Training Family Practice Residents in Abortion and Other Reproductive Health Care: A Nationwide Survey

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The majority of residents responding to a 1995 survey of program directors and chief residents at 244 family medicine residency programs in the United States reported they had no clinical experience in cervical cap fitting, diaphragm fitting or IUD insertion and removal. For all family planning methods except oral contraceptives, no more than 24% of residents had experience with 10 or more patients. Although 29% of programs included first-trimester abortion training as either optional or routine, only 15% of chief residents had clinical experience providing first-trimester abortions. Five percent of residents stated they certainly or probably would provide abortions, while 65% of residents stated they certainly would not provide abortions. A majority (65%) of residents agreed that first-trimester abortion training should be optional within family practice residency programs. Residents were more likely to agree with inclusion of optional abortion training and with the appropriateness of providing abortions in family practice if their program offered the training.

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As primary caregivers to women and men throughout the country, family practice physicians must address a full spectrum of reproductive health care needs, including family planning. The need for family planning services is vast: In 1992, 77% of women of reproductive age were at risk of unintended pregnancy; of these, 94% were using a contraceptive method.[1] A 1990 survey demonstrated that 29% of women practicing contraception used the pill, 18% used the condom, 30% used female sterilization and 13% had partners who had undergone a vasectomy.[2]

Fifty-seven percent of pregnancies are unintended, and approximately two-thirds of U.S. women will have an unintended pregnancy before menopause.[3] Nearly one-half of these occur among women practicing contraception.[4] One-half of all unintended pregnancies end in abortion.[5] Because approximately 1.53 million abortions are performed annually in the United States, abortion is one of the most frequently performed surgical procedures.[6]

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Clearly, the prevention and management of unintended pregnancy are primary health services needed by the majority of women of reproductive age, as well as many comparable men. The training that family physicians receive in family planning and first-trimester abortion is critical, yet few studies have investigated these aspects of their education.

The Council on Residency Education in Family Practice recommends residency training in pregnancy risk-assessment and conception control, including family planning, oral contraceptive counseling, IUD insertion and removal, diaphragm fitting and tubal ligation, as well as voluntary interruption of pregnancy up to 10 weeks of gestation.[7] Despite the Council's recommendations, research has demonstrated that very few residents are being trained in abortion. A 1993 nationwide study of family practice programs revealed that only 12% offered abortion training.[8] An analysis of eight programs in Southern California revealed that 42% of residents had been offered abortion training, but less than one-fourth of these residents had performed an abortion in the previous year.[9] No recent studies have investigated family practice training in the provision of contraceptive and sterilization services.

The decrease in access to abortion over the last 15 years provides another reason to investigate family planning training of family physicians, since this decrease has been attributed to a shortage of abortion providers.[10] As of 1992, only 16% of U.S. counties had a provider;[11] the number of counties with an abortion provider declined by 31% between 1978 and 1992.[12] In 1992, the shortage of providers was most marked in nonmetropolitan areas, where 94% of counties had no abortion services.[13] It is in such areas that reliance on family physicians is greatest.

Moreover, the number of obstetrics and gynecology residency programs that routinely included abortion training was 50% lower in 1991 than in 1986.[14] In addition, decreases in state and federal funding for therapeutic abortions, combined with more restrictive state laws, have contributed to reduced abortion access for women. Better training of family practice residents in effective family planning methods (including reversible and irreversible contraception) should translate into more effective contraceptive use by women and a decreased need for abortion services. Because family physicians are the only source of health care for millions of rural women and the only providers of affordable health care for many poor women, increasing the number of family physicians who perform abortions would greatly improve access to this service also.

Given the climate of debate that surrounds abortion in the United States, it is not surprising that the inclusion of abortion training in family practice residency programs has been controversial. In January 1995, the Congress of Delegates of the California Academy of Family Physicians passed a resolution supporting resident training in abortion. Yet the same resolution was rejected at the 1995 national convention of the American Academy of Family Physicians. The controversy is also evident in the recent family practice literature, in which a number of editorials have debated whether termination of pregnancy should be part of family practice training.[15]

Advocates of abortion training have argued that family physicians, with their counseling skills and emphasis on caring for the patient in the context of her life and family, are able to offer more supportive abortion care than other clinicians. Opponents counter that the care of the family includes the fetus, and that family prac-

tice residency programs should not include training in a procedure that is morally wrong. Others contend that abortion is a surgical procedure best left in the hands of gynecologists.

