Advanced Obstetrical Training for Family Physicians: The Future Hope for Rural Obstetrical Care

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Forty-three million Americans live in rural areas designated as physician underserved.[1] Historically, most obstetrical care in these areas has been provided by the family physician. Unfortunately, there has been a dramatic decline in the number of family physicians practicing obstetrics over the past 15 years.[2–5] As a consequence, there are hundreds of rural counties with no obstetrics providers, and many others with inadequate coverage. In Tennessee, 36 of 95 counties (38%) are without any physicians practicing obstetrics.[6] Consequently, pregnant women living in 12 of the 19 counties surrounding our medical center must travel to Knoxville for delivery.

Inaccessibility to obstetrical care is more than an inconvenience to pregnant women. It leads to higher rates of prematurity, maternal morbidity, and perinatal mortality.[7] The requirement for extended travel results in delayed initial visits, missed return visits, and late presentation of obstetrical complications. We have seen critical delays in the treatment of serious obstetrical complications when patients from underserved areas are seen by nonobstetrical providers, such as emergency department physicians.

There have been a number of reports comparing patient outcomes between obstetricians and family physicians, including a recent article in *The Journal of Family Practice*.[8] Although it is not possible to completely eliminate differences in the populations or the use of varying technologies, it is reasonable to conclude that the outcomes for low-risk patients are at least as good, if not better, when managed by family physicians. Furthermore, it is unlikely that a significant number of obstetricians will soon move to underserved areas. Nationwide surveys confirm that only 10% of graduating obstetrics residents intend to practice in a rural setting,[9] and the portion of senior medical students choosing obstetrics and gynecology has remained relatively constant at 6% to 8% of the class.[10] Those of us who have practiced obstetrics in rural communities realize that it is a very difficult task, regardless of specialty or training. It is impossible to eliminate all potential high-risk obstetrical situations, as many occur after the onset of labor, and many small hospitals have limited support staff for labor and delivery. Hospital laboratory services and anesthesia support is often sparse or not available on a 24-hour basis. There is often a lack of physician support for cross coverage,[11] resulting in long stretches of obstetrical call without relief. Travel distances and the inconvenience of obtaining this coverage also discourage rural family physicians from pursuing continuing medical education, despite medicolegal demands for up-to-date obstetrical management.

We have taken several different approaches to solving the rural obstetrical problem in our region. We established rural clinics with physician specialists and nurse practitioners, with the patients coming to our center for delivery. This tack offered the significant advantages of tertiary referral and evaluation of high-risk patients. Additionally, these sites have provided an opportunity for enhanced training of medical students, family practice residents, and obstetrics residents. Unfortunately, this arrangement did not eliminate the need to travel a considerable distance for consultations, delivery, or both. Furthermore, our department is simply unable to meet the staffing needs of all the rural sites in addition to our own regional needs, and limited reimbursements make employment of a larger number of providers untenable.

We recently attempted but failed to interest a graduating obstetrics-gynecology resident into locating in a small town in our region. This person had a rural background and was highly motivated to practice in a small town. Unfortunately, a combination of factors, including the concerns of rural physicians already in practice in the area and limited resources of the hospital and community,

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influenced the resident's decision to practice in a larger town.

We have trained two family practice residents who were interested in advanced obstetrical skills by means of a 1-year fellowship after the completion of their family practice residency. These individuals took 3 months of basic obstetrics and gynecology, followed by 3 months of "advanced obstetrics" during their family practice residency. During the additional year, they spent 6 months serving as a senior level resident on the obstetrics service. Experience in related rotations such as neonatology, anesthesiology, and critical care also was provided. During the obstetrics rotation, the advanced residents learned the necessary surgical and operative procedures necessary for rural obstetrics: cesarean section, tubal ligation, dilation and curettage, and vacuum and forceps deliveries. They also gained a reasonably detailed knowledge of high-risk obstetrics, and are able to effectively triage serious problems to our tertiary institution. These two family physicians were subsequently instrumental in reestablishing an obstetrical service in Fentress County, a population of 16,000 people approximately 100 miles from our regional center. During the past 3 years, their obstetrical service has grown to approximately 150 deliveries per year. The impact on the hospital and town has been significant, and a third family physician has committed to join the group. Currently, the site is used as a third-year family practice student rotation.

Training of these individuals was not without problems. There was a potential conflict between the family practice and the obstetrics residents (and sometimes the medical students) regarding which resident would be involved with a given procedure. Aside from financial considerations and "turf wars," there was a genuine concern and reluctance of some of the obstetrical faculty to train family physicians in operative obstetrics. Some attending physicians expressed the concern that "a little knowledge is a dangerous thing" and felt that once in practice, the family physician would "get in over his head." Others stated that the sole obligation of the obstetrics-gynecology department is to teach obstetrics residents, a task that is, in itself, difficult enough.

Bloom[12] suggested that new physicians are frequently so overwhelmed by what they need to know that they look for a protected area of the profession where they feel they can have reasonable control of their work. We think that the general lack of availability of advanced obstetrical training is an example of this principle. A survey of third-year family practice residents by Smith and Howard[13] revealed that one of the most important impediments to residents choosing to practice obstetrics is the level of obstetrical training they receive. If their obstetrical education were enhanced, more family medicine residents would no doubt continue it in their practice.

Training programs for advanced obstetrics must be well structured and adequate in both surgical and nonsurgical experience. Provision for adequate training in neonatal medicine is also critical for rural physicians, as they will have to provide emergency newborn care as well. Many have suggested that family practice role models are crucial to the success of advanced obstetrical training programs.[14] We agree, but with the caveat that departments of obstetrics and gynecology must be significantly involved in providing adequate surgical training, knowledge of high-risk maternal-fetal medicine, and obstetrical ultrasound techniques. Furthermore, prospective involvement of obstetrics faculty establishes ties essential for future communication. Once established in rural practice, the family physician needs a rapid access to maternal-fetal transport facilities and to consultants and the tertiary care center by telephone and computer.

In conclusion, there is a continuing rural obstetrical health care crisis in our country. Family practice residencies produce the largest number of physicians trained to do obstetrics, almost 2,400 per year.[15] It is time for academic medical centers to adjust their philosophy and place a greater priority on advanced obstetrical training for family physicians. Motivated obstetrical faculty and family practice faculty are both essential to such an effort. National bodies governing the training and practice of family physicians and obstetricians must work together to develop advanced obstetrics curricula. In 1972, the World Health Organization issued the following statement about the relationship of medical education to a society: "Medical education is inextricably tied to the health system service, and when questions arise about service, questions about education must follow."[12]

It is time for all relevant medical specialists to ask questions and confront issues related to advanced obstetrics training for family physicians. The future of rural obstetrical care hangs in the balance.

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