Obstetrics in Family Practice: A Model for Residency Training

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Family physicians have a unique service to offer families at the time of their reproduction, and have a role to play that cannot be duplicated by an obstetrician-gynecologist or pediatrician. The process of a family integrating a new member is a natural concept to family practice and lends itself to a family-centered model of care seldom seen in medicine. Practicing obstetrics has a positive effect on a family physician's practice, for without obstetrics a practice largely of episodic adult internal medicine develops. Obstetrical care provided by a family physician is a natural answer to the currently articulated public need for personalized, sensitive, family-centered, and expert childbirth care. Obstetrical training in the family practice residency needs to include a longitudinal pregnancy care experience in addition to block rotation on hospital services to teach residents skills of good obstetrical practice and to develop an attitude of family-centered health-care advocacy. A detailed program of family-centered patient education classes practical for a private group practice has been developed to extend throughout the entire course of pregnancy and includes classes after delivery.

Family practice provides comprehensive care for the whole family and views each person as a member of the family unit. In actual practice, however, many training programs and physicians in private practice approach family practice as a mixture of internal medicine, pediatrics, obstetrics-gynecology, surgery, and behavioral science. There often has been little to distinguish care given by family physicians from that delivered by another specialist except that the family physician is able to offer the patient services that cut across the traditional "specialties" which may so often fragment the delivery of health care.

Recently, attention has been focused on obstetrical care in family practice as the best example of longitudinal *health* care, involving the family, with an opportunity for unique contributions by the family physician.[1-3] This stems from the fact that the family physician is a member of the only specialty that deals with the entire process of individual development through embryo, fetus, infant, adolescent, and adult. Due to the family physician's broad base of training in behavioral science and family therapy, pediatrics and neonatal medicine, internal medicine and surgery, he or she is uniquely able to deal with the family as a whole during what is naturally a family-centered event—the care and guidance of the pregnant woman and her husband during the gestation, de-

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livery, and subsequent nurturing of their offspring. This process of a family integrating a new member lends itself to a family-centered model of care as does no other process in medicine.

Family physicians are able to initiate pediatric care before delivery through anticipatory guidance of parenting problems, and discussion of circumcision, breast-feeding, immunizations, and use of infant auto safety seats. A partnership is established between the physician and the family during the course of the pregnancy that does not end abruptly at the time of delivery, but instead can extend into the subsequent years of care rendered to the family. Instead of the physician getting to know family members through episodic illness care, he or she is able to use the months of pregnancy to get to know the family better and to begin effective health education dealing with labor, delivery, problems of sexual adjustment, changes in family dynamics, and issues of early childrearing.

Enhancing the birth experience for the pregnant woman and her family is another area for which the family physician is uniquely suited. Consumers of health care are asking for a style of childbirth that emphasizes the interpersonal, family-centered nature of the event, while preserving the advantages of skilled medical observation and capacities for needed intervention. LeBoyer has described modifications of the birthing process designed to minimize psychological trauma to the infant.[4] The process of labor is increasingly being recognized as an important social process, while at the same time the medical community is recognizing the importance of early parent-child interaction as a determining factor of later parenting success.[5-7]

The family physician has a special opportunity to modify the interactional and environmental influences surrounding the birth of the child because of his unique position as caretaker of all family members. Unlike the obstetrician-gynecologist, the family physician can sit down with the parents following the delivery and examine their newborn infant with them. There is no waiting to see the pediatrician, no hiatus in care, no chance for fears or misconceptions to build in the minds of anxious parents. The family's questions are answered by the trusted health-care provider they have worked with through all of their pregnancy, and not by a new, unfamiliar face.

One of the most valuable needs that can be filled by the family physician is using his position as a trusted confidant to smooth the way if specialized obstetrical or perinatal care is needed. Klein and Papageorgiou[8] have described effective mechanisms to reconcile the technical advances of perinatology with family-centered maternity care, minimizing the trauma entailed by transfer of the mother or compromised neonate to the perinatal unit. The family practice specialist, as the only physician who bridges the perinatal period, is in a unique position to deal with the anxieties of the family while facilitating the introduction of the new physician to the family at its time of crisis.

Positive Effects of Obstetrics on Family Practice

Practicing obstetrics has several positive effects upon family practice as a specialty. Mehl et al studied four physician group practices, two of which did include obstetrics and two which did not.[2] Those without obstetrics were found to do very little pediatrics or gynecology, but focused primarily on acute care of episodic problems and long-term-care internal medicine. Those including obstetrics in their practice did significantly more pediatrics, gynecology, minor surgery, and psychotherapy. Most importantly, those practicing obstetrics saw five times as many family members for continuous comprehensive care at the same location.