The purpose of our research was to determine what training family practice residents currently receive in reproductive health, including contraception, sterilization and abortion, and to survey chief residents about their opinions on abortion training and their intention to provide abortions.

Methods

In February 1995, a letter and survey were sent to the directors of all 422 approved U.S. family practice residency programs. A second set of questionnaires was sent to programs that did not respond within six weeks. Each program director was asked to pass along a similar survey to the current chief resident whose surname was earliest in the alphabet. Both program directors and chief residents were asked which family planning topics were included in oral instruction and clinical experience, as well as questions about the availability and nature of abortion training. Chief residents were asked a series of questions regarding their opinions on abortion provision and training in family practice.* They were also asked whether they personally planned to perform abortions.

The questionnaire was modeled after two previous surveys on family planning training in obstetrics and gynecology.[16] Questionnaires were confidential, marked only for purposes of regional identification and to indicate those programs requiring a second mailing of the survey. Survey responses were analyzed using SPSS statistics software to compute frequency distributions and to perform chi-square analyses.

Questionnaires were received from 255 programs (61%); of these, 11 were blank, reducing to 244 the number of programs represented in complete questionnaires (58% of the total number initially sent out). One hundred and five programs were represented by completed questionnaires from both a chief resident and the program director, making a total of 349 completed questionnaires. Of these 349, 197 were from program directors (47% response rate), and 152 were from chief residents (36% response rate). Of the 11 respondents who returned blank questionnaires (3% of the number initially sent out), six stated that the program was new, three stated that the program was affiliated with Catholic institutions and did not include family planning training, one stated that the program did not have a chief resident, and one made no comments.

Sixteen percent of the 244† programs represented in complete surveys had a religious affiliation. In addition, 42% were affiliated with a medical school, 37% were at a private hospital and 26% had an obstetrics and gynecology residency at the same hospital. Response rates were fairly consistent in each region: 57% for the Midwest (N=73); 59% for the West (N=47); 58% for the South (N=77); and 57% for the Northeast (N=47).

Table 1 shows that chief residents were more likely to be men (59%). The mean age was 32 years, with a range of 26–65 years (not shown). Most were married (75%), and just over half had children (52%). Half ranked religion as "very important" (50%), and an additional 37% ranked religion as "somewhat important." Thirty-seven percent identified themselves as Catholic, 45% as another Christian denomination and 6% as "other." Fourteen percent identified themselves with no religion. In political affiliation, 37% identified themselves as "more conservative than liberal," while 31% agreed that they were "more liberal than conservative." Twenty-four percent indicated they were "equally conservative and liberal," and 6% indicated they were neither.

Table 1. Percentage distribution of family practice chief residents, by demographic characteristics, National Survey of Training in Family Planning, 1995 (N=152)

Characteristic	%
Gender	
Female	41
Male	59
Marital status	
Married/domestic partner	75
Single	24
Has children	
Yes	52
No	48
Political affiliation	
More conservative than liberal	37
Equally conservative and liberal	24
More liberal than conservative	31
Neither liberal nor conservative	6
Don't know	2
Religion	
Catholic	32
Protestant	45
Other	6
None	14
Missing	3
Importance of religion	
Very important	50
Somewhat important	37
Not important	13
Don't know	1
Total	100

Note: Percentages may not total 100% due to rounding.

