

Social Support by Doulas During Labor and the Early Postpartum Period

Bruce A. Meyer, MD, MBA

Jane A. Arnold, CNM, MSN

Debra Pascali-Bonaro, BEd, CCE, CD(DONA), CPD

A doula is a woman who is experienced and professionally trained to provide continuous social support to the birthing family. Doulas may be present during labor and delivery, attend the new mother at home during the first days or weeks after the birth, or both. Doulas do not perform clinical tasks or provide medical interventions or advice; their role complements that of the medical care providers.

Although the doula is a relative newcomer to the modern hospital-based labor and delivery team, doulas are increasingly being employed by hospitals or contracted by individual patients. This article considers the role of the doula in labor and delivery, the benefits to the mother of having a doula present during and after birth, and the training required for certification as a doula. The effects of doula care on outcomes and costs are also reviewed.

HISTORICAL ROOTS OF DOULA CARE

Doula care was introduced in the United States relatively recently; in developing nations, however, the presence of continuous human companionship not only has been assumed but has often assured an infant's survival.¹ A mother who was nurtured through labor, birth, and the early postpartum period was able to nurture and care for her infant, ensuring successful breast-feeding.

Childbirth has historically been a deeply entrenched social event in which women bonded as they shared a rite of passage. Typically, the woman's mother, sister, aunts, and female friends attended her. The art of many cultures and centuries illustrating childbirth consistently depicts a laboring woman surrounded by women offering social support (**Figures 1 and 2**). A review of 127 nonindustrialized societies found that in all but 1, a female companion remained with the laboring woman throughout labor.^{2,3}

In the United States, the usual venue for labor and delivery shifted in the 1920s from home to hospital,

substantially altering the nature of social support provided to laboring women. In the hospital setting, female assistants were typically excluded, and many women labored alone. Medication was used to calm and comfort women who were alone and often afraid.

The natural childbirth movement of the 1960s and 1970s recognized the laboring woman's need for support and brought husbands and partners into the delivery room for the first time. The broadening of general understanding about the importance of social support in labor was accompanied by the development of the professional doula, a relatively new but increasingly appreciated member of the labor and delivery team. Strong scientific evidence supporting the benefits of continuous care by a doula during labor and delivery has been documented in many studies (**Table 1**).⁴

THE DOULA'S ROLE

The Importance of Social Support

The basis of doula care is social support, which includes offering information, tangible physical assistance, and emotional support.⁵ Maternal social support has been shown to reduce the risk of child abuse and neglect.⁶ Home-based support programs for families with newborns have no apparent risks and may offer benefits to socially disadvantaged mothers and their children, possibly including reduced rates of childhood injury.⁷ Professional support, social support, or both may aid in the diagnosis and treatment of postpartum depression.^{8,9} Additional research is needed on

Dr. Meyer is Professor and Chair, Department of Obstetrics and Gynecology, University of Massachusetts Medical School, Worcester, MA. Ms. Arnold is an Assistant Professor and Director, Midwifery Division, Department of Obstetrics and Gynecology, State University of New York at Stony Brook, Stony Brook, NY. Ms. Pascali-Bonaro is the President of MotherLove, Inc, a doula training and consulting agency in River Vale, NJ, and Adjunct Faculty, School of Nursing, Continuing Education, State University of New York at Stony Brook, Stony Brook, NY.



Figure 1. A 16th-century depiction of a delivery on a simple wooden birth chair with women in attendance. Reproduced from Limburg A, Smulders B. *Women giving birth*. Berkeley (CA): Celestial Arts; 1992:3.

the effects of postpartum social support on the rates, duration, and quality of breast-feeding; child abuse and neglect; domestic violence; postpartum depression; parent-infant bonding and interaction; parents' self-esteem and confidence; and parents' overall satisfaction with the social support they receive—all of which have been examined to some degree.⁷

How Doulas Provide Social Support

The doula has been trained to provide continuous physical, emotional, and educational support to the laboring woman and to the rest of her social support team, if any, during childbirth. Many doulas are mothers, although motherhood is not a prerequisite.

Those who assist during labor are called *birth doulas*, although the modifier is often dropped. After the birth, a doula may be engaged to visit the home to teach breast-feeding techniques, assist with light housework, and educate the new parents during their complex first weeks with the neonate. Doulas who assist the new mother after delivery are called *postpartum doulas*.