By not practicing obstetrics, the family physician effectively eliminates from his practice two clearly recognizable points of entry into the medical care system—the woman seeking prenatal care and the woman seeking care for her newborn child. The established health care delivery system functions to direct patients away from the family physician who does not use the natural entry of the family into his practice at the time of childbirth. If care is obtained from the obstetrician-gynecologist and the pediatrician, the family has learned a model of health care delivery that traditionally tends toward fragmentation. The family physician then becomes the physician who sees members of the family for the care that is "left over" when the patient cannot identify another physician who might handle his problem. Therefore, when a physician decides to include or exclude obstetrics from his practice, he may actually be determining whether or not he will practice family-centered health-care delivery.

Table 1. ACOG-AAFP Recommended Core Curriculum*

(Developed by a joint ad hoc committee of the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the Council on Resident Education in Obstetrics and Gynecology)

Core Curriculum

I. Cognitive Knowledge

A. Normal growth and development, and variants

B. Gynecology

- Physiology of menstruation
- Abnormal uterine bleeding
- Diagnosis of pediatric gynecologic problems
- Infections of the female reproductive tract and urinary systems
- Sexual assault
- Trauma
- Benign and malignant neoplasms of the female reproductive tract
- Pelvic tissue injury
- Menopause and geriatric gynecology
- Assessment of surgical needs

C. Obstetrics

- Antepartum care
- Labor and delivery
- Postpartum care
- Care of the newborn
- Obstetrics complications: diagnosis and management, including emergency breech delivery and postpartum hemorrhage
- Pregnancy risk assessment systems and their implementation

D. Family Life Education

- Family planning and fertility problems
- Interconceptional care
- Family and sexual counseling

E. Process and Examination

- Pediatric female reproductive examination
- Adult female reproductive examination

F. Consultation and Referral

- Individual patient consultation and referral
- Women's health care delivery systems
- Maternal and perinatal health regional planning

II. Skills: Emotional preparation and performance of the gynecologic examination at all ages

A. Gynecology

- Obtaining vaginal and cervical cytology
- Endometrial biopsy
- Cervical biopsy and polypectomy
- Culdocentesis
- Cryosurgery/cautery for benign disease
- Microscopic diagnosis of urine and vaginal smears
- Bartholin cysts drainage or marsupialization
- D and C
- Conization (II)

B. Conception Control

- Oral contraceptive counseling
- IUD insertion and removal, and counseling
- Diaphragm fitting and counseling
- Voluntary interruption of pregnancy to ten weeks gestation

C. Pregnancy

- First examination—evaluation of pelvic adequacy
- Use of risk assessment protocols
- Evaluation of fetal maturity and feto-placental adequacy
- Normal cephalic delivery including outlet forceps
- Exploration of vagina, cervix, uterus
- Manual removal of placenta
- Episiotomy and repair
- Pudendal and paracervical block anesthesia
- Fetal monitoring
- Induction of labor (II)
- Third degree perineal repair
- Cesarean section (II)

D. Surgery

- Assist at common major surgical procedures
- Tubal ligation with cesarean section (II)

Core cognitive ability and skill should require a minimum of three months experience in a structured obstetric-gynecologic educational program, with supervised management of at least 30 vaginal deliveries. Substantial additional obstetric-gynecologic experience will be obtained during the three years of their experience in family practice centers. Residents will return to the family practice centers for their scheduled times even during the obstetric-gynecologic rotation.

For those electing additional training, particularly those who are planning to practice in communities without readily available specialist consultation, an additional minimum of three months experience in a structured obstetric-gynecologic educational program is strongly recommended. This program should include experience in induction of labor, cesarean section (a minimum of ten procedures), and tubal ligation if appropriate to physician beliefs, and gynecologic procedures such as conization. These advanced skills are identified by (II).

* Condensed from AAFP reprint 261. Used by permission.