Table 2. Percentage of family practice chief residents and program directors reporting no oral instruction about family planning methods or first-trimester abortion, by topic

Topic	Chief residents (N=152)	Program directors (N=197)
Abstinence	43	28
Cervical cap	45	41
Condoms/spermicide	16	10
Contraceptive sponge	34	22
Injectable	16	8
Diaphragm	24	14
General contraception	10	10
IUD	31	22
Implant	14	12
Oral contraceptives	7	9
Emergency contraception	54	29
Tubal ligation	26	18
Vasectomy	21	12
First-trimester abortion	54	57

Results

Oral Instruction

Program directors and chief residents were asked whether their programs included grand rounds or other lectures devoted to specific family planning topics (Table 2). The majority of chief residents reported no formal education in emergency contraception or first-trimester abortion. A higher proportion of program directors than chief residents reported verbal instruction in many of the family planning topics.

Contraception and Sterilization Training

Table 3 (see page 224) shows information on the extent of clinical education reported by chief residents. (At the time of the survey, chief residents were within three months of residency completion.) Most graduating chief residents had no clinical experience in fitting cervical caps (87%)

*In order to inquire about clinical experience of residents, respondents were asked to fill out a questionnaire presented in the form of a chart. For chief residents, the questionnaire read, "Please indicate whether you have received clinical experience with the following and the number of cases you have managed"; for program directors, it read, "Please indicate whether your residents receive clinical experience with the following and the average number of cases one resident manages." Among other skills, they were asked about "vacuum aspiration for incomplete abortion" and "first-trimester therapeutic abortion: vacuum aspiration." These were asked about separately to increase the likelihood of interpreting "therapeutic abortion" to mean elective abortion. In order to inquire about institutional training policies, respondents were asked, "Is training in first-trimester abortion routine (i.e. scheduled for everyone), optional (i.e. available but not required) or not available to family practice residents in your program?"

†In programs where both the program director and chief resident returned questionnaires, the program director's survey was interpreted.

Table 3. Percentage of chief residents at family practice programs who received no clinical exposure to family planning or first-trimester abortion procedures and percentage who managed 10 or more cases, by procedure (N=152)

Procedure	No training	No clinical experience	Managed ≥10 cases
Cervical cap fitting	71	87	1
Diaphragm fitting	36	53	7
IUD insertion	43	66	6
IUD removal	41	64	4
Implant insertion	14	29	21
Implant removal	13	34	12
Oral contraceptive management	1	0	89
Postpartum tubal ligation	28	41	24
Laparoscopic tubal ligation	50	62	10
Vasectomy	26	49	9
First-trimester abortion: vacuum aspiration	74	85	3

or diaphragms (53%), in inserting (66%) and removing IUDs (64%), or in performing laparoscopic tubal ligation (62%) or first-trimester elective abortion (85%).

Chief residents were also asked to estimate the number of cases they had managed. Because there is no standard number of cases above which a resident is deemed competent in an area of family planning, we used a previously published paper's standard of 10 cases.[17] Answers such as "too numerous to count," "many" or "hundreds" were interpreted as greater than 10, and "rare" was interpreted as fewer than 10. In all family planning services except oral contraceptive management, the majority of chief residents had managed fewer than 10 cases. Eleven percent of graduating chief residents had managed fewer than 10 oral contraceptive cases.

Abortion Training

Respondents were asked about abortion training in two ways: They were asked about residents' specific clinical experience and about their institutions' training policies. Forty-five percent of chief residents reported no training in vacuum aspiration for incomplete abortion, and 53% reported no clinical experience. Seventy-four percent of chief residents reported no instruction in first-trimester therapeutic (elective) abortion, and 85% of both chief residents and program directors reported no such clinical experience. Clinical experience in first-trimester abortion did not correlate with residents' gender, importance of religion, marital status or political affiliation, nor did residents' clinical experience correlate with their institutions' religious affiliation. However, chief residents in the South were significantly less likely to have experience in first-trimester abortion than those in the West (p=.002).*

Twenty-nine percent of programs reported that first-trimester abortion training was available, either as "routine" or "optional." There was no significant difference between chief residents' and program directors' assessments of the availability of first-trimester abortion training. Sixty-seven percent of family practice chief residents (N=48) who responded that first-trimester abortion training was available at their institution had no clinical experience in this procedure.