Figure 2. A 19th-century depiction of a birth in Africa. Reproduced from Limburg A, Smulders B. *Women giving birth*. Berkeley (CA): Celestial Arts; 1992:4.

Some doulas perform both roles; most specialize in one or the other.

Doulas do not perform clinical tasks, make medical decisions for women and their families, or offer opinions that might influence a woman's approach to labor and birth. A doula respects the precept that every birth is a unique experience for each woman and her family. The doula facilitates positive communication and informed consent between the woman and her partner and their health care provider.

Doula care represents a return to the tradition of woman-to-woman support during pregnancy, labor, birth, and the immediate postpartum period. The doula's work and nurturing presence complement the care that laboring women receive from medical practitioners. Doulas encourage women to trust their bodies, decreasing fear of the labor process. The continuous presence of an experienced doula during labor has been demonstrated to endow a woman with confidence and to provide greater satisfaction in birth.¹⁰ Labor support includes emotional support and reassurance, comfort measures (eg, bath or shower, massage, soothing touch, breathing and relaxation techniques), and encouraging the woman to change positions and work with her body. The doula respects the woman's cultural and religious beliefs throughout.

Whereas the roles of partner, doula, nurse, and

Table 1. Benefits of Continuous Support by a Labor Doula as Demonstrated in Clinical Studies

Reduces undesirable events	Health complications and hospitalization of newborn ^{b,c}	Provides emotional advantages to mother
Likelihood of undergoing cesarean section ^{a-g}	Maternal fever and infection ^b	Mother experiences a more positive birth experience ^{d,h,m}
Use of epidural anesthesia or other analgesic ^{a-d,g,h}	Maternal bleeding after birth ^e	Mother feels more in control ^{i,m}
Use of oxytocin (Pitocin) ^{a,b,d,f,g}	Postpartum depression ^{d,j}	Mother feels more secure ⁿ
Duration of labor ^{a-f}	Anxiety levels ^d	Mother has higher regard for newborn and increased sensitivity toward newborn ^{d,j}
Use of forceps ^{a,b,d,e}	Increases desirable events	
Use of vacuum extraction ^d	Successful breast-feeding ^{d,i-l}	
	Spontaneous vaginal birth ^f	

Adapted with permission from Mercola JM, Mermer C. Doulas can improve the health of both mother and newborn [Web page]. Available at <http://www.mercola.com/2000/oct/1/doula.htm/>. Accessed 24 July 2001.

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midwife or obstetrician overlap and complement each other, each is unique. The doula learns the policies of the physician or midwife provider and of the hospital or birthing center in which each of her clients will give birth. She can provide uninterrupted support because she is free from the responsibility of performing other tasks, such as clinical management or having to attend to any other woman until delivery is complete and the mother is resting. In contrast, the exigencies of medical practice today allow most physicians only brief intervals during which to offer social support to the laboring women whose deliveries they will oversee.

DOULAS' SKILLS AND RESPONSIBILITIES

Maintaining an Uninterrupted Presence During Labor

Maintaining a continuous presence during labor and birth is the most important aspect of doula care and the one that is unique to doula practice. Although

busy physicians and midwives can rarely fill the need for continuous support during birth, they can value labor support and make provisions for it.

As Enkin and colleagues wrote, "A woman's feelings of isolation can be compounded by the intermittent appearance and disappearance of unknown people, including obstetricians; midwives; nurses; and medical, nursing, or midwifery students."¹¹ Studies have demonstrated that labor nurses in some institutions spend as little as 6.1% of their time performing supportive activities for the laboring women in their care.^{12–14}

Being alone in an unfamiliar place with only intermittent care can leave a woman and her partner feeling isolated and frightened. Fear releases catecholamines, which may prolong the first stage of labor while decreasing blood flow to the uterus, placenta, and fetus. In the presence of catecholamines, the fetus conserves oxygen and undergoes heart rate decelerations.¹⁵ In

TRAINING PROGRAMS FOR PHYSICIANS

Some doula trainers provide inservice programs to medical students and residents to help them provide social support and comfort techniques to the laboring mother and to give them an overview of the role and benefits of doula care. These programs generally include evidence-based practices that facilitate rotation and descent and help prevent dystocia. Comfort techniques are also demonstrated. For more information, contact any of the organizations listed in Table 3.

