

## ORIGINAL RESEARCH

# Transgender Education Experiences Among Obstetrics and Gynecology Residents: A National Survey

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### Abstract

**Purpose:** To assess the current state of training among U.S. Obstetrics and Gynecology (OB/Gyn) residents in the field of transgender medicine.

**Methods:** An anonymous survey was sent to current OB/Gyn residents in the United States, which contained a series of questions regarding their training experiences caring for transgender patients.

**Results:** Roughly half of respondents (49.4%) reported having formal didactics in transgender medicine or personal experience caring for a transgender patient (46.8%). Only 14.5% of respondents had any surgical training, and 59% responded that they had at least some comfort level caring for transgender patients. Of the areas of care assessed, residents felt most comfortable providing appropriate cancer screening to transgender patients and least comfortable with gender-affirming hormone therapy management. Just 50.3% of respondents felt that they worked with at least one faculty member with expertise in transgender medicine, and more than half (51.1%) responded that they felt there were barriers to training in their program, with 14% reporting a perceived atmosphere of bias or discrimination toward this patient population. The majority of residents (82.6%) expressed interest in additional training in this field, with direct patient exposure and didactic lectures identified as being the most desired learning modalities.

**Conclusion:** Approximately half of resident respondents reported didactic exposure to transgender medicine in their current programs, with far fewer having surgical training. At least half of respondents felt that there were barriers to their training in transgender medicine, and a majority of respondents were interested in further training in this field.

**Keywords:** education; obstetrics and gynecology; residency; transgender

### Introduction

Meeting the unique and sometimes complex health care needs of transgender patients in a comprehensive and caring manner has been emphasized as a top priority by many leadership organizations in medicine in recent years. Although data regarding the prevalence of transgender individuals are limited, they are estimated to make up roughly 0.5–0.6% of the population in the United States.<sup>1,2</sup> One important aspect of improving health care for transgender patients long-term is to train the next generation of physicians to provide compassionate and holistic care to this population. This is an endeavor of crucial importance across

all specialties of medicine, with certain specialties, such as Obstetrics and Gynecology (OB/Gyn), playing a key role in providing both primary and subspecialty care for transgender patients throughout their lives.

To this end, The American College of Obstetricians and Gynecologists (ACOG) released Committee Opinions regarding the care of transgender individuals in 2011 and 2017.<sup>3,4</sup> Resident physician training in transgender health was recommended by the Council on Resident Education (CREOG) in OB/Gyn in its objectives in 2013, and a 2016 survey of OB/Gyn residency program directors (PDs) showed that, while more than 96% of PDs thought that this education would

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be beneficial to residents, only 36.9% reported direct resident exposure to transgender patients and almost 15% reported not educating their residents at all in transgender medicine.<sup>5</sup> A more recent study of OB/Gyn residency PDs in 2019 found that only 51% offered transgender health education, with 11% reporting that they had a well-established curriculum and 16% offering training in gender-affirming surgical techniques. Reasons cited by PDs regarding why they offered transgender education in their programs included resident interest and the presence of a transgender patient community requesting health care services.<sup>6</sup> Surveys of residency PDs from other specialties have reported factors such as presence of LGBT faculty and PD attitudes regarding the importance of transgender education as factors that contributed to the number of hours dedicated to resident transgender education.<sup>7,8</sup>

In addition, the comfort and experience of academic faculty may also play a role in resident education. A survey conducted by Unger in 2015 among OB/Gyn providers revealed that 80% of respondents were not trained in transgender medicine during residency, and this was found to be independent of time in practice since residency training. The majority of respondents did not know recommendations for basic routine health screenings and maintenance for transgender patients. This is significant because 86% of respondents in the survey reported that they currently practice in an academic setting with residents.<sup>9</sup>