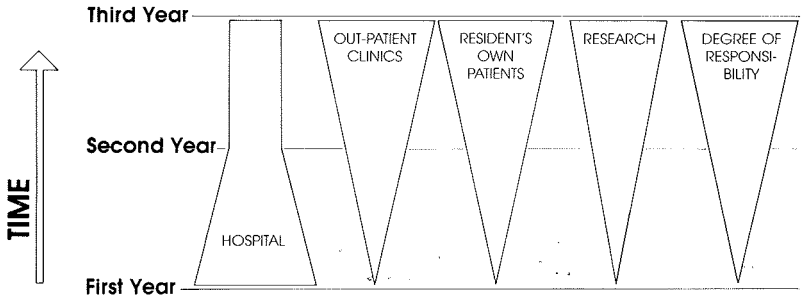

Figure 1. Time distribution by year during family practice residency.

Obstetrics in Family Practice Residency Training

Family practice residency programs in university and community hospitals have differing situations that affect the experience of their residents.[9,10] There is no reason, however, why there cannot be a common concept about the family-centered nature of the birthing process and the value of the family physician. Recently, consensus has been achieved between the American Academy of Family Physicians and the American College of Obstetricians and Gynecologists regarding a core curriculum for obstetric-gynecological skills and knowledge for family practice residents (Table 1).[11,12] Candib has identified three major objectives of the family practice movement that recognize the unique contribution of family practice in the delivery of obstetrical care and which can serve to unify the approach of various residency programs, regardless of the level of obstetrical training. These objectives are: "(1) to develop an alternative strategy to the delivery of maternity care which provides a family-centered experience for all members of the family; (2) to provide access to training [in] . . . . childbirth to family practitioners at different levels of training; and (3) to assure the growth and development of family practice as a discipline by offering care to families entering the health care system at the moment of pregnancy."[3]

Traditional training within family practice residency programs has been largely borrowed from obstetrics and gynecology. The focus has been on the abnormal, and family-centered interpersonal relations have been ignored. Block rotations in obstetrics under the supervision of obstetrician-gynecologists have not been able to provide family practice residents with the experience and insight necessary to meet the family's needs for longitudinal care during health, with appropriate emphasis on changing family dynamics, nutrition, and patient preparation and education. As Candib observes, "the longitudinal experience of knowing patients before they are pregnant, being the provider of the news that they are pregnant, dealing with the patient's fears and hope about the process, following the changes and the patient's state at different stages of pregnancy, observing chang-

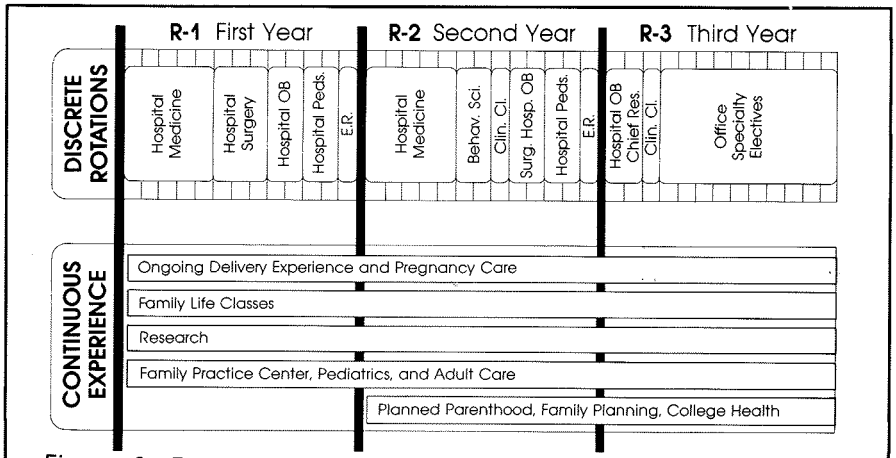

Figure 2. Family-centered resident education at Family Medicine Spokane.

ing family dynamics with the expectation of the new baby, being present during the labor process, mediating that process to both mother and father and extended family, participating with the family in the delivery, assuring the family of normalcy or explaining the event of any abnormality in either mother or baby or the process itself, and, of course, following mother, baby, and family back into the home setting—*this by nature longitudinal process is at the center of the experience of family practice*. This process is obscured by training in block rotations in the hospital setting under the supervision of specialists."[3]