A valuable resource for students and practitioners is Simkin and Ancheta's *The Labor Progress Handbook: Early Interventions to Prevent and Treat Dystocia* (Oxford: Blackwell Science; 2000).

addition, a woman who feels isolated and frightened tends to interpret labor events—as well as interactions with health care givers—more negatively than one who does not.¹⁵ Stress inhibits the progression of labor.^{16,17} Comfort and protection against fear militate against the secretion of these biologically active amines.¹⁸ A doula's continuous reassuring presence thus permits labor to progress normally.

Respecting Birth as a Key Life Experience

The doula recognizes birth as a key life experience and a rite of passage and therefore nurtures and protects the woman's memory of birth. Simkin's study of women's memories of their first births clearly demonstrated that birth memories last for at least 20 years—the time limit of the study.¹⁹ Simkin also found that laboring women's memories of their births were determined by the quality of care they receive while in labor.²⁰ Those with the highest satisfaction ratings for the care they received during birth also had the most positive memories and felt that the birth experience contributed to their self-confidence and self-esteem. Kind, respectful nurturing leads to positive memories, which commonly increase self-esteem. In contrast, thoughtless, negligent, or disrespectful care tends to create a negative experience, forging a negative self-image that may affect the woman for the rest of her life (Figure 3).

It has been shown that a woman's memories of birth as a positive or negative experience are formed not by the process of delivery itself but by the circumstances surrounding it.^{19,20} Women who have a fast, healthy, uneventful vaginal birth, for example, may

nevertheless consider the experience a negative one if they have intermittently or for long periods been left alone or without supportive care, if they do not understand what is happening to them, and especially if they are treated with what they consider disrespect. Yet, a long, difficult birth, even one that begins with many interventions and ends in cesarean section after 18 to 24 hours of hard labor, can be a highly positive experience for a woman who enjoyed a continuous nurturing presence and felt informed, honored, and respected.

The day of giving birth is a time of unique and intense absorption and learning for the laboring woman. Medical providers who attend births need to recognize that women will remember their words and actions, whether positive or negative, for the rest of their lives. To show respect for the laboring woman and to honor her intentions through informed consent and other means represents medical care in its most estimable form.

Providing Emotional Support

The doula recognizes the effects of emotions on the physiology of labor. A pleasant birthing environment helps a woman to feel more relaxed and comfortable. As catecholamine levels drop, the mother relaxes, and the length of labor may be shortened.²¹

Doulas encourage women to take comforting music and fragrances to their birthing rooms. Dimming the lights, when appropriate, can help a woman to feel safer and less stressed during labor. In contrast, emotional barriers can slow or halt the progress of labor.

Doulas offer emotional support by:

- Encouraging the woman to trust her body and the process of labor and birth.
- Offering reassurance that the body is taking its natural course and (with the medical provider's approval) that both mother and baby are healthy.
- Honoring a woman's emotions and helping her to express them and "let go" to give birth.

Providing Instruction in Comfort Techniques

The doula is skilled in instructing women in comfort techniques and positions that promote progress during labor and reduce requests for pain medication. Doulas are trained and experienced in providing alternative comfort measures during labor and birth. Doulas trust that birth is a natural event. They also trust themselves, influencing the woman in childbirth to trust them.

Doulas receive training on maternal positions that facilitate fetal descent and rotation (Figure 4). They

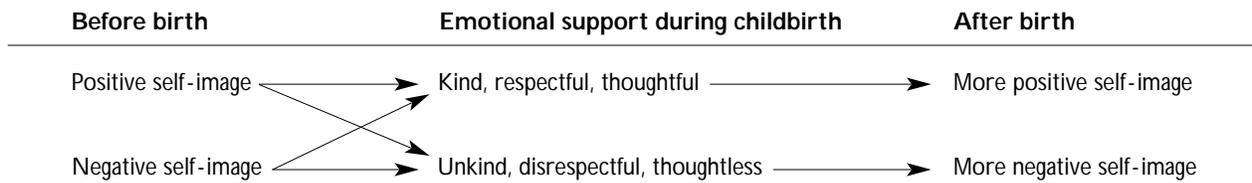


Figure 3. Schematic illustrating the influence of emotional support on a woman's self-image. Reproduced with permission from Simkin P. The experience of maternity in a woman's life. *J Obstet Gynecol Neonatal Nurs* 1996;25:247–52.

