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Benefits of a Doula Present at the Birth of a Child*

CASE

During a prenatal visit with Ann and Roger, a first-time mom and dad, the pediatrician asked about their childbirth education experiences. Ann said the classes were like a lecture, and there was little time to get questions answered. "As we went through the meetings and learned about things that might happen, we began to feel really nervous. The educator said it was best for the baby if the mother received no medication, so she suggested natural childbirth. I'm willing to try going without pain medication, but Roger doesn't want to see me in pain. Could I ask your opinion about a doula?"

Dr Wagner followed the mother's question with her own: "That sounds like an interesting idea. Tell me what you know about doulas." Ann replied, "Not much. I've only heard the name. You know, we recently moved here." Dr Wagner responded, "Well, Roger, let me tell you something that I have found exciting. In the last year, 4 fathers have come for their baby's first visit and have told me how great it was to have a doula. It was the third baby for one of them. He couldn't wait to tell me what a rewarding experience it was for him and his wife compared with their earlier experiences. I thought that there must be 1 fabulous woman in our community working as a doula, but all the fathers had a different doula! The fathers said that the doula assured them that she would be with the couple through the whole labor and the first 2 hours after delivery and that the fathers could leave at any time if tired or hungry. The doulas showed the fathers what they could do to help the mother."

Roger interrupted, "That sounds great, but Ann and I thought we could manage by ourselves. I'm not sure about having a stranger in the room with us." Dr Wagner replied, "These 4 men and their wives met with the doula in their homes 1 or 2 times in the month before labor began. As a result, they knew her and liked her and then were relieved to see her when they went to the hospital. Let me be frank with you. There is a lot that goes on in a modern maternity hospital that will be new to you. There are strange smells and sounds, nurses and physicians rushing about, a lot of unfamiliar hospital lingo. There is a nationwide nursing shortage, and due to managed care most hospitals have found it necessary to cut costs drastically. Therefore, each nurse has to care for more than 1 patient at the same time. Obstetric care in the United States has become more intensive. From what I have learned from my patients about

their labor and delivery experiences, it seems to me that every laboring woman needs a doula. And I say that knowing that there are many more important reasons for having continuous doula support. I am going to do some research about the doula, and then I will get back to you with what I learn."

Six weeks later when the parents brought their new daughter for her first office visit, Dr Wagner was surprised at the change in their confidence and enthusiasm. Ann said, "We can't thank you enough for finding a doula for us and telling us the good effect she would have. From the time of our first meeting with our doula, Maria, I stopped feeling so nervous. She told Roger and me she would meet us when we came to the hospital in labor and would be with us until 2 hours after delivery. Maria wanted to make sure that I had the baby skin to skin on my chest right after birth and let the baby self-attach to my breast. And she did stay the whole 9 hours of labor plus the 2 hours postpartum! Maria was so strong that I could really relax. I could never have gone through that labor without her. I mean it." Roger interrupted, "She was terrific! She stayed the whole time and showed me what to do to help Ann. I think she helped me even more than she did Ann."

INDEX TERMS. *doula, childbirth, mother-infant attachment, labor and delivery.*

Dr Martin T. Stein

Cultural values combine with new medical knowledge to bring about change in the way we practice medicine. In pediatrics, back-to-sleep positioning of infants, cosleeping, limitations on the use of corporal punishment, and breastfeeding are among the many practices of child rearing that have undergone substantial change in the past decade. The environment in which babies are born has also seen significant change during the past quarter century.¹ A family-focused model of care now includes fathers as active participants in the delivery room. The introduction of a doula—a woman who provides emotional support to the mother and father during labor and delivery—is a relatively recent addition to labor and delivery units in some US hospitals.

This Challenging Case is an opportunity to explore the activities of a doula and to review recent studies that evaluate the effect of a doula on perinatal and developmental outcomes. **Dr John Kennell** is a Professor of Pediatrics at Case Western Reserve University School of Medicine, where he has been a pediatric educator and researcher for many years. Along with Dr Marshall Klaus, Dr Kennell published some of the earliest work on the effects of the hospital environment on the mother-child relationship. They found an important relationship between early and

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extended contact between a mother and newborn after birth and subsequent affection and comforting responses in response to crying.² Dr Kennell has extended this interest to studies of doulas during the labor and delivery. **Ann Fulcher** is the Program Manager for the Hearts and Hands Volunteer Doula Program at the University of California, San Diego. She coordinates more than 40 trained volunteer doulas who are on call and available to all patients who deliver at a University hospital.

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Dr John H. Kennell

Dr Wagner is wise to provide information about the doula to Ann and Roger because of the impressive advantages of doula support for the mother, father, and baby. Doula¹ is a Greek word that has come to mean a woman experienced in childbirth who provides continuous physical and emotional support to the laboring woman and her partner. The doula is concerned with only 1 patient for the entire labor and delivery. She focuses on the emotional needs of women, not medical issues. She remains calm and objective, unlike a family member or friend.