At Family Medicine Spokane the author has participated in the design of an approach to obstetrical training that tries to combine the intense in hospital experience necessary to develop technical competence with the longitudinal experience and family-centered approach necessary to develop the concept of family-centered health care advocacy. The traditional aspects of obstetrical training are highlighted by six months of inhospital delivery service experience, two months in each of the three resident years (Figures 1 and 2). On the inhospital delivery service the first year family practice resident is supervised and taught by his/her second or third year family practice resident teammate and the various attending physicians. The second year resident, in a more supervisory role, provides his first year teammate with an introduction to procedures and approach to the patient. In addition, the second year resident assumes night call where he continues to gain new experience and patient exposure. The third year resident acts as the chief resident on the obstetrical service, supervising the first year family practice resident, teaching the introductory obstetrical syllabus and procedures, and concentrating on the American College of Obstetrics-Gynecology—American Academy of Family Physicians (ACOG-AAFP) essential goals of training outlined for family practice residents[12] (Table 1). Traditional aspects of training include outpatient obstetric-gynecological experience in private physicians' offices, and ongoing experience in public family planning centers and in a college health center. In addition, residents are required to submit an individual research project on some aspect of family medical care during their third year.

Family-Centered Training

Today most family practice residency programs are providing residents with some experience intended to enhance the physician's ability to provide family-centered obstetrical care, even though obstetrical training may not be emphasized in the residency itself (Figure 2). As at Family Medicine Spokane, the knowledge a resident gains in formal behavioral science training helps in developing expertise with personality diagnosis, family dynamics, and individual stress factors. Familiarity with community resources also helps the physician aid his patient. Pediatrics and neonatal nursery experience not only provide the opportunity to learn medical care for children, but also provide additional experience with the family at times of stress. The opportunity to deal with the parents of an ill newborn infant often equips the resident with a sensitivity and depth of experience that helps immeasurably when counseling his pregnant patient concerning the fears she has about her unborn child. The ability to bridge the gap between pregnancy and newborn care provides a unique opportunity to work with patient families in a manner not possible for physicians in other specialties. General medical and surgical experience obtained by the residents during their training also enhances the family-centered nature of care by providing an excellent background for dealing with unexpected medical or surgical problems encountered by the patient. Often, instead of needing to refer a patient during the critical time of pregnancy, the resident is able to provide care himself and strengthen the bond between patient and physician. When another specialist does need to be consulted the resident is able to maintain the role of patient advocate in continuing to participate in her care.

At the heart of teaching family-centered obstetrics in the family practice residency is the ongoing patient care experience over the three years. Obstetrical care is probably the best example of the family's need for longitudinal care during *health*. Certainly isolated block rotations in obstetrics under the supervision of obstetrician-gynecologists can in no way provide family practice residents with experience in continuity of care. During the ongoing experience of pregnancy care at the family practice center, the family practice resident soon learns that he or she is a unique health-care provider offering a service that cannot be duplicated by any other medical specialist.

When another family member becomes ill or is affected by or as a result of the woman's pregnancy (eg, Couvade syndrome), the family physician is able to intervene directly and use previously gained knowledge of the family to best advantage. When the illness of a child or other family member might have potentially serious effects on the pregnant woman, (eg, Rubella), the family physician again is uniquely able to initiate proper measures. The resident soon learns that problems previously categorized in medical school as falling into the domain of narrow specialties are no longer so easily placed. Does working with a pregnant woman incapacitated by fear about her unborn offspring fall into the domain of obstetrics, psychiatry, or pediatrics? Here lies the value of family practice! Brazelton notes that pediatricians who want to be effective guardians of their patients' well-being "are pressed into a role equivalent to the old 'family doctor'" since they are implying "a familiarity with the child's environment and participation with the parents in rendering it as favorable as possible to his well-being."[13] It seems obvious there is no one in a better position to render this anticipatory guidance to parents regarding their children than the family practice specialist of today.

Designing the Ongoing Patient Care Experience

A practical problem faced by residency programs is how to assure an adequate patient population for ongoing family-centered pregnancy care experience. "Patients have been educated to expect obstetrical care from obstetricians and newbaby care from pediatricians. Bringing obstetrics back into family practice is crucial to reversing this trend toward fragmentation of family care which became the leading dynamic of access to care in the 1960s. During that time, many family physicians stopped doing obstetrics as a means of limiting the growth of their practices."[3]

At Family Medicine Spokane, the problem of exposing the residents to an adequate family obstetrical experience has been approached