also learn a variety of approaches to assist women in relaxation and comfort techniques as labor progresses. Massage, touch, hydrotherapy, rhythmic activity, and other techniques reduce the woman's awareness of pain, according to the gate control theory of pain.²² Most people instinctively move when they are in pain. Yet the laboring woman is often confined to lying on her back in bed, inviting fetal distress and increasing her own pain.

Facilitating Positive Communication

Doulas facilitate positive communication between women and their caregivers to ensure that informed consent is accomplished and that the woman's personal birth choices are respected. If the woman's partner is present, facilitating communication between the couple during this significant event in their relationship can be particularly useful, especially if the partner feels deep concern or fear for the welfare of the woman and baby.

Promoting Breast-feeding in the Early Postpartum Period

A shorter, easier birth without interventions or medication promotes breast-feeding in the first 60 to 90 minutes after birth.²³ When a mother is nurtured herself during labor and birth, she is ready to nurture her baby.

The influence of doula-supported deliveries continues long after birth. In a South African study, a significantly greater proportion of women supported by doulas were breast-feeding 6 weeks after delivery than were controls (51% vs 29%).²⁴ The author concluded that the quality of care a mother receives during labor can be used to predict the quality of her infant care. Doula-supported mothers developed relationships with their infants more quickly than did controls and often rated their babies as more beautiful, clever, and strong than other babies. Six weeks after delivery, mothers who had been attended by doulas were significantly less anxious and depressed and had more self-esteem than did mothers in the control group. In addition, women who had received labor support were



Figure 4. Correcting an occiput posterior presentation. The doula and partner are working together to assist the laboring woman. The partner performs the "hip squeeze" to encourage the rotation and descent of the baby, while the doula offers acupressure, support, and reassurance. © Patti Ramos/2001.

significantly more likely than controls at 6 weeks to be breast-feeding their babies exclusively.²⁵ "Such striking differences 6 weeks later from such a short period of support," write Klaus and colleagues, remind providers that "the period of labor is a time when the mother is especially sensitive to environmental factors and open to learning and growth."²¹

Many women who give birth today in the United States have never observed a woman breast-feeding. They lack role models that were presumed for centuries. The doula can fill this role by providing breast-feeding instruction, guidance, and reassurance, thus validating and encouraging this innate process.

As one of the authors (JA) has found in her midwifery practice, some women have grown so accustomed to being in control of their lives that they become distraught if they are unable to produce an adequate supply of milk immediately after delivery. Stress prevents the physical relaxation that milk production requires. Doulas can explain the situation, facilitate stress reduction, and provide breast-feeding instruction.

Table 2. Curriculum of a Typical Doula Training Program

Role and scope of practice of doula care
Anatomy and physiology of reproduction, labor, and birth (prerequisites)
Ways in which a doula should be prepared to support the emotional and psychological needs of women and their partners in labor
Comfort measures and nonpharmacologic pain management techniques, including hands-on practice
The doula's role during a difficult labor
The first hour of life, including the doula's role involving the newborn and the initiation of breast-feeding
Referral sources for situations that fall beyond the doula's accepted scope of practice
Value clarification and communication skills
Review of certification requirements, ethics, and standards of practice

Although studies have shown for some time that a continuous reassuring presence during labor and birth increases the rate and duration of breast-feeding, new studies suggest that the social support of home visitation during the postpartum period does so as well.²⁶⁻²⁹ These findings support the benefits of providing such postpartum assistance routinely.

DOULA CARE AS A PROFESSION

Doula training programs require knowledge of the anatomy and physiology of labor and birth, including the stages of labor. Prospective doulas attend sessions lasting for a minimum of 16 contact hours. The curriculum includes a wide range of topics, including scope of practice, comfort techniques, emotional support during labor and birth, and when and how to tap outside resources (**Table 2**).

