EDUCATION

Dilation and evacuation training in maternal-fetal medicine fellowships

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OBJECTIVE: Many maternal-fetal medicine (MFM) specialists provide dilation and evacuation (D&E) procedures for their patients with fetal or obstetric complications. Our study describes the D&E training opportunities that are available to MFM trainees during their fellowship.

STUDY DESIGN: National surveys of MFM fellows and fellowship program directors assessed the availability of D&E training in fellowship. Univariate and multivariate comparisons of correlates of D&E training and provision were performed.

RESULTS: Of the 270 MFM fellows and 79 fellowship directors who were contacted, 92 (34%) and 44 (56%) responded, respectively. More than one-half of fellows (60/92) and almost one-half of fellowship programs (20/44) report organized training opportunities for D&E. Three-quarters of fellows who were surveyed believe that D&E training should be part of MFM fellowship, and one-third of fellows who have not yet been trained would like training opportunities. Being at a fellowship that offers D&E training is associated with 7.5 times higher odds of intending to provide D&E after graduation ($P = .005$; 95% confidence interval, 1.8–30).

CONCLUSION: MFM physicians are in a unique position to provide termination services for their patients with pregnancy complications. Many MFM subspecialists provide D&E services during fellowship and plan to continue after graduation. MFM fellows express a strong interest in D&E training; therefore, D&E training opportunities should be offered as a part of MFM fellowship.

Key words: dilation and evacuation, maternal-fetal medicine training, second-trimester abortion

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Approximately 120,000 second-trimester abortions are performed each year in the United States. [1,2] Dilation and evacuation (D&E) is the most common method of second-trimester abortion; however, it requires specialized training, which is not available at almost one-third of all US obstetrics and gynecology residency programs. [3] In part because of limited availability of training in the procedure, D&E providers are scarce, with only 67% of self-identified abortion providers offering D&E services during the second trimester, and only 23% offer the service after 20 weeks of gestation. [1] The downstream effect of this scarcity is that many women identify difficulty finding a provider as a major barrier to accessing D&E services and as a cause of delay in obtaining abortion services. [4]

Maternal-fetal medicine (MFM) subspecialists can play a role in increasing access to D&E services; these subspecialists care for women with complicated pregnancies and fetal anomalies who may desire or require second-trimester termination. In addition, MFM subspecialists are located throughout the country and may be found in areas where there are no other second-trimester abortion providers. [5] A recent survey of MFM subspecialists indicated that 31% of respondents provide at least 1 D&E per year and that 33% of those who did were trained after residency. [6] Like obstetrics and gynecology residency programs, MFM fellowship programs require training in pregnancy termination but do not specify the technique or gestational age. The American Board of Obstetricians and Gynecologists (ABOG) recognizes that performing D&E for second-trimester fetal death or lethal anomalies is within the scope of practice of MFM; however, unlike other procedures that are needed by women with pregnancy complications (amniocentesis, cerclage), only an understanding of the risks and indications, rather than actual clinical experience, is required for graduation. [7]

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TABLE 1
Characteristics of survey respondents

Characteristic	Maternal-fetal medicine, n (%)		
	Fellows (n = 92)	Fellowship directors (n = 44)	All fellowships[a] (n = 79)
Region			
Northeast	37 (40)	16 (37)	26 (33)
West	22 (24)	6 (14)	14 (18)
Midwest	17 (18)	9 (21)	20 (25)
South	16 (17)	13 (30)	19 (24)
Family planning fellowship at institution	59 (64)[b]	15 (34)	24 (30)

[a] Data from the Society for Maternal-Fetal Medicine[9] and the Fellowship in Family Planning[10]; [b] $P < .001$ for χ^2 test of difference that compared the prevalence of family planning fellowship among maternal-fetal medicine fellow respondents and the national prevalence; no other comparisons were statistically significant.

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Although we know that many MFM subspecialists receive training in D&E during fellowship, little is known about MFM fellows' interest in training, how frequently D&E training is offered, and what components are included in training. We surveyed MFM fellows and MFM fellowship program directors to describe fellows' interest in and availability of D&E training during MFM fellowship.

Materials and Methods

We recruited MFM fellows by contacting all associate members of the Society for Maternal Fetal Medicine (SMFM) and inviting fellows who were enrolled in 1 of the ABOG-approved MFM fellowship sites in 2010. The names were obtained from a purchased list that is available through the SMFM, the ABOG subspecialty handbook, and a search of the institutional websites of the fellowship sites. When we were able to obtain email addresses from the institutional websites or from PubMed, we sent an email invitation with a link to the online survey. Fellows for whom an email address was not available received a mailed invitation that contained the survey and a link to the online version. If names of the fellows were not available publicly from institutional websites, we sent paper surveys addressed to "MFM Fellow" at their respective institutions. Those recruited by email received 3 separate email invitations; those who received the paper survey received a postcard reminder once after the original mailing. As an incentive, respondents were offered a $5 gift card that was not contingent on completion of the survey. To preserve anonymity, the respondent's name and address were entered separately from the survey responses. All responses were entered into KeySurvey, an online software program.

The survey included 75 questions on topics that included demographics and training opportunities that were available at their fellowship. Training opportunities were classified as "routine" (a required fellowship rotation), "opt-in" (available for interested fellows to arrange), or "not available." We also asked questions about previous experience with D&E and about abortion attitudes with 5 questions with Likert scale responses. Abortion attitude scores ranged from 5–25; higher scores reflected attitudes more supportive of abortion.[8] This survey was completely anonymous and asked only about geographic location but not about fellowship institution.

To complement the individual fellow's perspective, we then conducted a follow-up study that was directed at MFM fellowship program directors to confirm the availability of training opportunities. We sent a link to a 10-question online survey to the 79 ABOG-approved MFM fellowship program directors whose names and email addresses are publicly available on the SMFM website. Two reminder invitations were sent, and a $5 gift card was offered as an incentive. These questions focused directly on the D&E training opportunities that were available to MFM fellows and the estimated proportion of fellows who participated. Fellowship directors were asked about the availability of formal routine or opt-in rotations (identical to the options given to the fellows themselves); a third category that addressed informal training opportunities ("no formal training, but fellows can participate in D&E when they occur") was added based on feedback from the fellows' survey. Both surveys were approved by the Committee on Human Research at the University of California, San Francisco.

We performed descriptive statistics with χ^2 tests and multivariable logistic regression to identify correlates of D&E provision and training. We compared geographic characteristics with publicly available information about MFM and family planning fellowships.[9,10] All analyses were performed with Stata software (version 12; Stata Corporation, College Station, TX). Results with a P value of $< .1$ were examined for possible statistical significance because of our small sample size and our desire to avoid a type II error of concluding no difference where one does truly exist.

Results

Characteristics of respondents

Of the 270 MFM fellows in 2010, we obtained the names of 190 and the email addresses of 156. A total of 126 paper surveys were mailed, 80 of which were addressed to "MFM Fellow" because names were not available. Ninety-two fellows responded to our survey for an overall response of 34%, with those invited by email more likely to respond (48%; 75/156). Most survey respondents were female (78%), and most lived either in the Northeast or the West (Table 1). Forty-four of the 79 MFM fellowship program directors completed our survey, for a response rate of 56%. These fellowship directors are at programs that train 168 fellows, which is 57% of all