

EDUCATION

Sources of support for and resistance to abortion training in obstetrics and gynecology residency programs



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BACKGROUND: Only 64% of obstetrics and gynecology program directors report routine, scheduled training in abortion, despite the Accreditation Council for Graduate Medical Education's requirements for routine training. Most report that exposure to training is limited to specific clinical circumstances.

OBJECTIVE: We sought to describe residency program directors' perspectives of support for and resistance to abortion training in residency training programs in the United States.

MATERIALS AND METHODS: A national survey of directors explored the availability of abortion training as well as support for and resistance to abortion training within their departments and institutions. In addition, directors who indicated that training was not available at all, available only as an elective, or as routine but limited to specific clinical circumstances, were also asked which procedures were limited, in what ways, and by whom. Descriptive and bivariate analyses were performed.

RESULTS: A total of 190 residency program directors (79%) responded from throughout the United States (30% in the Northeast, 30% in the

South, 23% in the Midwest, and 16% in the West), and 14% described their program as religiously affiliated. Most directors (73%) reported at least some institutional or government restrictions to training, and reported an average of 3 types of restrictions. Hospital policy was the most commonly reported restriction, followed by state law. Programs with routine abortion training reported an average of 2 restrictions, compared with 4 restrictions in programs with optional training, and 5 restrictions in programs with no abortion training.

CONCLUSION: Significant barriers to integrating abortion training into residents' schedules continue to exist decades after the Accreditation Council for Graduate Medical Education training mandate. We should use these data to develop better support and targeted strategies for increasing the number of trained abortion providers in the United States.

Key words: barriers, gynecology education, induced abortion, resident education, training

The Accreditation Council for Graduate Medical Education (ACGME) requires obstetrics and gynecology residency programs in the United States to include abortion training so that residents can become competent in uterine evacuation and other aspects of abortion care.¹ Since the policy was enacted in 1995, residency program directors have reported a slow increase in integration. Before the mandate, the proportion of programs reporting routine training fell from 24% in 1985² to 12% in 1992.³ The mandate led to a gradual increase from 31% in 1998⁴ to one-half of the programs (51%) in 2004.⁵ The most recent study in 2014, almost 20 years

after the policy went into effect, found that 80% of program directors reported routine training using the same definition as in previous surveys. However, when elaborating on the definition of routine as a quality-control measure to ensure that routine training included only those programs with scheduled training, the proportion was only 64%.⁶ In addition, more than one-third of the residency program directors indicated that training was limited to specific cases, such as early pregnancy loss and pregnancy complications. Since there is scant literature about factors that contribute to restrictions or limitations to training as well as those that facilitate it in obstetrics and gynecology training programs, we analyzed data about these factors from a 2014 cross-sectional study of residency programs. Our findings may help inform potential interventions to strengthen resident abortion training, to comply more fully with ACGME requirements and to ensure that graduates can better

meet the reproductive health needs of women in their future practice.

Materials and Methods

We invited directors of all 242 obstetrics and gynecology residency programs, as identified through American Medical Association's Residency and Fellowship database, to participate in an online survey.⁷ A pre-notification, an invitation, and up to 3 reminders were sent by electronic mail from February 2014 to April 2014. In October 2014, a paper survey with self-addressed envelopes and a \$25 gift card were sent to the remaining nonrespondents. Data were deidentified once it was noted that the director responded. The University of California Institutional Review Board considered the study exempt.

The survey consisted of 74 multiple-choice, open-ended, and quantitative questions, including many that had been asked in prior surveys.²⁻⁵ We collected data about the training programs, including geography, size, program type, and affiliation with the Kenneth J. Ryan

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AJOG at a Glance

Why was this study conducted?

To explore the sources of support for and resistance to abortion training in US obstetrics and gynecology residency training programs. Only 64% of residency program directors report routine abortion training, despite the Accreditation Council for Graduate Medical Education's requirements for abortion training.

Key findings

With a 79% response rate, most residency program directors reported institutional or government restrictions to training, and reported an average of 3 types of restrictions. Hospital policy was the most commonly reported restriction, followed by state law.

What does this add to what is known?

The status of abortion training is analyzed and reported on every few years, but no other study has detailed these systemic barriers to abortion training with a national sample. This study begins this investigation by reporting residency program directors' perspectives of support and restriction, and considers strategies for improvement.