In addition to OB/Gyn, many other fields of medicine are beginning to emphasize the importance of training residents in the care of transgender patients. In a 2018 cross-sectional survey of Otolaryngology residents and fellows, ~30% reported having education regarding or direct exposure caring for transgender patients.<sup>10</sup> A 2016 survey of residents and fellows in Plastic Surgery training programs reported that 64% of respondents reported education regarding or direct exposure to transgender patient care during residency, with a similar number reporting experience with gender-confirming surgical training.<sup>11</sup> In a 2016 survey of Urology residents in the United States, slightly more than 50% reported some form of transgender education, with 77% responding that they felt gender-confirming surgical training was important. Positive trainee attitudes regarding the importance of this training correlated with their previous exposure to transgender care.<sup>12</sup>

Gathering data on the current state of transgender education and barriers that exist among OB/Gyn residency programs in the United States is important for

the development of interventions that may help improve resident education, with the ultimate goal of improving patient care. Currently, no study exists that surveys OB/Gyn residents directly regarding their training experience in transgender medicine.

## Methods

### Participants

The survey was created by the first author using Qualtrics software and was targeted toward current resident physician trainees in OB/Gyn in the United States. It was reviewed by the Creighton University Institutional Review Board and received exempt status (IRBNet ID: 1453934-1). Using a centralized email listserv, the survey was distributed to OB/Gyn residency PDs and program coordinators at 283 training programs four times from July to September 2019. PDs and coordinators were asked to distribute the survey to their residents, using a link provided in the email. A participant bill of rights was also included in the email, with PI contact information made available for participant questions. The survey was anonymous, no personal identifiers were collected, and all IP tracking was disabled. No reward was offered for completion of the survey.

### Survey

**Demographics.** Residents were asked to identify which ACOG district their training program was located in, with each district and its included states listed for reference. Respondents were also asked to identify what year of training they were currently in and which gender they identified with, with the option to not answer if they preferred.

**Current training in care of transgender patients.** Residents were asked if their training programs offered any formal didactic education regarding the medical care of transgender patients, if they had any personal experiences caring for transgender patients during residency training, and if they felt that they worked with at least one faculty member with expertise in the field of transgender medicine. The respondents were asked to respond “yes,” “no,” or “I’m not sure” to these questions, and “yes” responses were given the opportunity to elaborate based on the question. Residents were also asked to assess their level of knowledge and/or comfort on a scale from “not at all” to “very much so” regarding multiple aspects of transgender medicine, including using appropriate gender terminology, referring patients to transfriendly

specialists, and counseling transgender patients regarding contraception, gender-affirming hormones, cancer screening, and fertility preservation options. Residents were also asked about their surgical training in transgender medicine and their self-perceived overall readiness to meet the health care needs of a transgender patient. Residents were asked if they felt there were barriers in their training programs regarding training in transgender health. They were asked to choose from a list of possible barriers and were also given the option for free response to this question.

**Additional training needs.** Residents were asked to rate their interest level in further training in transgender medicine on a scale of “not at all interested” to “very interested” and were asked to identify specific areas of interest. Residents were also asked to identify modes of learning they felt would be most conducive to furthering their education in transgender medicine. A comprehensive list of survey questions is provided in the Supplementary Materials.

#### Statistical analysis

Survey data are descriptive with data being presented as frequency count and percentage.

## Results

### Demographics

A total of 169 complete or partial survey responses were received, 2 of which had to be excluded due to being from recent graduates and not current residents in training. The demographics of respondents are outlined in Table 1. The majority of respondents identified as female, one identified as nonbinary, one preferred not to answer, and no respondents identified as transgender. There was representation from every residency training class, from years 1 to 4, with an even distribution of upper-level and lower-level trainees. There was representation from every ACOG district, except for district X, which represents the Armed Forces district, and was not listed as an option on the survey.

