Benefits of Comprehensive Reproductive Health Education in Family Medicine Residency

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Given the high prevalence of unintended pregnancy and early pregnancy failure, family physicians frequently encounter these clinical problems. Early abortion care and miscarriage management are within the scope of family medicine, yet few family medicine residency programs' curricula routinely include training in these skills. Comprehensive reproductive health education for family physicians could benefit patients by improving access to safe care for unintended pregnancy and early pregnancy loss and by improving continuity of care, especially for rural and low-income women. By promoting reflection on conflicts between personal beliefs and responsibility to patients, training in options counseling and abortion care fosters patient-centered care and informed decision making. Managing pregnancy loss and termination also improves skills in patient-centered counseling and primary care gynecology. Multiple studies document the feasibility and success of several training models for abortion and miscarriage management in family medicine. Incorporating comprehensive reproductive health care into family medicine residency training enables family physicians to provide a full range of reproductive health services.

(Fam Med 2008;40(3):204-7.)

Given the high prevalence of unintended pregnancy, miscarriage, and abortion, all family physicians care for patients facing these issues. More than half of pregnancies in the United States are unintended,[1] up to 20% of recognized pregnancies end in miscarriage,[2] and one in three American women will have an abortion during her reproductive years.[3] Access to abortion services is increasingly limited, as evidenced by an 11% decline in the number of abortion providers between 1996 and 2000, with 87% of US counties lacking an abortion provider in 2000.[4] Because many family physicians are not prepared to manage miscarriage or provide early abortions, care of women with unwanted pregnancy and early pregnancy loss often occurs outside of the family medicine home, resulting in delays, reduced patient safety, and lack of continuity.

Provision of comprehensive reproductive health care services, including contraception, abortion, and miscarriage management, is well suited to the strengths of family physicians. Family physicians are widely distributed in medically underserved areas, have procedural training, and routinely provide women's primary care and early pregnancy care. Contraceptive management and counseling about pregnancy options are included in the family medicine residency program requirements.[5] Management of miscarriage and incomplete abortion is also a core skill, and training in termination up to 10 weeks' gestation is recommended for family physicians who will practice in areas with limited access to specialists.[6]

Both miscarriage management and early abortion can be provided in primary care settings. Spontaneous abortion is increasingly managed in the outpatient environment with the options of expectant management, medications, or uterine aspiration.[2] The latter can be performed under local anesthesia using inexpensive manual vacuum aspiration equipment.

Outpatient miscarriage management has been shown to be more cost-effective than inpatient surgical treatment and is associated with high levels of patient satisfaction.[7] In addition, patients with spontaneous abortions who

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sought treatment from their family physicians were more likely to be managed conservatively than those presenting to hospitals.[8] More than 90% of US abortions occur in the first trimester, and the safety of early abortion provision in primary care settings has also been well documented.[9-12] Medication abortion (early pregnancy termination with mifepristone or methotrexate and misoprostol) can also be safely and effectively provided in a family medicine setting.[13,14] If family medicine residency training included training in office-based management of miscarriage and early abortion care, more women could receive care in these times of crisis from their own family physicians.

Access to Comprehensive Reproductive Health Training

Outpatient management of miscarriage is limited in many parts of the country,[7] suggesting that many family physicians are not adequately prepared to provide this service. In addition, research has shown that the majority of family medicine residents have little or no training in abortion care and that even family planning education may be inadequate in many programs.

For example, a 1995 survey of family medicine residency directors and chief residents found that while 29% of family medicine residencies offered training in first-trimester abortions, only 15% of chief residents had performed them.[15] The same study also found that contraceptive education in many family medicine residencies was inadequate, with 10% of chief residents reporting having managed fewer than 10 patients using oral contraceptives. A similar survey in 2002 found that only 11 of 337 (3.3%) family medicine residencies included abortion care as a routine part of training.[16] Finally, a 2006 survey of graduating primary care residents found that few had comprehensive skills in contraceptive management and that family medicine residents had the lowest contraceptive knowledge scores among residents surveyed.[17]

Benefits of Comprehensive Reproductive Health Training

Incorporating comprehensive reproductive health training in family medicine has many documented and potential benefits. First, when family physicians provide comprehensive reproductive health services, patients benefit from improved continuity of care. An unplanned pregnancy or early pregnancy loss is a time of emotional crisis for many women. A woman's family physician is ideally suited to provide information and emotional support in the context of an ongoing physician-patient relationship. Training in miscarriage management greatly expands family physicians' ability to care for women with early pregnancy complications in their medical homes. In addition, if more family physicians provided early abortions, women could obtain this care in the privacy of their own physician's office, with continuity of care and freedom from harassment by demonstrators at free-standing abortion clinics.

Second, comprehensive reproductive health education that includes early abortion care could help address the current shortage of abortion providers and improve patient safety by increasing access to early abortion services. A survey of obstetrician-gynecologists found that those with more-extensive abortion training were more likely to provide abortion services after residency;[18] this is likely to be true for family physicians as well. Further, up to 87% of major complications in women undergoing abortions after 8 weeks' gestation could be avoided if these abortions had been performed before 8 weeks.[19] Reasons for delay in obtaining abortion include locating an abortion provider and making arrangements to travel.[20,21] Integrating abortion into primary care settings could therefore reduce the number of abortions performed later in pregnancy and thus lower women's risk of complications from later procedures.

Full-spectrum reproductive health education that includes options counseling and abortion care can also improve patient-centered care. Mentored participation in abortion counseling provides residents with a chance to reflect on conflicts between their personal values and their professional responsibility to patients.[22] A recent study of US physicians found that many who object to abortion do not feel obligated even to inform patients about this option (14%) or refer patients for abortion services (29%).[23] These behaviors threaten the doctor-patient relationship and increase barriers for women to early abortion services. In our experience as trainers, all residents, including those who identify themselves as strongly anti-abortion, are better able to deal with these ethical conflicts and support patients' decision making in a more balanced, unbiased manner after participating in a comprehensive reproductive health curriculum that includes abortion care.