Residency Training Program in Abortion and Family Planning (Ryan Program), which provides technical and financial support to initiate and institutionalize training.^{6,8} We asked residency program directors (also referred to as "program directors" or simply "directors") to describe abortion training as routine, optional, or not available. "Routine" training was defined as training automatically included in a resident's schedule, unless that individual choose to opt out; "optional" training was training that residents are not scheduled to have but can choose to opt into (which can take place at the training institution or arranged at a freestanding clinic); and "none" is training in which abortion training is not available in any way as part of the residency program's curriculum. We then applied a more rigorous definition of routine training that included time in the schedule: routine training was either a formal, structured rotation dedicated to family planning or integrated into another rotation with dedicated time; this is the definition used in the present study.

Directors were asked multiple questions regarding the types of restrictions to abortion training, including whether care was limited by gestational age or by indication. We also inquired about the source of the imposed restrictions on

the training such as university or hospital policy, state laws, or policies in specific hospital units. Directors were provided a list of possible restriction sources, and were prompted to list others not mentioned. For this analysis, programs with routine training were further divided into 2 categories: those without any reported training restrictions, and those with some training restrictions.

We asked directors about institutional support for and barriers to abortion training. All directors were asked, "Within your institution, what level of resistance or support is there regarding abortion training?" from a variety of stakeholders, such as departmental leadership, nursing, faculty, and learners. Respondents indicated support or resistance levels using a 5-point Likert scale, from "very supportive" to "very resistant" or "not applicable" (NA). Directors who indicated that training for specific clinical circumstances was restricted in any way were also asked, "For what reason(s) is [each specific abortion technique] limited or restricted?" A variety of potential reasons for restriction were listed, and directors marked "yes" or "no."

Descriptive and bivariate statistical analyses were conducted with STATA/IC version 15.1 statistical software.

Differences were considered statistically significant at $P < .05$.

Results**Program characteristics**

A total of 190 (79%) residency program directors responded, with 83% submitting surveys online and 17% via paper. Of the respondents, 14% had a religious affiliation, and 65 (34%) were affiliated with the Ryan Program at the time of the survey. Programs were in all regions of the United States: 30% in the Northeast, 30% in the South, 23% in the Midwest, and 16% in the West. This is similar to the locations of obstetrics and gynecology residency programs nationally: 27% in the Northeast, 32% in the South, 26% in the Midwest, and 15% in the West.⁹

Nonrespondents were more likely to be in the Northeast (42% vs 30%) and the South (38% vs 30%), and less likely to be from the Midwest (17% vs 23%) and the West (2% vs 17%) ($P = .02$). In addition, whereas 34% of respondents were in Ryan Programs, only 10% of nonrespondents were in Ryan Programs ($P = 0.0$).

Training restrictions

Ten programs (5%) reported that abortion training was not at all available, 59 (31%) reported it as optionally available, and 121 (64%) reported it as routinely scheduled for residents. Of the 121 programs with routine training included in a resident's schedule, 69 (57%) reported some institutional or state-imposed restrictions and were considered "routine programs with restrictions."

There was variation in which abortion techniques were taught and for which clinical indications (Table 1). Overall, 99% of the program directors reported some training in medication abortion: 64% of programs offered it for all indications and 36% only for early pregnancy loss and abnormal pregnancies. Similarly, 93% reported training in first-trimester uterine aspiration, but 31% of trained residents only in limited indications. In all, 90% of trained residents received training in

TABLE 1

Abortion procedures included in ob-gyn training programs and for which indications (total N = 190 residency program director respondents)

Resident training	Medication abortion	First-trimester aspiration	Second-trimester D&E	Second-trimester induction
For all reasons	122 (62.4)	118 (62.1)	95 (50.0)	61 (32.1)
Only for fetal demise/abnormal pregnancy	48 (25.3)	40 (21.1)	63 (33.2)	104 (54.7)
For fetal demise only	18 (9.5)	19 (10.0)	13 (6.8)	20 (10.5)
No training	2 (1.1)	13 (6.8)	19 (10.0)	5 (2.6)

Values are n (%) unless otherwise specified.

D&E, dilation and evacuation.

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second-trimester dilation and evacuation (D&E) and 97% in induction termination, but 40% reported training limited to certain indications for second-trimester D&E and 65% for induction termination.

The training limitations for each uterine evacuation technique were explored further. Program directors described a number of restrictions that differed slightly by technique (Table 2). Directors described the training restrictions as institutional policies, such as those at a hospital, university, or specific unit; state law; or circumstances within the instruction that limited training, such as a lack of expert faculty, resistance from nurses, or lack of patient insurance/prohibitive costs. The most commonly reported training restriction for each procedure was hospital policy, cited by the majority of directors at programs with restrictions.