### Current training

The proportion of respondents who indicated that they were offered formal didactic education regarding transgender medical care was approximately half (49.4%). Of those indicating that they did have formal didactic training, 86.3% reported 1–2 sessions per academic year, 13.7% reported 3 or more sessions, and 2.7% reported more than 10 sessions per year. Of the respondents, 46.8% had personal experience caring for a

**Table 1. Respondent Demographics**

Question	Response	n (%)
16	Gender	
	Male	18 (13.0)
	Female	118 (85.5)
	Transmale	0 (0.0)
	Transfemale	0 (0.0)
	Nonbinary	1 (0.7)
17	No answer	1 (0.7)
	Year	
	1	40 (29.0)
	2	29 (21.0)
	3	40 (29.0)
15	4	29 (21.0)
	District	
	I	5 (3.7)
	II	16 (11.7)
	III	8 (5.8)
	IV	20 (14.6)
	V	17 (12.4)
	VI	23 (16.8)
	VII	18 (13.1)
	VIII	11 (8.0)
	IX	10 (7.3)
	X	—
XI	6 (4.4)	
XII	3 (2.2)	

transgender patient, with the majority having this experience while on a general gynecology service. Just 14.5% of residents had any surgical training experience with transgender patients, with the majority (57.1%) reporting 1–5 cases, and 9.5% reporting more than 20 cases. Approximately half of residents (50.3%) felt that they worked with at least one faculty member with expertise in the field of transgender health care.

When residents were asked if they felt there were barriers in their residency programs pertaining to education in transgender health, 51.1% responded “yes,” 28.1% responded “no,” and 20.9% responded “I’m not sure.” Of barriers identified, “lack of curriculum” was the reason chosen most frequently, followed by “lack of transgender patient population,” “lack of time,” and “lack of interest from program director (Table 2).” Respondents were given an opportunity for free response, and expressed constraints due to institutional religious affiliations, lack of staff/mentors, and lack of access to gender affirming care coverage. These free responses are documented in Table 3. Of note, 14% of those reporting perceived barriers felt that there was an atmosphere of discrimination or bias toward gender minorities or LGBTQ populations in their training programs.

When asked about their own level of preparedness in caring for transgender patients, 39.7% felt they were very knowledgeable regarding the use of appropriate gender terminology, 52.1% felt they were somewhat

**Table 2. Current Training**

Question	No	Yes	Not sure
1			
1a			
Formal didactic training	84 (50.6)	82 (49.4)	
1 session	—	40 (54.8)	
2 sessions	—	23 (31.5)	
3 sessions	—	2 (2.7)	
4 sessions	—	5 (6.9)	
5 sessions	—	1 (1.4)	
> 10 sessions	—	2 (2.7)	
2			
Personal care experiences	82 (53.3)	72 (46.8)	
General obstetrics	—	18 (26.5)	
General gynecology	—	53 (77.9)	
Maternal fetal medicine	—	3 (4.4)	
Urogynecology	—	10 (14.7)	
Reproductive	—	15 (22.1)	
Oncology	—	6 (8.8)	
Peds	—	8 (11.8)	
Other	—	8 (11.8)	
4			
Faculty expertise	41 (28.3)	73 (50.3)	31 (21.4)
10			
Surgical training (cases)	124 (85.5)	21 (14.5)	
10a			
1–5	—	12 (57.1)	
6–10	—	3 (14.3)	
11–15	—	3 (14.3)	
16–20	—	1 (4.8)	
> 20	—	2 (9.5)	
12			
Barriers to training	39 (28.1)	71 (51.1)	29 (20.9)
12a			
None	—	6 (12.0)	
Lack of curriculum	—	39 (78.0)	
Lack of time	—	16 (32.0)	
Lack of interest—PD	—	13 (26.0)	
Lack of interest—residents	—	5 (10.0)	
No transgender patients	—	20 (40.0)	
Discrimination	—	7 (14.0)	
Other	—	6 (12.0)	

Data are provided as *n* (%).  
PD, program director.