Doula certification is available through several organizations (**Table 3**). Doulas of North America (DONA) certification requires attending a DONA-approved doula training course, completing the required reading, and either attending a childbirth education series or being a labor and delivery nurse, childbirth educator, or midwife. Doulas applying for certification must attend a minimum of 3 births, after which they are evaluated by the mother, the nurse, and the midwife or obstetrician. They must submit documentation of the births they have attended and write a 300- to 500-word essay describing the birth, the mother's reaction to the birth, their own role as a doula, and what they learned. DONA requires all doulas

applying for certification to sign the organization's Code of Ethics and Standard of Practice forms.

In North America, a growing number of hospitals and freestanding birth centers have their own doula programs in which they employ doulas for social support during labor and birth; many other facilities have expressed interest in initiating such programs. In a highly successful program at Danbury (CT) Hospital, doulas are paid \$250 per birth, of which clients pay \$50 and the hospital pays the rest. Lexington Medical Center in West Columbia, SC, has employed doulas since 1994. Grant-funded doula programs exist in various locations nationally. In Seattle, the Pacific Association of Labor Support has a contract with the Department of Health that provides labor support doulas to Medicaid clients.

Many doulas work through community-based doula agencies or as independent practitioners. Some hospital doulas work on call, and a laboring woman does not know which doula will attend her. In contrast, private doulas and those in community-based programs make commitments to individual women and promise to attend the birth, remaining on call 24 hours a day for notification of the start of labor. If more than 1 birth occurs simultaneously, an alternate doula is found. Clients are prepared in advance for this possibility.

Efforts are ongoing in Europe to incorporate social support during childbearing into the maternity care system of many countries. The Home Obstetrical Mother-care Experience (HOME), an international organization based in Italy and funded in part by the European Union, is seeking to institutionalize a new professional figure in European health care, an extensively trained "mother's assistant," essentially fulfilling the role of doula. At a May 2001 international meeting of HOME in Perugia, Italy, one of the authors (DP-B) described US models of doula care to the assembled participants from 7 countries.

EFFECTS OF DOULA CARE ON OUTCOMES AND COST Reducing Cesarean Section Rates

Among the far-reaching consequences of a continuous presence during labor is a reduction in cesarean section rates. In a randomized controlled trial of 42 healthy primiparous women requiring induced labor, the cesarean section rate was 64% for women who lacked doula support and 20% for those attended by a doula.³⁰ The authors concluded that continuous doula support was an effective method for lowering cesarean section rates in women with induced labor and that such labor support for women with other high-risk conditions should be investigated as well.

In a randomized controlled trial conducted at Jefferson Davis Hospital, Houston, TX, participants were divided into 3 groups: 212 women who were actively supported by doulas, 184 women observed passively by observers with whom they had no physical or verbal contact during labor and birth but who would remain with them through delivery, and 204 controls. Cesarean section rates were 18% among controls, 13% in those who were passively observed, and 8% among women who had been attended by doulas.³¹ This is the only study to date that has included doulas, observers, and controls and examined the effects of a continuous presence even when physical and verbal contact was lacking. Whereas previous doula studies had demonstrated profound differences between the effects of doula care and control groups on labor and delivery, the Jefferson Davis study highlighted the importance of continuous labor support.

Evidence of how well this element can work is revealed in the comments of a leading practitioner in Europe. Declan Keane, Master of the National Maternity Hospital in Dublin, Ireland, recently reported that his facility's cesarean section rate for nulliparous women at term who were in spontaneous labor with a singleton pregnancy and in cephalic presentation has remained stable at 5.5% for some 20 years.³² For this consistently low rate he credits the policy known as active management of labor. Among the policy's 6 criteria, which he insists must be followed as a whole, is the continuous presence of a trained labor support person.³³

In an American College of Obstetricians and Gynecologists task force report based on a review of 10 years of medical evidence on cesarean deliveries, it was noted that: "The continuous presence of a trained individual who provides comfort and support to the woman in labor may lead to lower cesarean delivery rates in some patient populations, and a reduction in medical interventions. . . . Researchers should further study the value of labor support and other possible nursing interventions and the means whereby they may act on cesarean delivery rates."³⁴