At the present time, the demands on labor and delivery nurses are so great that they can spend less than 10% of their time providing supportive services. By adding continuous doula support, researchers found remarkable positive perinatal effects, as demonstrated in a meta-analysis of the first 6 randomized, controlled trials (RCTs).²⁻⁸ There were reductions in cesarean deliveries by 50%, use of forceps by 40%, and requests for epidural analgesia by 60%, and a 25% decrease in labor length. These RCTs took place in hospitals that did not permit family members or friends to be present with the laboring woman or allowed only brief visits.

At this point there were questions about whether there would be similar positive effects for middle- or upper-income groups or for women accompanied by their husbands during labor and delivery. As a result, an RCT of healthy women, each of whom was expecting to be supported by her male partner, was conducted.⁹ All could have family members present. A cesarean delivery was required by 22.5% of the women who were accompanied only by a male partner compared with 14.2% of those supported by both the father and a doula. This study showed the value of doula support for all mothers whether laboring alone or with a partner. The doula does not displace

the father but supports him, shows him how he can be helpful, and relieves much of his anxiety.

The long-term advantages of doula support during labor may be even greater for the baby, as demonstrated in 2 studies that examined changes in mother-infant interaction following doula support. Investigators in Johannesburg observed the psychological health of the women and infants in both the control and supported groups 6 weeks after delivery.^{1,10} There were favorable effects of doula support on the subsequent psychological health of the women and infants. At 6 weeks there were impressive postpartum behavioral differences: a significantly greater proportion of doula-group women were breastfeeding (51% compared with 29%), and the doula-group women were significantly less anxious, had lower scores on a test of depression, and had higher levels of self-esteem. These maternal qualities would be favorable for the development of the infants. Not only did the supported mothers show more positive behaviors with their babies, but they more often rated their babies as better than a standard baby, more beautiful, more clever, and easier to manage than did the control mothers, who perceived their babies as slightly less beautiful and clever than a standard infant.

In a second study, primigravida mothers with uncomplicated vaginal deliveries were randomly assigned to a doula or 1 of 2 no-doula groups (narcotic medication or epidural). A home visit was made when the infant was 2 months of age to administer a developmental test and to observe the mother's interaction with her infant.^{11,12} The doula-supported mothers behaved more affectionately with their babies than did the no-doula mothers 2 months after delivery. Questions remain regarding the physiological and/or psychological mechanism that could explain this powerful and long-lasting effect of doula support. In a review of 128 representative societies, women were present with women during childbirth in 127. This was the practice in North America until 100 years ago. Does a laboring woman with doula support experience normal hormonal and behavioral responses that may be restricted or inhibited by factors associated with a hospital birth without a doula? Even though the mechanism is not clear at this time, wise pediatricians will recommend a doula to their patients' parents.

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The concept of having an experienced woman at the side of another woman in labor is as old as childbirth itself and spans many cultures.^{1–3} It is the unfamiliar name and the emergence of the trained, paid doula (“doo-lah”) in our society that is relatively new.

Today's doulas are trained to provide a pregnant woman with continuous 1-to-1 support during childbirth—nonmedical physical and emotional care that complements both the clinical service provided by hospital or birth center staff and the intimate, but usually inexperienced, care offered by family or friends.† Many doulas are trained to help with the initiation of breastfeeding and are available for lactation assistance several days postpartum.

Women are employing professional doulas in increasing numbers. (Statistics from Doulas of North America [DONA] indicate that the number of DONA-certified doulas alone has risen from 31 in 1994 to over 2400 in 2002. Membership in this organization, just 1 of the several national professional certifying bodies, rose from 750 to more than 4500 in the same period.⁴) They value their advocacy role. Women want someone to help guide them through the last stages of pregnancy, to navigate the unknown of the birth setting they will face, and to ease them into the early postpartum stage. Many women are aware of the improved clinical outcomes for both mother and baby associated with doula care during labor and delivery (Table 1).⁵

† Certification is offered by several national and international professional organizations, including Doulas of North America, Association of Labor Assistants and Childbirth Educators, International Childbirth Education Association, and Childbirth and Postpartum Professional Association.

TABLE 1. Benefits of Doula Care

Randomized, controlled trials assessing the role of the doula demonstrate benefits in the following outcome measures:
Shorter labors
Reduced need for pain medication
Fewer episiotomies
Fewer operative vaginal deliveries
Fewer cesarean sections
Improved neonatal outcomes
Better mother-infant interaction
Improved breastfeeding rates
Greater maternal satisfaction

Because the doula has no medical or decision-making responsibility, has no other patients, and does not work on a shift, she can devote herself fully to the needs of 1 woman. She has the time and training to ask about fears and individual preferences. She stays continuously with that woman until her baby is born regardless of how long that may take and regardless of pain management or delivery methods employed. Often, knowing that the doula will be there for the duration (more than 24 hours straight is not uncommon) is powerful in its ability to decrease anxiety not only for the mother-to-be but also for her attending family. From a physiological perspective, it is possible that the enhancement of feeling safe and confident, a key to a woman's ability to labor effectively, leads to suppression of anxiety-produced catecholamines, which decrease oxytocin during labor.