knowledgeable, 4.8% felt they were not at all knowledgeable, and 3.4% were not sure. When asked if they were comfortable referring patients to other transfriendly health care specialists, 30.1% responded that they were not at all comfortable, 38.4% were somewhat comfortable, 20.6% were very comfortable, and 11% were not sure. When asked if they felt they were appropriately trained to meet the health care needs of a transgender patient, approximately half of respondents answered, “somewhat” (54.8%), 8.2% answered “very much so,” 31.5% answered “not at all,” and 5.5% answered “I’m not sure.” When asked about individual aspects of transgender health care, 77.4% felt they were “somewhat” or “very much” trained to counsel transgender patients regarding contraceptive options, as opposed to 22.6%, who felt they were “not at all” trained or were unsure. Of them, 79.5% responded that they were “somewhat” or “very much” trained to provide cancer-screening service to transgender patients, while 20.5% felt they were “not at all” trained or were not sure. When asked if they felt appropriately trained to counsel transgender patients regarding fertility

**Table 3. Participant Free Responses**

**Q2a. Have you had any personal experience caring for transgender patients in your obstetrics and gynecology residency training? If yes, during which rotation?**

Clinic (2)  
Breast  
Family planning rotation (2)  
Transgender clinic  
I perform forensic medical evaluations and have performed some for transgender females. This was outside of my formal training.  
MIGS

**Q12a. If you feel there are barriers to education regarding transgender medicine in your program, what are they?**

Catholic hospital system  
Lack of mentors  
Lack of knowledgeable staff (attending and support staff)  
Lack of experience of staff  
Religious bias  
Access to gender affirming care (i.e., Medicaid)

preservation options, 45.3% responded “not at all,” 45.3% responded “somewhat,” 6.5% responded “very much so,” and 2.9% responded, “I’m not sure.” The vast majority of residents responded that they did not feel appropriately trained to prescribe gender-affirming hormone therapy to transgender patients, with only 15.8% and 3.4% responding that they felt “somewhat” or “very” comfortable, respectively (Table 4).

#### Additional training

The majority of respondents (82.6%) indicated some level of interest in additional training in transgender medicine. While there were many areas of interest expressed among respondents, the most popular included hormone therapy, surgical techniques, fertility preservation, contraception, and cancer screening. Direct patient exposure was chosen as the most beneficial mode of learning about transgender health care, followed by didactic lectures and online modules (Table 5).

#### Discussion

The responses to this survey are illustrative of the current state of training in transgender medicine among OB/Gyn residency programs in the United States, with representation from all but one ACOG district and respondents from all levels of residency training. The majority of respondents (85.5%) identified as female, which is roughly in line with data published by The Association of American Medical Colleges, which reported that 83% of residents training in OB/Gyn residency programs in the 2017–2018 academic year were female.<sup>13</sup> Responses to this survey indicate a lack of

**Table 4. Care of Transgender Patients**

Question		Not sure	Not at all	Somewhat	Very much so
3	Knowledge	5 (3.4)	7 (4.8)	76 (52.1)	58 (39.7)
5	Comfortable	16 (11.0)	44 (30.1)	56 (38.4)	30 (20.6)
6	Appropriate training				
6	Meet health care needs	8 (5.5)	46 (31.5)	80 (54.8)	12 (8.2)
7	Counsel	3 (2.0)	30 (20.6)	65 (44.5)	48 (32.9)
8	Cancer screening	4 (2.7)	26 (17.8)	60 (41.1)	56 (38.4)
9	Hormone therapy	3 (2.1)	115 (78.8)	23 (15.8)	5 (3.4)
11	Fertility preservation	4 (2.9)	63 (45.3)	63 (45.3)	9 (6.5)

Data are provided as *n* (%).

strong, reliable training in transgender medicine across the United States in OB/Gyn residency programs, with a particular dearth of training in surgical technique and hormone therapy.