Reducing Epidural Rates

The rates of epidural anesthesia during labor and delivery in the United States are escalating steadily. Although epidurals can be beneficial, their risks have been documented in the medical literature. Doula care has resulted in significant reductions in laboring women's requests for epidurals and a delay in their administration.³⁵⁻³⁸ Because medication cannot control the laboring woman's emotions, the administration of

Table 3. Major US Doula Organizations*

Association of Labor Assistants and Childbirth Educators (ALACE)

PO Box 382724

Cambridge, MA 02238

617-441-2500

E-mail: ALACEHQ@aol.com

Web page: <http://server4.hypermart.net/alacehq>

Childbirth and Postpartum Professionals Association (CAPPA)

180 Allen Road, Suite 311-H

Atlanta, GA 30328

1-888-548-3672

E-mail: AskCAPPA@yahoo.com

Web page: <http://www.childbirthprofessional.com>

Doulas of North America (DONA)

13513 N. Grove Drive

Alpine, UT 84004

801-756-7331

E-mail: referrals@dona.org (for a list of doulas in one's area);

Doula@dona.org

Web page: <http://www.dona.org>

International Childbirth Education Association (ICEA)

PO Box 20048

Minneapolis, MN 55420

1-800-624-4934 or 612-854-8660

E-mail: info@icea.org

Web page: <http://www.icea.org>

Lamaze International

1200 19th St., NW, Suite 300

Washington, DC 20036

1-800-368-4404 or 202-857-1100

E-mail: lamaze@dc.sba.com

Web page: <http://www.lamaze-childbirth.com>

*Lamaze-trained doulas are certified through DONA; the other organizations listed certify their own trainees.

epidural anesthesia does not eliminate or diminish the need for doula support. Some women actively request doula support even when they intend to receive regional anesthesia during labor.³⁹ Even when an epidural has been given, the doula continues to suggest position changes to facilitate rotation and descent.

A publication on dystocia published by the Society of Obstetricians and Gynaecologists of Canada noted that the presence of a continuous caregiver promotes the progress of labor.⁴⁰ The Society recommended that a caregiver who provides continuous psychological support and comfort be a component of any intrapartum care program designed for the prevention and treatment of dystocia.

Reducing Costs

Providing continuous nurturing during labor and delivery may prove to be highly cost-effective. A report published by the Medical Leadership Council, an organization formed by the Advisory Board Company (a private, membership-based research and consulting firm in Washington, DC, that represents hospitals, health systems, and their physician leaders), hypothesized that if a hospital with 2000 deliveries per year initiated a doula program and thereby reduced its cesarean section rate by 3% to 5% and its epidural rate by 30% to 50%, assuming a cost of \$250 per birth for doula care, \$1,000 per epidural, and \$3,600 per cesarean section, it would save \$100,000 to \$180,000 per year. The report also noted that hospitals with doula programs had enjoyed increased market share.⁴¹

In the Jefferson Davis Hospital study, the cesarean section rate was reduced by 10% and epidurals by 75% in cases that involved doula participation.³¹ Extrapolating from these figures nationwide and assuming an average cost of \$200 per patient for doula care, it was calculated in 1992 that providing continuous doula support throughout every delivery would reduce annual maternity health care costs in the United States by more than \$2 billion.³

CONCLUSIONS

In a systematic review published by the Cochrane Collaboration of randomized trials assessing continuous support, Hodnett⁵ concluded: "Given the clear benefits and no known risks associated with intrapartum support, every effort should be made to ensure that all labouring women receive support, not only from those close to them but also from specially trained caregivers. This support should include continuous presence, the provision of hands-on comfort, and encouragement."

In an unpublished talk given in 1982 (personal communication), John H. Kennell, MD, one of the founders of DONA, noted, "The supportive companion is safe. There is no electrical hazard. No purchase order is required. There is no need for approval from regional planning boards, health planning commissions, or bud-

get offices. There are no long waits for FDA approval and no long delays for repairs. We can institute this immediately for every mother."

Balancing the use of technology and medicine with the traditional ways of support returns nurturing, respect, and support to childbearing women and their partners. In today's birth experience, "high touch" complements "high tech." HP

ACKNOWLEDGMENTS

The authors wish to thank Marcia Ringel for her invaluable assistance in the preparation of this article, Penny Simkin for permission to reprint material based on her research, and Patti Ramos for her contribution of a photograph.

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