Programs in the Midwest and the South were significantly less likely (p<.001) to have first-trimester abortion training available (15% and 18%, respectively) than were programs in the West and Northeast (60% and 38%, respectively). There was no significant difference in the availability of abortion training by religious affiliation, private or public status, medical school affiliation or presence of an obstetrics and gynecology residency program at the same institution. Sixty-seven percent of programs affiliated with a medical school offered no training in first-trimester abortions.

Opinions About Abortion

Chief residents were asked if they planned to provide abortions; to this question they could answer "certainly yes," "probably yes," "neutral," "probably no," "certainly no" or "don't know." Five percent stated that they certainly or probably would provide abortions. An additional 5% were neutral and 1% said they did not know. Sixty-five percent said they certainly would not do so. Residents in the West were more likely to say they "certainly" or "probably" planned to provide abortions than were those in other regions (p=.003). The importance of religion to chief residents was weakly associated with diminished intention to provide abortions (p=.06). Residents' gender and political identification were not associated with their intention to provide abortions.

Chief residents were also asked to rate whether first-trimester abortion training was appropriate in family practice, on a five-point Likert scale (Table 4). Chief residents were divided on its appropriateness, with 44% somewhat or strongly disagreeing and 37% somewhat or strongly agreeing. Residents at programs that included first-trimester abortion training were significantly more likely (p=.001) to agree that providing first-trimester abortions was within the realm of family medicine (not shown). Opinions about the appropriateness of abortion provision in family medicine did not differ significantly by region. Residents who identified themselves as "more conservative than liberal" were more likely to disagree with the appropriateness of first-trimester abortion provision in family practice (p=.001).

We assessed chief residents' opinions about first-trimester abortion training by asking their level of agreement with statements regarding whether such training should be routine or optional (Table 4). Their opinions on abortion training in family practice varied. The majority of chief residents (62%) strongly disagreed with routine first-trimester abortion training. The majority, however, strongly or somewhat agreed that this training should be optional in family practice programs (64%). Chief residents held a variety of opinions about the exclusion of first-trimester abortion training from family practice residency (26% strongly agreed, while 22% strongly disagreed).

Demographic variables were compared with residents' opinions about abortion training. Residents at programs that included abortion training were more likely to agree that programs should offer first-trimester abortion training as optional (p=.002) and programs should include first-trimester abortion training as routine (p=.02). They were also more likely to disagree that programs should not include such training (p<.001). Women were more likely than men to disagree with this last viewpoint (p=.005).

Residents for whom religion was not important were more likely to agree that first-trimester abortion training should be offered as optional training (p<.001). Chief residents for whom religion was very important were more likely to agree that it should not be included (p=.002). Residents who identified themselves as "more conservative than liberal" were more likely to disagree with optional inclusion of first-trimester abortion training (p=0.005) and to agree that it should be excluded (p=.01).

*Regions were divided as follows: Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont; Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin; South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virginia and West Virginia; West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

Discussion

Study Limitations

Our study was limited in several ways. We sought no information on attitudes regarding medical abortion, mostly because of its very recent introduction into medical training. Moreover, the survey response rate was only 61%, in contrast to the 63–75% response rates quoted in previous family practice surveys.[18] Completed questionnaires were received from only 36% of chief residents; this may be explained by time constraints or by their not having received the questionnaire from program directors. The overall low response rate might have been improved with follow-up phone calls, although a second set of surveys was sent to nonresponding programs within six weeks.

Despite the low overall response, rates were surprisingly consistent across each region. Nor did other characteristics of the respondents indicate an obvious bias. As always, those who returned surveys were likely to be those who had strong opinions about the topic; whether this biased the sample for or against family planning education is not clear.

Confusion about the term "therapeutic abortion" may have biased the results conservatively. Other potential limitations include recall bias and the possibility that respondents might not have wanted their program to reflect badly in comparison to other programs.

Contraception and Sterilization

Educators, women's health advocacy groups and training organizations, including the American College of Obstetricians and Gynecologists and the Council on Resident Education in Family Practice, have voiced the need for residency programs to adequately prepare future physicians to care for women who wish to control their fertility.[19] Our study suggests that the level of family planning education and experience of chief residents who were 2–3 months short of graduation was not adequate to meet patients' needs.