In addition, comprehensive reproductive health education benefits our learners. Many skills gained in miscarriage management and early abortion training have broad applicability in areas such as family planning, patient-centered counseling, gynecological procedures, and early pregnancy care. Proficiency in abortion care encompasses skills such as sonographic dating of pregnancies, evaluation of first-trimester bleeding, and instrumentation of the uterus for intrauterine device (IUD) insertion, endometrial biopsy, or manual vacuum aspiration. Program evaluations show that abortion training in family medicine is perceived by residents to enhance both technical skills and continuity of care.[10,24] An abortion curriculum at one family medicine residency resulted

in improved contraception and abortion-related knowledge, more favorable attitudes about abortion training in primary care, and improved gynecology skills.[25]

Finally, including comprehensive women's reproductive health training as a standard part of the curriculum may also directly benefit the residency program. A positive correlation has been shown between the overall number of procedure skills taught by family physicians and residency Match results.[26] Lesnewski and colleagues found that programs with fully integrated abortion training had higher than average Match rates in family medicine.[27] The growth of the national organization Medical Students for Choice to more than 10,000 members has encouraged more students to seek abortion training during residency, and as residency faculty we have seen more students expressing interest in our programs because of the availability of training.

Training Models

Several different models exist for preparing family medicine residents to provide comprehensive reproductive health care. Miscarriage management can be included in the services provided by the residency practice by introducing manual vacuum aspiration and pertinent medications in this setting. Integrating medication abortion services into the residency practice does not require additional equipment or procedurally trained faculty but does necessitate training and building support among office staff and administration.

To achieve competency in uterine aspiration or surgical abortion, a resident will most commonly choose to spend elective time receiving training in a local abortion clinic or obstetrician's office. Residents without local resources for an elective may use an "away elective" to seek training at another site. Another model involves residents rotating through a local abortion clinic site as a routine part of their gynecology training. Finally, some residencies have integrated abortion services into their residency practice with procedure sessions. Some have procedure sessions dedicated to women's health procedures such as IUD insertions, manual vacuum aspiration procedures, and endometrial biopsies, while others have mainstreamed the abortion procedures into general procedure sessions in which dermatologic, musculoskeletal, gynecologic, and obstetrical procedures are provided.

Each of these models has advantages and drawbacks. Spending time at abortion clinics can provide a high volume of training in uterine aspiration, allowing residents to achieve proficiency. However, the high volume of patients and the division of specific tasks among different staff often limits patient-physician interaction and opportunities for training in counseling skills. In the family medicine setting, the patient volume is lower, making it more difficult for residents to acquire the number of procedures they need to feel comfortable. Here they are supervised by their known family medicine faculty, and counseling and follow-up care are an integral part of their training. The ideal model may be a combination of these, involving a community-academic partnership in which resident training is provided by family medicine faculty in both the residency practice and the high-volume clinic setting.

Multiple studies have demonstrated the feasibility of introducing abortion services in family medicine residency,[8-10,24,25,28] and a variety of Web-based curricular resources are available to assist family medicine residencies in providing comprehensive reproductive health education (Table 1).

Integration of comprehensive reproductive health training commonly allows residents to opt out of performing abortion procedures for ethical or religious reasons. Each resident should have opportunities to confidentially explore personal values and beliefs about abortion with trained faculty facilitators.

Table 1

Web-based Resources for Comprehensive Reproductive Health Education in Family Medicine

- **Family Medicine Model Practices**
  Physicians for Reproductive Choice and Health
  http://prch.org/med_ed/tools/mpp.shtml
  This site describes model practices that meet the new family medicine residency requirements in contraception, options counseling for unintended pregnancy, and abuse and family violence. Curricular tools including handouts, presentations, and evaluations are available for download.

- **Early Abortion Training Workbook**
  UCSF Bixby Center for Reproductive Health Research & Policy
  www.teachtraining.org
  A comprehensive curricular tool designed for use in a clinical setting under the guidance of an experienced trainer or provider.

- **Family Medicine Digital Resources Library**
  Society of Teachers of Family Medicine
  www.fmdrl.org
  This site includes downloadable curricular materials for options counseling, contraception, and abortion training.

- **Reproductive Health Access Project**
  www.reproductiveaccess.org
  This site includes information sheets and protocols for primary care abortion providers as well as patient education handouts in English and Spanish.

Curricula can be tailored to meet the needs of each resident in a nonjudgmental manner, while ensuring that all residents achieve core competencies in caring for women with unplanned pregnancy. The Advancing New Standards in Reproductive Health Early Abortion Project provides useful curricular materials for abortion and miscarriage management as well as key training elements for those who opt out of learning to provide abortion.[29] A written policy may be helpful to inform prospective residents about the abortion training program and opt-out provisions.

Conclusions

Providing comprehensive care throughout the life cycle is a core value in family medicine, and the Future of Family Medicine Report calls on all family physicians to assure that their patients receive a comprehensive basket of primary care services.[30] Inclusion of full-spectrum reproductive health care in the comprehensive services provided by family physicians could improve access to an important area of health care for women. Timely management of unintended pregnancy and miscarriage in the family medicine setting enhances continuity of care. Several successful training models for abortion care and miscarriage management in family medicine have been described. Future research should measure changes in patient access and satisfaction after implementation of these training programs. Routine inclusion of comprehensive reproductive health training in family medicine residency could enhance family physicians' skills and expand women's access to essential health care services.

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