Table 2. Family Life Classes: Family Education

First Trimester One 3-Hour Class	Second Trimester Four 2-Hour Classes	Third Trimester Four 2-Hour Classes	Labor Plus Delivery	Parenting
1. Physiology	1. Physiology	1. Physiology		1. Infant development and feeding
2. Fetal development	2. Discomfort of pregnancy	2. Exercise and relaxation		2. Newborn and infant medical care
3. Prenatal exercise and relaxation	3. Exercise	3. Breathing techniques		3. Mothering, fathering and parenting
4. Nutrition and weight gain	4. Family Changes	4. Signs of labor and stages		4. Individual and family-centered care
5. Psychology	5. Sexuality	5. Variations in labor		
6. Drugs, smoking, and alcohol	6. Preparation for baby	6. Bonding to the newborn (Family integration)		
7. Discussion	7. Parenting—Adjusting to the newborn	7. Physical changes after delivery		
	8. Discussion	8. Sexuality		
		9. Dealing with relatives		

mainly in two ways. First, all second and third year residents are required to take a one-month rotation with rural family physicians who practice obstetrics. During this time they are exposed to a role model and to patients in rural communities where medical care has not yet developed the fragmentation usually seen in the larger cities where training programs must locate.

Secondly, childbirth educators together with some of the family practice residents have designed a unique family-centered approach to patient care and education. This program is attracting increasing numbers of pregnant women and their husbands to the residency practice. The keystone of this program is the family life classes (Table 2). Unlike traditional childbirth classes which meet only in the third trimester of pregnancy, the family life classes begin in the first trimester when the patient first learns she is pregnant. The classes attempt to focus on the changing concerns and motivation of the couple as pregnancy progresses. For example, during the first trimester class, discussion centers around changing physiology, fetal development, prenatal exercises, nutrition and weight gain, mood changes of pregnancy, strains on the couple's relationship, and the dangers of drugs, smoking, and alcohol use. A short series of classes during the second trimester comprise the mid pregnancy series. Discomforts of pregnancy are usually becoming more important to the pregnant woman at this time, and these are discussed along with an exercise program. Family changes, sexuality, preparation for the baby, and anticipation of parenting problems are other topics that are discussed in an informal and relaxed atmosphere. Classes during the third trimester focus primarily on the techniques of prepared childbirth, relaxation, and understanding of the birthing process. A unique feature of the classes is that the last session occurs after delivery. Parents are encouraged to share with others their experience with the new offspring, and this serves as an introduction into infant development and feeding problems. Issues of parenting effectiveness are covered and important milestones in the newborn and infant medical care are discussed.

The classes at Family Medicine Spokane are coordinated and taught by childbirth educators and other qualified health care professionals. Residents do not have primary responsibility for teaching in the classes, but are able to attend and

participate as desired, often acting as a medical resource. Residents attending the classes find that they not only learn from the course offering but also from the concerns of their patient families who attend and participate. The family-centered nature of the classes and the fact that they extend throughout pregnancy into the postpartum period do not allow couples to concentrate on the delivery experience itself as the determination of the success of their class participation. Instead, pregnancy and childrearing are presented as a continuum, with the delivery an important part of the process. The patient experience in the classes nicely complements the family-centered care provided by the resident.

Patient enthusiasm for the family life classes is now resulting in a steady increase in families coming to the residency program for pregnancy care since the classes were instituted one year ago. Many family physicians in the area also encourage their patient families to attend the classes. Couples opting for this approach to pregnancy care and education enthusiastically voice the opinion that the obstetrical care delivered by the family practice resident is fulfilling their need for a personalized, sensitive, family-centered birthing experience. Currently, each resident delivers approximately 10 to 15 of his or her own patients per year.

Importantly, the classes conducted at Family Medicine Spokane are also practical and financially realistic for physicians in private practice. As presently conducted, the classes are financially self-supporting with approximately 120 deliveries per year, allowing easy incorporation into a two, three, or four physician family practice. The entire series is offered to the patient and family for $22. The childbirth educators are paid $5 per hour of instruction time and $2.50 for preclass preparation, for a total cost of $130 per series. There is no charge for a meeting room, since classes are held at the residency. If a minimum of eight couples are registered and pay the $22 fee, $176 is available to pay instructors, purchase some light refreshments, and amortize the cost of reading materials and teaching aids. Classes can start whenever the required number of couples are registered for that particular section, preventing overcrowding but insuring that costs will be met.

In order to begin similar classes, an interested residency or group practice should plan on investing approximately $500 to cover the cost of basic teaching aids needed. A considerably larger sum is required to provide the classes with a reference library. Often local public service groups can be approached to endow classes with needed materials when the classes are conducted on a nonprofit basis and accept all registrants.

It may be stated in conclusion that obstetrics is a vital part of delivering comprehensive health care to families in the Family Medicine Spokane residency practice because of the unique opportunities of the family physician for effectiveness and the positive effects upon family practice as a specialty.

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