Community Health Center Engagement and Training During Obstetrics and Gynecology Residency

Anita Y. Cheng, MD
Adrienne L. Erlinger, MPH
Anna M. Modest, PhD, MPH
Lucy Chie, MD, MPH
Jennifer Scott, MD, MPH
Rose L. Molina, MD, MPH

ABSTRACT

Background Community health centers (CHCs) and federally qualified health centers (FQHCs) are critical health care access points for medically underserved areas in the United States. They also provide opportunities for residents to learn about health system challenges, including workforce shortages, social determinants of health, and health equity.

Objective We sought to describe current obstetrics and gynecology (OB-GYN) resident engagement and training in community health settings.

Methods We conducted a website review and survey to identify the prevalence and types of OB-GYN resident exposure to CHCs, including FQHCs. We reviewed 241 program websites to identify community health electives or rotations. We then surveyed program administrators regarding departmental affiliations with CHCs, types of resident involvement, and barriers to resident rotations at CHCs.

Results The website review revealed that 18% (44 of 241) of programs offered a community health rotation. Of the 241 programs surveyed, 78 program administrators responded (32%). Forty-three programs (55%) had at least 1 affiliated CHC, and 34 programs (44%) allowed residents to rotate at a CHC. The most common barrier to resident rotations at a CHC was inadequate resident coverage of hospital-based clinical responsibilities. Respondents reported that among 782 graduating residents in the 2016–2017 and 2017–2018 academic years, 76 (10%) planned to pursue a position at a CHC.

Conclusions According to their websites, a small percentage of US OB-GYN residency programs offered a CHC rotation. Of programs responding to a survey on the topic, less than half offered CHC rotations and less than 1 in 10 residents planned to work in CHCs after graduation.

Introduction

Community health centers (CHCs), including federally qualified health centers (FQHCs), are fundamental in providing access to high-quality primary care in medically underserved areas in the United States.[1] A CHC is any health center that receives funding to serve a population that has been identified as underserved. The CHCs must meet additional criteria to receive certification as an FQHC, such as obtaining specific federal grants determined by the secretary of the Department of Health and Human Services, operating under the Indian Self-Determination and Education Assistance Act, or receiving funds under the Indian Health Care Improvement Act.[2] The centers provide primary and specialized medical care, including obstetrics and gynecology (OB-GYN), as well as programs that improve public health by addressing social determinants in the community, such as work training, peer support, and educational programs.[3] Although CHCs and FQHCs serve more than 28 million patients, including 1 in 6 Medicaid beneficiaries,[1] they face high turnover and shortages of physicians, including obstetrician-gynecologists.[4,5] As of 2016, 13% of health centers reported a vacancy for an obstetrician-gynecologist and spent an average of 10.8 months recruiting for OB-GYN positions.[5]

One part of the solution to fill these critical workforce vacancies is to build a pipeline of providers by training and supporting graduating resident physicians to pursue positions in CHCs. Only 0.6% to 1.4% of all recent US residency graduates went on to practice in rural health centers or FQHCs between 2006 and 2008.[6] When residents receive training at CHCs or FQHCs, they practice in health centers at higher numbers than residents who trained in the typical hospital setting.[4] A study from the Washington, Wyoming, Alaska, Montana, and Idaho Family Medicine Residency Network demonstrated that graduates who trained in CHCs were nearly 3 times more likely to practice in a medically underserved environment than non-CHC-trained family physicians, when controlling for gender, percent full-time equivalent, and years from graduation.[7]

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Editor's Note: The online version of this article contains the survey used in the study.

Despite the literature from primary care residency programs, there are no studies about OB-GYN resident experiences in CHCs or subsequent entry into the CHC workforce for obstetrician-gynecologists. Several studies have explored resident interest in global health training, scope of global health curricula, and barriers to global health training in OB-GYN residency programs.[8–10] One example of integrating global and community health in OB-GYN resident training is the mandatory longitudinal curriculum entitled EMPOWUR (Educating, Mentoring, and Preparing OB-GYNs to Care for Women in Under-Resourced Communities) at the University of California, San Francisco. By equipping trainees with the skill set to provide quality care for the underserved in the United States, graduates are able to apply the same expertise to practice successfully in international settings with limited resources.[11]

Due to the relative dearth of information about exposure to community health across residency programs in the United States, we sought to describe current OB-GYN resident engagement and training in community health settings.

What was known and gap
Community health centers play a vital role in the US health care system and provide opportunities for residents to learn about health system challenges, but there is a dearth of information about exposure to community health across obstetrics and gynecology (OB-GYN) residency programs in the United States.

What is new
Website review and a survey to identify the prevalence and types of OB-GYN resident exposure to community health centers.

Limitations
The survey lacked validity evidence and had a relatively low response rate. Information on websites might not be accurate or up-to-date.

Bottom line
Less than half of OB-GYN programs offer community health rotations. Opportunities for OB-GYN residents to engage in community health through clinical rotations are often limited by financial barriers, supervision challenges, and an inability to allow residents to leave clinical responsibilities at the main teaching sites.