A full 11% of chief residents had managed fewer than 10 oral contraceptive cases, and the majority had little experience in tubal ligation. Yet the pill and female sterilization are the two most commonly used family planning methods in the United States.[20] Indeed, the reported number of cases of tubal ligation that were managed may be a high estimate, as many residents who recorded a number for cases managed commented that they had "only watched the procedure." This experience would not prepare residents to provide the 14% of female sterilization procedures that family practitioners were performing 10 years ago.[21]

Table 4. Percentage distribution of family practice chief residents, by level of support for selected statements on the role of first-trimester abortion in their residency training (N=152)

Statement	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	Do not know	Total
First-trimester therapeutic abortions are appropriate in family practice	15	22	15	15	29	3	100
First-trimester abortion training:							
Should be optional	31	33	9	7	18	2	100
Should be routine	5	6	7	19	62	1	100
Should not be included in residency training	26	12	1	19	22	5	100

Note: Percentages may not total 100% due to rounding.

Physicians trained in only one or two contraceptive methods may, in effect, limit future patients' family planning options, especially if they are the only providers in their geographic area. This is demonstrated by a survey of rural family physicians in Idaho. While nearly all of the physicians offered the pill, diaphragms and injectables, only 50% offered the IUD, 46% emergency contraception and 27% the cervical cap.[22]

Physicians inadequately trained to provide contraception may be faced with more than their share of patients with unintended pregnancies. Three million such pregnancies are estimated to occur annually in the United States due to lack of contraceptive use and contraceptive failure.[23] These in turn lead to a large demand for elective abortions. Indeed, it has been suggested that the provision of contraceptive services implies an ethical obligation to provide abortions in cases of contraceptive failure.[24]

Abortion Training

According to our survey, family physicians are also ill-prepared to provide one of the most common surgical procedures in the United States. This has particularly grave consequences for women living in nonmetropolitan counties, of which 94% lack a provider.[25] Even if a family medicine resident is highly motivated to receive training in abortion, our results show it is unlikely that his or her program has such training available or is able to provide it elsewhere.

In contrast to a 1993 study, in which only 12% of program directors stated that abortion training was offered,[26] 29% of programs in our study included first-trimester abortion training as either "routine" or "optional." It is unlikely that increases in training between 1993 and 1995 were sufficient to explain this difference, although there may have been a small increase in training because of collaboration between programs and freestanding clinics. Instead, respondents may have misinterpreted "therapeutic abortion" to mean removal of products of conception in cases of natural fetal demise or miscarriage, rather than the elective termination of pregnancy. (A few comments by residents and program directors indicated such a misunderstanding.) If this confusion among respondents was widespread, our results may overestimate the availability of training in elective abortion.

We also found a difference between availability of training and the actual experience of residents. There are many possible reasons for this lack of participation. Residents may not participate because of time constraints or lack of support. Alternatively, the beliefs of the residents themselves may affect their participation. For example, in residency programs providing abortion training, religious or moral objections are the most common reason given for residents choosing not to participate.[27]

With the advent of medical methods of abortion (mifepristone or methotrexate and misoprostol), more physicians may be willing to provide abortion services.[28] A study of rural family physicians found that while only 2% currently provided surgical abortion, 26% said they certainly would provide medical abortions, and an additional 35% were uncertain.[29] However, willingness on the part of physicians to provide medical abortion will not eliminate the need for surgical abortion training. Medical abortions are limited to very early stages of pregnancy, and 5% require follow-up vacuum aspiration. Nevertheless, these findings offer the possibility that doctors uncomfortable with or not trained in surgical abortion can offer medical abortion, provided they are given proper surgical back-up.

Abortion Beliefs

As in a previous study of Southern California residency programs,[30] we found that training availability was associated

with more favorable attitudes toward abortion training. Previous research also found that levels of resident participation in abortion were correlated with program expectations of training.[31] However, agreement with abortion training does not guarantee abortion provision.