Interestingly, it is often the medical staff who are the least knowledgeable about the functions of the doula and outcome measures. “Who are these doulas, and what do they do?” are questions asked in call rooms and nurses stations as staff observe the increasing presence of doulas in the labor and delivery unit. Suspicion and or “turf” issues may occur when the work of a doula is experienced for the first time.

However, as the number of doula-attended births rises, obstetric nurses, midwives, obstetricians, and anesthesiologists gain a better understanding of the doula's role and usually welcome the doula's presence when the benefits become evident. As cost benefits to the hospital, assistance to the obstetric staff, and patient satisfaction become evident, hospitals have started in-house doula programs or are hiring doulas directly to work in their labor and delivery units.⁶

We encourage pediatric clinicians to gain an understanding of the medical and psychosocial benefits associated with doula care. The use of doulas as lay providers who can successfully impact the birth and postpartum experience is an effective way to improve maternity care, birth outcomes, and, potentially, long-term family well-being. One group of researchers who have studied the effects of doulas observed that “in reassuring the parents and enhancing their sense of accomplishment, the doula may be modeling the parental role for them.”⁷ Professor Johnny Lind of Karolinska Hospital in Stockholm

expanded that concept when he noted that “the family is born in the delivery room.”⁷

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Dr Martin T. Stein

An appreciation for the many potential benefits of a doula during labor and delivery reminds me of the many remarkable changes in the birth process that have occurred in the past 40 years in the United States and other countries. As a medical student and pediatric resident in the mid-to-late 1960s, I have vivid memories of 2 less-than-optimal common practices when working in labor and delivery. Many of the women at that time delivered with the assistance of a general anesthetic—producing amnesia and psychologically numbing them from the experience of the birth and immediate contact with their newborns after delivery. At the other extreme, I recall many women at municipal urban hospitals who came in fully dilated and ready to deliver. They experienced the birth of their baby without any pain relief and without the benefit of a prenatal class where methods of anticipatory guidance and self-regulation for pain relief were taught. In both situations, fathers were absent from the delivery room. Babies were not given to their mothers for nursing and skin-to-skin contact but whisked away to the nursery for a bath,

‡ The University of California, San Diego (UCSD), Hearts and Hands Volunteer Doula Program began in late 1999, within the in-hospital birth center at the UCSD Medical Center in San Diego. Originally working with midwifery patients in the birth center, the number of doulas increased, and their work drew the interest of the labor and delivery unit staff and patients as well. More than 40 trained volunteers now work either on-call or as part of the program’s client referral component, and doulas are offered free of charge to any patient delivering at this medical center. The Hearts and Hands Program is currently funded through a 1-year grant from the First Five Commission of San Diego. (San Diego County also has a growing number of private-practice doulas working independently at the various hospitals in the community.)

growth measurements, vitamin K injection, eye ointment, and swaddling.

Subsequently, fathers were encouraged to participate in prenatal classes and be present in the delivery room, self-regulation techniques that modified pain were available to women who chose a “natural childbirth,” epidural anesthesia was used more frequently as a way to provide regional anesthesia while remaining conscious during the delivery, and breastfeeding was encouraged in the immediate postpartum period. Each change came slowly—a reflection of our human nature to accept change cautiously, if at all! Cumulatively, these environmental alterations of the birth process have enhanced the quality of the experience for mothers and fathers (probably for participating doctors and nurses as well) and resulted in improved perinatal outcomes, fewer obstetric complications, and the greater likelihood of initiating and sustaining breastfeeding.^{1–4} Although challenging to study objectively, these changes in the birth process support the enhancement of mother-child (and father-child) attachment and, in high-risk cases, may promote a decrease in child abuse and neglect.

The case summary of this Challenging Case is filled with clinical pearls. The mother commented that “[the prenatal] classes were like a lecture, and there was little time to get questions answered.” These group sessions are an opportunity for dialog among parents—a chance to share their fears and uncertainties with each other. Pediatricians who participate in these classes can role-model the interactive-dialog technique for childbirth educators who may be accustomed to lectures. At another point in the visit, the parent asked about the doctor’s opinion about a doula. Dr Wagner practiced the interviewing techniques of active listening and feedback when she responded, “That sounds like an interesting idea. Tell me what you know about doulas.”⁵ Finally, Dr Wagner admitted that her knowledge about doulas was limited, and she said, “I am going to do some research about the doula, and then I will get back to you with what I learn.” I have found this technique to be especially powerful in the therapeutic relationship-building phase with a family. It implies that you do not have all the necessary information and that you are committed to learning more about the subject for the benefit of this particular child and family.

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