibly and collaboratively in low-resource settings, both nationally and globally.

Introduction

Trainees are desirous of opportunities to work in global health settings during residency and afterwards. A recent survey revealed that many residents in obstetrics and gynecology even use their free time and own funds to secure such experiences [1]. Providing opportunities during training for work in international settings and in underserved domestic communities has the potential to increase the physician workforce ready to care for underserved populations. Residents and students who have experiences with underserved populations develop a more informed perspective on health care delivery, resource allocation, and cost effectiveness [2-5]. More importantly, students and residents who train in low-resource settings are more likely to work in underserved areas locally and abroad in the long term [2-5]. Yet one survey of US physicians showed that roughly three-fourths of respondents felt unable to address social determinants of health and ill equipped to provide quality care to underserved populations [6].

Since the evidence demonstrates that experiences in caring for underserved populations leads to extended commitments to work in areas of need, we believe that training programs should prepare residents to care for underserved populations in this country and globally. However, we reject the assumption that just working in an underserved community will lead to appropriate skill acquisition and expertise. While many programs have residents rotate through safety net hospitals and spend [elective time in international settings](#), at the University of California, San Francisco (UCSF), we believe

that we have further developed these experiences into a curriculum that improves health care provision for women by intentionally training residents to address the particular medical and nonmedical needs of underserved populations.

The mission statement of the obstetrics and gynecology residency program at UCSF is to improve the health and well-being of all women. We emphasize the word “all” as we embrace and value the notion of inclusivity. We assert that all women, domestically and internationally, with resources and without, deserve to have opportunities to improve their lives and make decisions about their bodies that are consistent with their values and goals. Given these values and assertions, our mandatory resident training includes deliberately structured, supported, and integrated educational experiences in both global and local health. In this paper, we describe our approach to training obstetrics and gynecology residents to care for vulnerable women in our community and in international settings.

Instituting Domestic Training Programs for Underserved Populations

Many states in the US, including California, Texas, Georgia, and Wisconsin, have instituted programs in conjunction with their public academic institutions to help meet their workforce needs as well as address inequities in the provision of health care to their citizens [7-10]. In California, funding has been available since 1973 to support primary care programs to prepare physicians to work in under-resourced settings in the state [11]. In 2014, this opportunity was extended to obstetrics and gynecology programs [7], and the UCSF residency program was a fortunate recipient of this funding. Despite UCSF’s long history of commitment and service to underserved populations, this funding enabled us to implement a more robust and intentional curriculum on caring for vulnerable populations in our state and in our country. Our mandatory and integrated curriculum is entitled EMPOWUR—**E**ducating, **M**entoring, and **P**reparing **Ob/Gyns** to Care for **W**omen in **U**nder-**R**esourced communities. It aims to graduate obstetrician-gynecologists who are prepared, committed, and inspired to provide excellent care to underserved women within the United States. To accomplish this goal, we focus on the following four curricular pillars of the EMPOWUR program:

1. *A didactic curriculum.* The curriculum highlights issues of health and health care disparities, provides training in social determinants of health, and raises awareness about care for specific marginalized populations. These didactic activities have taken the form of grand rounds, traditional resident lectures, journal clubs, and supplemental evening didactic opportunities. Examples of topics include substance abuse in pregnancy, homelessness, and care for incarcerated women. The inclusion of such topics in our core curriculum reflects our belief that these learning areas are essential components of comprehensive [training in obstetrics and gynecology](#).
2. *Direct care in underserved communities.* Our second-year residents participate in a community-based clinical experience that differs from their

usual clinical work in hospital-based settings. During this required rotation, residents work directly in the community in clinics with extensive commitments to the surrounding neighborhoods and with limited resources and access to specialty care.

3. *Role modeling.* In these community-based settings, residents work with clinicians who have demonstrated long-term dedication to providing care to vulnerable populations. These [partnerships](#) expose trainees to career paths that they do not traditionally encounter within a tertiary care academic center; moreover, residents observe clinicians providing compassionate, evidence-based care and using innovative approaches despite constrained resources. Additionally, the program hosts an inspired speaker series featuring national leaders who have developed unique models of care for vulnerable populations. Past speakers have included Melissa Gilliam, who shared her innovative approach to engaging adolescents on Chicago's South Side in their care; and Willie Parker, who discussed his work on abortion care in areas of the South with restricted access. These speakers not only share their work in the larger forum of grand rounds but also spend time with our residents, discussing their motivations, career trajectories, and long-term goals.

4. *Activism and advocacy.* Recognizing that caring for vulnerable populations requires advocating for social change, health equity, and increasing access to health care along with other social services, our residents participate in departmental, interdisciplinary, community, and national trainings related to public advocacy for women's health. These trainings often spur individual and group action related to quality improvement projects in our own health system along with broader efforts concerning social justice and health. Our residents have lobbied against shackling of pregnant women, which became law in California in 2012 [12], and lobbied against repeal of the Affordable Care Act; currently, they are working to revise policies on drug testing in the labor and delivery suite to minimize racial disparities in testing and in reporting to child protective services.