Program directors described the gestational limits for second-trimester procedural training and limits at their institutions in general, as well as the source of gestational restrictions. Training limits differed by program type: programs with routine training without restrictions trained residents in second-trimester D&E to a mean of 20.0 weeks (range, 12–24 weeks), routine training with restrictions to a mean of 18.7 weeks (range, 12–24 weeks), and optional training programs to a mean of 17.1 weeks (range, 13–24 weeks) ($P < .001$). The most common reason for gestational limits across program types was state law (36%), followed by lack of

trained faculty (20%), and hospital policy (14%).

The number of training restrictions varied significantly by general training availability: programs with no training listed a mean of 5 restrictions, optional programs reported 4 restrictions, and routine with restrictions reported 2 restrictions ($P < .001$). Directors also reported more training restrictions in religiously affiliated programs ($P = .02$). The mean number of barriers specifically to second-trimester D&E training were few but statistically significant: programs with routine training reported a mean of 0.7 restrictions to D&E training, optional programs reported 1.2 restrictions, and no-training programs reported 1.4 restrictions.

Institutional support and opposition for training

Programs with routine training reported more institutional support than programs with optional or no training; conversely, programs with optional training and no training reported more opposition to training than programs with routine training. Directors from all program types most often cited support from obstetric and gynecology departmental leadership, faculty, and residents, but the proportion reporting such support varied by program type (Table 3). For example, obstetric and gynecology departmental leadership was 1 of the top 3 sources of support reported by all 4 program types and was reported by nearly all programs with routine training and no restrictions (90%), 77% of

routine programs with restrictions, 51% of optional programs, and 30% of no-training programs. Similarly, directors from all program types most often reported opposition to training from hospital administration, operating room nurses, and labor and delivery nurses, but the proportion of programs reporting opposition varied by type. As an example, labor and delivery nurses were considered 1 of the top 3 institutional sources of opposition reported by all 4 program types: this was cited by nearly three-fourths of programs without training and programs with optional training (70% each), 64% of routine programs with restrictions, and 50% of programs with routine training without restrictions.

Comment

Abortion continues to be one of the most frequently performed surgical procedures in the United States.¹⁰ Despite a professional mandate passed more than 2 decades ago, there continue to be major obstacles to providing such training, training that ensures clinical competence in various methods of uterine evacuation. Research shows that 40% of obstetrics and gynecology residents who are trained in abortion and family planning intend to provide abortions post-residency and to contribute to the essential pool of abortion providers. Their training may also ensure their awareness of women's reproductive health needs and their responsibility in meeting them.⁸ It has been documented that graduates of programs with routine

TABLE 2
Specific reasons for restricted training in obstetrics and gynecology residency programs

Possible reasons for restrictions in training in specific procedures	Total (% of programs with restrictions by procedure type ^a)			
	Medication Abortion (n = 68)	First-trimester aspiration (n = 72)	Second-trimester D&E (n = 95)	Second-trimester induction (n = 129)
Hospital policy	38 (55.9)	39 (54.2)	55 (57.9)	69 (53.5)
State law	18 (26.5)	16 (22.2)	25 (26.3)	27 (20.9)
University policy	10 (14.7)	10 (13.9)	15 (15.8)	15 (11.6)
Lack of expert faculty	9 (13.2)	14 (19.4)	21 (22.1)	7 (5.4)
Nursing concerns	5 (7.4)	7 (9.7)	12 (12.6)	23 (17.8)
No relationship with clinic/clinician providing this type of abortion	4 (5.9)	8 (11.1)	9 (9.5)	9 (7.0)
Military program	4 (5.9)	4 (5.6)	3 (3.2)	4 (3.1)
Restrictive policies in specific clinical units	3 (4.4)	5 (6.9)	4 (4.2)	12 (9.3)
Other restrictions	3 (4.4)	2 (2.8)	1 (1.1)	2 (1.6)
Patient insurance/cost	1 (1.5)	1 (1.4)	0 (0.0)	1 (0.8)
Other clinics available	1 (1.5)	1 (1.4)	1 (1.1)	1 (0.8)
Method discouraged	1 (1.5)	0 (0.0)	2 (2.1)	2 (1.6)
Limited indications	0 (0.0)	0 (0.0)	0 (0.0)	4 (3.1)
	Of all programs (N = 190)			
Any restrictions	68 (36)	72 (38)	95 (50)	129 (68)
No restrictions	122 (64)	118 (62)	95 (50)	61 (32)

D&E, dilation and evacuation.