For example, while the majority of chief residents surveyed here agreed that first-trimester abortion training should be included as an optional component of family practice training and 37% agreed that such abortions are appropriate to provide within family practice, only seven of 152 family practice chief residents stated they would probably or certainly provide abortions. This discrepancy between beliefs and actions is similar to findings of a 1991 Kansas study of family practitioners, which determined that while the majority found abortion to be appropriate under some circumstances, fewer than 1% reported that they had performed an abortion in the previous year.[32]

This attitude was also echoed among surveyed obstetrician-gynecologists, the majority of whom believed that abortion services should be available to women, but few of whom actually performed abortions themselves.[33] Further research is required to investigate why physicians with favorable attitudes toward abortion training and provision do not themselves choose to provide abortions.

Physicians' beliefs can also affect access to abortion services. One study of family and general practitioners found that the majority discuss abortion with their patients in a routine workup of a new pregnancy only if the patient asks about it, and that many discuss their personal opinion on abortion with women facing a problem pregnancy.[34] This research also found that most of those who identified themselves as antiabortion did not refer women seeking an abortion, and were less likely to perform follow-up examinations of women who had received an abortion elsewhere. Another study of family physicians showed that only 2% provided abortions and that only 65% were willing to refer a woman for an abortion.[35]

Comments by Respondents

Many chief residents and program directors offered comments that added insight to our study. One chief resident stated, "I feel like therapeutic abortion is best handled by family physicians. The doctor-patient relationship is bound by the care of the patient's husband, mom, dad, brother, sister, children, etc. A family doctor could best counsel any patient considering abortion because they are most likely going to have a good perspective on the impact of an unwanted or unplanned child on the patient's life. Abortion has unfortunately become a political and religious subject instead of a medical procedure."

Comments against abortion training included statements such as, "My reason for not agreeing with abortion training is because I do not agree with abortion and not because I think family practice residents are less able to perform." One program director commented, "I would be required to leave my post as a medical director should my program be required to teach techniques of pregnancy interruption."

Comments from respondents explaining lack of abortion training included Catholic or military affiliation, attitudes on abortion in the community and the lack of available faculty to provide training. It has been claimed that negative attitudes and actions toward abortion providers have had a great impact on family physicians' willingness to perform this service.[36] A similar effect may be responsible for the reluctance of so many programs to provide training.

This perception is supported by the comment, "our residency program and the city surrounding it is very conservative and, in general, even talk of abortion is not generally done. No way this program would consent to train family practice residents in abortion (which I personally disagree with)." Physicians must not, however, allow the political climate to dictate the provision of necessary and legal reproductive health care services to millions of women.

Conclusions

The ideal solution for ensuring training of family practice residents in contraception, sterilization and abortion is to integrate the education into the residency programs. If a program is not equipped to train residents in contraceptive methods, it could include a rotation to an outside family planning clinic. Many residents have completed elective or required rotations in abortion at Planned Parenthood or other clinics. A previously untapped resource, and an excellent model for family physicians, is the large number of private physicians who offer abortion as one component of their practice. Often these obstetrician-gynecologists and family practice physicians have remained unknown, and thus inaccessible for training opportunities. With encouragement, these physicians might come forward to help educate and train future providers.

Many medical students and national organizations are working to improve their education. Medical Students for Choice, a national organization dedicated to improving reproductive health education in medical schools and residencies, offers a summer internship with abortion providers that nearly 100 medical students will have completed by the end of 1997. The American Medical Women's Association also places fourth-year medical students in reproductive health internships that include education about contraception and abortion. At least for the near future, a combination of these approaches—partnerships with community clinics and physicians, residency program and medical school curricula reform and persistence on the part of the resident physician—will be required to ensure adequate training in contraception and abortion.

Increased training of family physicians in contraception and abortion would have two important effects. First, it would greatly improve women's access to family planning services, particularly in rural and underserved communities. Second, patients would benefit from the family physician's unique approach to care, one that evaluates the patient's health in the overall context of her life. Family practice educators must work to ensure that programs include contraception and abortion training while educating residents about the importance of these skills.

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