The majority of respondents were interested in further training in this field and were especially interested in direct patient care and didactic learning. The most common barrier to education cited by respondents was, “lack of curriculum,” which highlights an actionable area of focus for improving transgender education in residency. In addition, “lack of transgender patient population” was a barrier cited by a large number of respondents. This could be due to location of individual programs or due to lack of access or connection between transgender patients in the community and resident clinics. Residency programs that currently have strong transgender patient population bases may be willing to mentor other PDs in establishing patient populations locally or may consider inviting visiting residents to do a transgender medicine elective with their institution. While some barriers are surmountable by improving resource distribution

and communication, others are more insidious and challenging. Fourteen percent of respondents who felt there were barriers to transgender education in their program felt that there was an atmosphere of discrimination or bias toward gender minorities or the LGBTQ population. This is a much more difficult problem to address at a systems level, although may be improved by increased education and exposure to marginalized populations during medical education and residency training.

While this survey did clarify the current state of transgender education in OB/Gyn residency programs in the United States, it also had limitations. First, although it was distributed to 283 programs using a centralized list-serv, there was a very low survey response rate. This could be due to a low distribution rate from PDs and program coordinators to residents or to low response rates from residents despite receiving the survey. Unfortunately, the true number of residents who received the survey, and therefore the true response rate, is unable to be determined. The distribution of surveys by PDs and coordinators could also have introduced bias, as only residents who were given the survey were able to respond, and it stands to reason that PDs with an interest in transgender medicine may have been more likely to encourage their trainees to participate than PDs with little interest or a negative view on transgender education. This could have also led to multiple residents from the same program taking the survey, skewing the results of individual ACOG districts. Due to this concern, responses were not categorized by demographics and were viewed as a composite set. In addition, residents with an interest in transgender medicine may have been more likely to voluntarily participate in this survey. Finally, a technical error was noted with the survey early in the distribution process, which did not allow for the recording of free responses. This was fixed at the time the error was identified, but could have prevented some free response input for respondents who completed the survey early.

**Table 5. Additional Training Needs**

Question		Not at all	Neutral	Somewhat	Very
13	Additional training interest	7 (5.1)	17 (12.3)	48 (34.8)	66 (47.8)
13a	Sensitive language	32 (54.2)			
	History taking	25 (42.4)			
	Cancer screening	33 (55.9)			
	Contraception	37 (62.7)			
	Fertility preservation	40 (67.8)			
	Hormone therapy	50 (84.8)			
	Surgical techniques	45 (76.3)			
	Not interested	2 (3.4)			
14	Mode of learning				
	Patient exposure	120 (87.6)			
	Didactic lectures	96 (70.1)			
	Standardized patients	29 (21.2)			
	Online modules	43 (31.4)			
	Not interested	7 (5.1)			

Data are provided as *n* (%).

Despite these limitations, there is potential for further future inquiry using this preliminary data as a starting point. Future projects could attempt a more uniform and reliable distribution method by distributing surveys directly to residents through ACOG or the Accreditation Council for Graduate Medical Education (ACGME) or by presenting a limited number of questions at the end of the CREOG annual in-service examination to all resident examinees. Direct distribution to residents would make the survey more accessible to trainees, potentially improving the response rate, and would allow for an accurate response rate to be calculated. If future distribution methods resulted in a larger response rate, more reliable statistical information could be gathered regarding demographic and geographical differences in resident training experiences. Furthermore, specific content of didactic education and clinical and surgical experience could be elucidated from survey participants. These metrics could also be measured over time to gauge improvement in resident transgender education, especially if specific interventions are implemented.

### Conclusion

Care of transgender patients has been identified as a priority in resident education by ACOG, although only about half of our respondents reported having didactic education in this field. Far fewer had experience in the surgical care of transgender patients or management of hormonal therapies. While many respondents felt that there were barriers to transgender education in their programs, the majority were interested in further training. Although the response rate was low, this survey gained insight into the current state of training in transgender medicine in OB/Gyn residency programs and highlighted areas that can be targeted for improvement moving forward in this important mission.

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### Author Disclosure Statement

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### Supplementary Material

Supplementary Data

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### Abbreviations Used

ACOG = American College of Obstetricians and Gynecologists  
 OB/Gyn = Obstetrics and Gynecology  
 PD = program director