^a Values are n (%) unless otherwise specified.

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training are more likely to achieve competence and plan to include abortion in post-residency practice.^{5,6,8,11}

Nearly 40% of obstetric and gynecology residency programs do not provide routine training, and residents are not routinely trained in abortion techniques. Although nearly two-thirds of obstetrics and gynecology residency programs routinely provide training, institutional policies and restrictions interfere with the availability of abortions in teaching hospitals or other training settings and thus hinder resident education and competency.

Principal findings

The majority of programs with restrictions on specific aspects of abortion training reported hospital policies as the most significant restriction. Obstetrician-gynecologists in practice have also described the ways in which

formal and informal hospital restrictions affect the care both of patients who seek terminations and of those who need prompt management of pregnancy loss.^{6,12–14} A recent study found that policies around abortion at training hospitals with ACGME-accredited obstetrics and gynecology programs are often more restrictive than state laws.¹⁵ Clearly, less restrictive hospital policies would have a significant impact on ensuring adequate training and high-quality care for patients.

We found that when restrictions are minimal, programs are not only likely to offer routine integrated training, but train to higher gestational durations, and are less likely to report hospital administration and hospital leadership interference. This may reflect that it is easier to have routine training in such circumstances, but it may also imply that there is a positive impact of the program

on hospital, university, and nursing leadership.

Clinical implications

Programs should continue to work toward routine, integrated training, so that the ACGME mandate can be met, so that graduates are prepared to care for their patients, and so that teaching hospitals provide adequate patient care.¹⁶ Obstetrics and gynecology departmental leadership and faculty, as well as hospital administrators responsible for setting policy, have a unique opportunity to educate policy makers about the consequences of these policies.

Strengths and limitations

To our knowledge, this article is the first to investigate and describe the sources of opposition and support of abortion training as experienced and reported by program directors. Yet we acknowledge

TABLE 3

Institutional sources of abortion training support and opposition, by program training type (proportion of residency program directors reporting)

	Routine, without restrictions (n = 52)		Routine, with Restrictions (n = 69)		Optional (n = 59)		No training (n = 10)	
	% Very/ supportive	% Very/ opposed	% Very/ supportive	% Very/ opposed	% Very/ supportive	% Very/ opposed	% Very/ supportive	% Very/ opposed
University leadership	51.9	26.9	27.5	42.0	11.9	42.4	0	30.0
School of medicine leadership	59.6	21.2	29.0	40.6	11.9	35.6	0	20.0
Obstetrics and gynecology departmental leadership	90.4	1.9	76.8	14.5	50.8	30.5	30.0	40.0
Hospital administration	51.9	42.3	29.0	60.9	15.3	64.4	10.0	60.0
Operating room nurses	44.2	50.0	15.9	69.6	13.6	62.7	0	70.0
Labor and delivery nurses	44.2	50.0	13.0	64.4	10.2	69.6	0	70.0
Outpatient clinic nurses	53.8	40.4	30.4	49.3	8.5	59.3	0	60.0
Anesthesia staff/faculty	53.8	40.4	31.9	50.7	15.3	59.3	20.0	50.0
Obstetrics and gynecology faculty	90.4	1.9	69.6	20.3	50.8	28.8	40.0	30.0
Operating room team	53.8	38.5	23.2	59.4	20.3	52.5	0	70.0
Other specialties/colleagues	46.2	40.4	17.4	47.8	10.2	52.5	0	70.0
Residents	90.4	3.8	69.6	18.8	52.5	27.1	10.0	60.0
Medical students	73.1	11.5	46.4	34.8	28.8	37.3	0	70.0

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potential limitations within our study. First, although our response rate of program directors (79%) is not 100%, it is still higher than in recent surveys of program directors, with response rates of 69% in 1998⁴ and 73% in 2004.⁵ It is conceivable that program directors may have been either less or more likely to respond based on their personal beliefs and training specifics in their programs. Our response rate among Ryan Programs directors (ie, programs in which abortion training is automatically included in residents' schedules unless they choose to opt out) was higher than that of the non-Ryan Programs directors (89% vs 71%), and the response rate was slightly higher in the Midwest and West.