Methods

We conducted a website review and a survey to identify the prevalence and types of OB-GYN resident exposure to CHCs. We obtained a list of currently accredited OB-GYN programs in the United States and Puerto Rico through the Association of Professors of Gynecology and Obstetrics website. From this website, we identified residency program directors or program coordinators.

We reviewed each program's most updated web page as of spring 2018 to determine the availability of community health or global health opportunities in the didactic curriculum or rotation schedule. If described, the location and duration of these experiences were recorded. We also documented whether residents at each program received training at more than 1 medical center. Military affiliation was also noted.

The authors, clinician educators with expertise in community health care, developed an electronic 33-item survey (28 closed-ended and 5 open-ended questions) without further testing (provided as online supplemental material). The survey was sent to residency program administrators via a secure e-mail link. Subsequent attempts to contact nonresponders included 3 outreach e-mails. Respondents were either program directors or program coordinators. Program directors were given the option to designate their program coordinators to complete the survey on their behalf. We asked program administrators to provide data regarding their own training (year of residency graduation, completion of subspecialty fellowship training, and past and/or current work in a CHC). We also asked respondents to characterize departmental affiliation with CHCs and FQHCs as well as opportunities for residents to participate in continuity clinics or ambulatory rotations at these sites. Furthermore, respondents were asked to describe additional opportunities for residents to work with medically underserved populations, including, but not limited to, global health experiences, Indian Health Service, rural hospitals, homeless shelters, prison systems, and Veterans Affairs institutions. We included Veterans Affairs institutions as a training opportunity for medically underserved populations due to its limited women's health services.[12,13] Respondents also reported the expected number of graduating residents from the current and previous academic years who plan to work in a CHC, FQHC, or another underserved community setting. Lastly, respondents had an opportunity to name barriers that prevent residents from training at CHCs. Descriptive statistical analyses were performed. Responses to open-ended questions were categorized into common themes and tallied.

The Institutional Review Board at Beth Israel Deaconess Medical Center approved this study.

Results

We reviewed the websites for 87% (241 of 278) of OB-GYN residency programs accredited by the Accreditation Council for Graduate Medical Education (ACGME). A total of 44 (18%) programs described a community health rotation. These

TABLE
Characteristics of Community Health Rotation Opportunities in Obstetrics and Gynecology Residency Programs

Parameter	Value, No. (%)
Resident program characteristics, N = 78	
Total number of CHCs identified	101[a]
Number of federally qualified health centers	34
Programs with any CHC affiliation, n (%)	43 (55)
Affiliated CHCs per program, mean (SD)	2.34 (1)
Programs that allow residents to rotate in a CHC, n (%)	34 (44)
Rotation type across years of residency, N = 103	
PGY-1–PGY-4	
Mandatory	91 (88)
Elective	12 (12)
Other exposure to community health in residency, N = 78	
Research	8 (10)
Quality improvement	12 (15)
Advocacy	13 (17)
Education	3 (4)
Other	7 (9)
None	35 (45)
Other exposure to medically underserved populations, N = 78	
Global health	43 (55)
Indian Health Service	1 (1)
Rural hospitals	7 (9)
Homeless shelters	8 (10)
Prison systems	7 (9)
Veterans Affairs	7 (9)
Other	31 (40)
None	14 (18)
Graduating residents in academic year 2016–2018, N = 782[b]	
Proportion expected to pursue a position in a CHC	76 (10)

Abbreviations: CHC, community health center; PGY, postgraduate year.
[a] Programs may be affiliated with more than 1 CHC.
[b] Total number of graduating residents among programs that completed the survey.

programs were evenly distributed across the Northeast (30%, 13 of 44), West (32%, 14 of 44), and South (32%, 14 of 44), with the fewest number of programs located in the Midwest (7%, 3 of 44). Four programs publicized a continuity clinic to expose residents to underserved communities. Forty-five (19%) programs described a global health experience.

Of the 241 OB-GYN residency programs, 78 (32%) administrators completed the survey. Forty-one (53%) respondents were program directors. On average, they had 18 years of experience as attending physicians, with a median of 9 years. Maternal-fetal medicine was the most common subspecialty among the 12 of 41 (29%) program directors who had completed fellowship training. Twenty program directors (49%) practiced in a CHC either in the past or at the time of survey administration.

Among all respondents, 43 (55%) programs had at least 1 affiliated CHC. A total of 101 CHCs were reported as having an affiliation with the OB-GYN department, 34 of which were considered an FQHC (TABLE). Thirty-four programs (44%) allowed residents to rotate at a CHC. Respondents noted that other than CHC clinical rotations (if available), trainees were exposed to community health through advocacy (17%, 13 of 78), quality improvement (15%, 12 of 78), research (10%, 8 of 78), and education (4%, 3 of 78). Thirty-five programs (45%) did not include any additional exposure to community health for their residents. Residents engaged with other medically underserved populations through global health activities (55%, 43 of 78), homeless shelters (10%, 8 of 78), prison systems (9%, 7 of 78), rural hospitals (9%, 7 of 78), and Indian Health Service (1%, 1 of 78). Among programs with CHC rotations, these rotations were evenly distributed among the 4 years of residency, with 88% (91 of 103) of CHC rotations being mandatory. Respondents reported that among the 782 total graduating residents in academic years 2016–2017 and 2017–2018, 76 (10%) planned to pursue a position at a CHC.