The EMPOWUR curriculum not only strives to prepare residents to be clinically competent in the care of underserved women domestically but also hopes to equip trainees with the knowledge and skills necessary to recognize disparities, to develop trusting and [engaged relationships with the community](#), and to address nonmedical factors associated with health inequity. This long-term and broader vision for our training reflects the call for clinician-educators to prepare physicians to address social and institutional barriers to health [13]. While the EMPOWUR clinical experience is focused on vulnerable domestic populations and community work, the didactic curriculum and advocacy work is applicable internationally and complements our global health training.

Creating Ethical Global Health Experiences for Trainees

In our didactic program, we have embraced a broader definition of global health—one that explicitly includes inequities both in our country and globally [14]. From a practical perspective, there has been increasing recognition that the skills needed to practice successfully in international settings—such as those required to surgically manage postpartum hemorrhage and provide safe, respectful maternity care—are similar to those needed to work with underserved populations in our own country [15]. By timing the global health experience to chronologically follow the clinical experience of the EMPOWUR program, residents are better prepared in terms of their skills and knowledge and, more importantly, better positioned to engage with local physicians in their efforts to address disparate outcomes.

Our curriculum in global health occurs primarily in the third year of residency and includes an online didactic course as well as an experiential component. UCSF obstetrics and gynecology residents spend four weeks at Mulago Hospital, the teaching hospital affiliated with Makerere University College of Health Sciences in Kampala, Uganda; they rotate alongside Ugandan house staff and provide advanced obstetric and gynecologic care. Mindful of the pitfalls of short-term experiences in global health, our program has been deliberately structured to maximize benefits to the host community while at the same time augmenting the learner's experience in understanding global inequity [16].

Key features of our global health program include:

1. *A long-term commitment to a particular country and institution.* This commitment allows relationship building, collaborative research, skills transfer, and longitudinal work on quality improvement initiated and led by the host partners. UCSF has partnered with Makerere University since 1998 primarily in the area of HIV and malaria research. For the last ten years, there has been a strong collaboration between the departments of obstetrics and gynecology at Makerere University and UCSF.
2. *A requirement of learner preparation prior to departure.* This requirement compels trainees to engage in active learning prior to beginning clinical work in Uganda. Trainees are introduced to diseases like malaria and tuberculosis that are not commonly encountered in the US as well as health conditions like ectopic pregnancy and preeclampsia that are seen in both environments but treated differently in Uganda due to limited resources. Mandating that trainees prepare before they travel allows them additional time and space during their rotation in Uganda to concentrate on larger issues related to delivery of care, innovations in care, and health inequities. The predeparture curriculum also includes topics focusing on safety and different cultural beliefs.
3. *Traveling with a faculty member experienced in global health.* This arrangement offers support for residents. Trainees spend approximately four weeks abroad and often speak about the incredible disparities in care and

health status that they see; providing residents with a familiar and safe faculty mentor allows them to reflect on and process the clinical care they witness and in which they participate.

4. *Investment in capacity building at Makerere University.* Although faculty members travel with residents, their primary goal is to participate in skill-building opportunities for clinicians in Uganda and to provide research mentorship and collaboration for topics generated by the Ugandans. Additionally, faculty members have fostered a bidirectional relationship in which several of the Ugandan physicians travel to the United States to advance their professional skills by engaging in research efforts, delivering grand rounds, presenting at scientific meetings, and obtaining additional clinical training.

We have developed a supportive and collaborative global health experience that strives to link global health and local health training and facilitate greater conversation about equity, social justice, and interconnectedness. Our pedagogical approach to global health education is one in which trainees are taught how to provide responsible, equitable care and challenged to transfer these principles and clinical approaches to the clinical setting in which they work. Additionally, faculty members strive to model collaborative and bidirectional work with local agencies and Ugandan physicians, hoping to demonstrate principles of community engagement that can be used in communities abroad and in our own backyard. We believe that global health training, when properly structured, adds to trainees' preparation in caring for marginalized women and increases the likelihood that they will ultimately work to address disparity in their careers.

Conclusion

We believe that we have constructed a robust curriculum on caring for underserved populations that emphasizes didactic and experiential exposure both locally and globally. In order to improve the health of all women, we feel an obligation to adopt a more expansive approach to clinician education that includes intentional preparation for work in low-resource settings. Accordingly, we aim to train clinically competent women's health practitioners who have the skills needed to care for marginalized populations and to address social and institutional barriers to health. While this paper has focused on women's health and training in obstetrics and gynecology, the concepts and principles are certainly applicable to most specialties. By pairing curriculum and experiential learning in both domestic and global health, we hope to encourage future work with underserved populations in our state, our nation, and our world. We believe that residents who participate in our unique curriculum are more likely to pursue this path and be content in their choice because they are exposed to the benefits and realities of this work. We hope that our educational model inspires our trainees to develop a larger vision of patient care, one in which they can continue to address inequities and to improve women's health, regardless of where they choose to practice.

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