Another limitation to this study is that we did not delve into the nuances or strengths of these restrictions. As an example, if a program director cited both nurses and a hospital policy as barriers to their training, we do not know the weight of the influence of either. In addition, we did not inquire about the specifics of

nursing opposition: whether the opposition was perceived from a few or most nurses, nursing leadership, or a general nursing culture, or specific units (eg, labor and delivery; operating room). Furthermore, our findings suggest that barriers to abortion training (as well as sources of support) are independent and unrelated to one another. In truth, barriers to training are multiple intersecting factors, which this article only begins to explore in the context of institutional barriers. If, for example, a state law restricting abortion training were completely overruled, training in that state would most likely not instantaneously become routine or without restrictions. Institutional and faculty support and commitment to training are based on many confluent factors of professional attitudes and public health concerns.

Research implications

Future studies investigating obstacles to abortion training through in-depth qualitative methods not only with residency program directors, but with

department chairs, residents, nurses, and hospital administration would offer a deeper exploration and understanding of various barriers. Such studies might explore how these diverse entities interact and influence each other, and how they affect training structures, resident competency, and future access to abortion.

Conclusions

There are still significant barriers to integrating comprehensive routine abortion training into residents' schedules for the majority of obstetric and gynecology residency programs, particularly because of institutional policies prescribed by either state law or individual teaching hospitals. Hospital culture, and the "openness" toward and commitment to abortion services for patients and teaching residents, is a complex mixture of political, personal, professional, and economic factors. Sources and reasons for training barriers—whether these are the residents themselves, department chairs, nursing, hospital leadership, and so forth—should

be better identified and understood. Identifying the sources and types of abortion training restrictions can help to develop effective support and targeted education strategies for change. ■

References

1. Accreditation Council for Graduate Medical Education. Clarification of Program Requirement IV.A.6.d. Review. Committee for Obstetrics and Gynecology. 2012. Available at: http://www.acgme.org/portals/0/pfassets/program_resources/220_obgyn_abortion_training_clarification.pdf. Accessed May 20, 2019.
2. Darney PD, Landy U, MacPherson S, Sweet RL. Abortion training in U.S. obstetrics and gynecology residency programs. *Fam Plann Perspect* 1987;19:158–62.
3. MacKay HT, MacKay AP. Abortion training in obstetrics and gynecology residency programs in the United States, 1991–1992. *Fam Plann Perspect* 1995;27:112–5.
4. Almeling R, Tews L, Dudley S. Abortion training in U.S. obstetrics and gynecology residency programs, 1998. *Fam Plann Perspect* 2000;32:268–71, 320.
5. Eastwood KL, Kacmar JE, Steinauer J, Weitzen S, Boardman LA. Abortion training in United States obstetrics and gynecology residency programs. *Obstet Gynecol* 2006;108:303–8.
6. Steinauer JE, Turk JK, Pomerantz T, Simonson K, Learman LA, Landy U. Abortion training in US obstetrics and gynecology residency programs. *Am J Obstet Gynecol* 2018;219:86.
7. American Medical Association. Fellowship and residency electronic interactive database online. Available at: <https://www.ama-assn.org/life-career/search-ama-residency-fellowshipdatabase>. Accessed December 14, 2013.
8. Steinauer JE, Turk JK, Fulton MC, Simonson KH, Landy U. The benefits of family planning training: a 10-year review of the Ryan Residency Training Program. *Contraception* 2013;88:275–80.
9. APGO residency directory. Available at: <http://www.apgo.org/student/residency.html>. Accessed December 14, 2014.
10. Jones RK, Jerman J. Population group abortion rates and lifetime incidence of abortion: United States, 2008–2014. *Am J Public Health* 2017;107:1904–9.
11. Steinauer J, Landy U, Filippone H, Laube D, Darney PD, Jackson R. Predictors of abortion provision among practicing obstetrician-gynecologists: a national survey. *Am J Obstet Gynecol* 2008;198:39.
12. Freedman L. *Willing and unable: doctors' constraints in abortion care*. Nashville, TN: Vanderbilt University Press; 2010.
13. Freedman L, Landy U, Steinauer J. When there's a heartbeat: miscarriage management in Catholic-owned hospitals. *Am J Public Health* 2008;98:1774–8.
14. Turk JK, Steinauer JE, Landy U, Kerns JL. Barriers to D&E practice among family planning subspecialists. *Contraception* 2013;88:561–7.
15. Freedman L, Langton D, Landy U, Ly E, Rocca CH. Abortion care policies and enforcement in US obstetrics-gynecology teaching hospitals: a national survey. Atlanta, GA: North American Forum on Family Planning; 2017.
16. Collaborators. A statement on abortion by 100 professors of obstetrics: 40 years later. *Am J Obstet Gynecol* 2013;209:193–9.

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