The most common reason reported for why residents did not rotate at a CHC was inadequate resident coverage of required clinical services, such as assisting in scheduled surgical cases and managing inpatient care, precluding residents from engaging in off-site clinics. Other reasons included financial and administrative challenges, lack of appropriate clinical supervision, resident preference to remain at the primary medical center, and opportunity to care for a similar patient population at another site.

Discussion

A 2018 review of 87% of US OB-GYN residency websites revealed that less than one-fifth of residency programs included a community health experience on their website. Programs that responded to a subsequent online survey revealed that a higher percentage (just under half) offered CHC experiences to residents. Programs suggested multiple reasons for why residents did not participate in a CHC elective rotation, such as inadequate resident availability to go off-site, administrative barriers, and lack of appropriate attending physician supervision at the

site. In contrast, more global health training opportunities were offered than CHC rotations. After graduation, few residents reportedly pursued work in a CHC.

Our results identified similar barriers to those previously reported by family medicine residency programs in establishing CHC affiliations, including lack of a shared mission of education and service, chronic financial instability, and administrative and governance complexity.[14] If these financial and administrative burdens are overcome, the learning opportunities for residents in CHCs add value to their medical training. For example, in a survey of OB-GYN residents, community-based residency programs were more likely to provide didactic sessions on primary care counseling and screening than university-affiliated programs.[15]

Additionally, residency training in a CHC may enhance cross-cultural care, an ACGME Milestone,[16,17] through engaging with the diverse patients who seek care at CHCs.[18] In a study of self-perceived preparedness to deliver cross-cultural care among primary care residents, including OB-GYN residents, significant predictors of preparedness included mentorship availability, formal teaching of cross-cultural care, and greater cross-cultural case mix during residency.[19] Moreover, similar to what has been described among family medicine residency programs, increasing exposure of OB-GYN residents to these medically underserved settings may be part of a solution to OB-GYN physician shortages found in CHCs and FQHCs.

The 32% response rate limits the generalizability of these results nationally. We were unable to compare meaningful characteristics between responders and nonresponders due to the data collection methods. Programs affiliated with CHCs may have been more likely to complete the survey, which may have resulted in an overestimate of the proportion of OB-GYN residency programs including CHCs and FQHCs in training. As our survey lacks validity evidence, respondents may not have interpreted the questions as intended, and some responses are subject to recall bias. We also recognize that the information on websites may not be accurate.

Further work is needed to characterize the extent of OB-GYN residency program partnerships with CHCs nationally. Future research should assess trends in the OB-GYN workforce in CHCs, FQHCs, and other rural settings with particular attention to residency training opportunities in community health and global health. In addition, further work is needed to enhance cultural humility and health equity training through resident experiences in community health settings.

Conclusions

OB-GYN residents have limited opportunities to engage in community health through clinical rotations. In contrast, more residency programs appear to offer global health training. Key barriers to OB-GYN clinical training in CHCs include the inability to allow residents to leave clinical responsibilities at the main teaching sites as well as financial and supervision challenges.

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Anita Y. Cheng, MD, is Resident Physician, Department of Obstetrics and Gynecology, Beth Israel Deaconess Medical Center; **Adrienne L. Erlinger, MPH,** is Clinical Research Assistant, Department of Obstetrics and Gynecology, Beth Israel Deaconess Medical Center; **Anna M. Modest, PhD, MPH,** is Staff Scientist, Department of Obstetrics and Gynecology, Beth Israel Deaconess Medical Center, and Instructor, Obstetrics, Gynecology, and Reproductive Biology, Harvard Medical School; **Lucy Chie, MD, MPH,** is Assistant Professor, Department of Obstetrics and Gynecology, Beth Israel Deaconess Medical Center, and Assistant Professor, Obstetrics, Gynecology, and Reproductive Biology, Harvard Medical School; **Jennifer Scott, MD, MPH,** is Assistant Professor, Department of Obstetrics and Gynecology, Beth Israel Deaconess Medical Center, Assistant Professor, Obstetrics, Gynecology, and Reproductive Biology, Harvard Medical School, and Associate Scientist, Division of Women's Health, Brigham and Women's Hospital; and **Rose L. Molina, MD, MPH,** is Assistant Professor, Department of Obstetrics and Gynecology, Beth Israel Deaconess Medical Center, Assistant Professor, Obstetrics, Gynecology, and Reproductive Biology, Harvard Medical School, and Associate Scientist, Division of Women's Health, Brigham and Women's Hospital.

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Corresponding author: Rose L. Molina, MD, MPH, Beth Israel Deaconess Medical Center, Department of Obstetrics and Gynecology, Kirstein 3, 330 Brookline Avenue, Boston, MA 02215, 617.667.0887, rmolina@bidmc.harvard.edu

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