

Continuous Supportive Care With Positive Outcomes

By Marilyn C. Moses and Roberto Hugh Potter

oula" is a word of Greek origin that refers to a woman who cares for another woman. Today, this word is used to describe a trained lay birth attendant who advocates for and provides uninterrupted — prebirth to post-birth — nonmedical support; hands-on care; information; and encouragement to laboring women. Doula support for incarcerated women giving birth is an exemplary practice supported by a large and unequivocal body of scientific evidence.

Doulas are not nurses, midwives, physician assistants or doctors. Although they do receive training, doulas do not have clinical responsibilities nor do they replace the roles played by the father and other family members during labor and delivery. A doula is a female companion who befriends the laboring mother, providing competent, uninterrupted physical and emotional care and support. The

doula provides low-tech care in a high-tech environment. The care is hands-on and may include nonsexual stroking and massage, assisting with relaxation techniques, providing continuous encouragement, anticipating and answering questions that mothers are likely to present, providing additional instruction on labor techniques, and advocating for the mother when she is feeling overwhelmed by hospital staff.

More than 20 randomized trials of low-tech, minimal-cost doula support have yielded positive obstetric outcomes. Doula programs have been principally implemented in the general population but also have been tested with juvenile and other high-risk populations. Both prisons and jails have implemented doula programs and an evaluation of one such program (described later) has demonstrated positive results.

Birth is a joyful but stressful time for any woman. Although society has changed, with family members geographically dispersed and women having children later in life, the typical woman is still likely to have the father or some member of the family providing the crucial support needed during delivery. Incarcerated pregnant women, however, are not typical women; they often have high-risk pregnancies and are likely to deliver alone in adverse conditions and without support, uninterrupted or otherwise, from anyone. While a doula is intended to augment the support that the woman is receiving, it is easy to understand why incarcerated laboring women, economically disadvantaged women and other high-risk women laboring alone with no support might benefit the most from a doula's service.

Pregnant Women in Jails and Prisons

On any given day in 2005, there were approximately 98,577 women housed in jails and 111,403 in prisons across the country, Bureau of Justice Statistics data indicated. Obtaining an accurate count of pregnant women in U.S. correctional settings is not easily accomplished. Estimates ranging from 6 percent to 10 percent are found in the academic and advocacy literature.2 And BJS estimated that 5.2 percent of women in U.S. jails were pregnant during 2002. This is likely an underestimate, as it is based on selfreports from women detained long enough to respond to the nationally administered survey. For state and federal prisons, there are few nationally representative data on the prevalence of pregnant women on any given day. BJS reported that, in 1991, about 6 percent of the approximately 30,000 women entering state prisons were pregnant. Out of 3.2 million arrests of women at midyear 1998, BJS noted that 5 percent of female offenders in state prisons were pregnant upon entry, compared with an estimated 6 percent of those entering jail.

While the existing literature allows for rough estimates of the number and percentage of women who enter jails and prisons pregnant, knowledge in this area remains rudimentary. There is no information on the stage of pregnancy at which women enter, their histories of prenatal care prior to and following entry into the criminal justice system, or specific information on birth outcomes of incarcerated women. Therefore, correctional administrators and health care providers must rely on a small number of studies of this population and draw inferences from other studies of women in the general population who share the same socioeconomic background and behavioral risk factors which often add up to high-risk pregnancies with higher than average negative outcomes. Therefore, almost any practice that mitigates negative outcomes would be worthwhile and welcome.

The Evidence Supporting This Practice

Rarely is there such a long history and sound body of positive evidence supporting a practice than there is for using continuous labor support. Studies assessing the value of continuous supportive care during labor began in 1980.³ To date there have been more than 20 published randomized controlled trials comparing continuous support

during labor with routine care. A published analysis of the first five studies resulted in positive support for the practice: Women with doula support experienced significantly shorter labors, double the rate of spontaneous vaginal births and a 50 percent reduction in the rate of cesarean and forceps deliveries. In 2005, a second review of an additional 15 randomized controlled trials of this practice was published. These studies were conducted between 1986 and 2002 and involved more than 12,000 women. Again, positive general findings were replicated, including reduced rates of cesarean delivery, operative vaginal births and receipt of any anesthesia/analgesia. Other reported beneficial outcomes include significantly shorter hospitalized labor time and higher Apgar scores of health assessment for the baby at one and five minutes.

The common denominator of these and related studies is the continuous labor support provided to the mother. What varies across studies is who provided the uninterrupted support to the mother and how much training the doula or companion received. The range of training levels across studies included student midwives, hospital employees, doulas or other laywomen with minimal to extensive preparatory training.⁷

Why Doulas Produce Positive Outcomes

The clinical trials cited in this article provide sound evidence that continuous supportive care during labor produces a number of positive obstetric outcomes. And biomedical researchers have an educated guess as to why it works.8 Recent psychological research suggests that males and females do not respond to stressful circumstances in the same way. The classic human response to a stressful circumstance is "fight or flight." Researchers now suggest, based on earlier animal and human studies, that fight or flight may be more appropriately categorized as a male response to stressful situations and that females respond differently - they "tend and befriend." That is, females tend to their children to ensure their safety and befriend other females in an effort to manage stressful situations. The female production of oxytocin⁹ and opiods¹⁰ during the tend and befriend response are likely responsible for the gender-specific response to stressors.

It is widely accepted that women naturally produce catecholamines (epinephrine, norepinephrine and dopamine) when experiencing pain, anxiety or fear during the stress of labor. Increased catecholamine levels during labor results in reduced blood flow to the uterus and placenta and are associated with decreased uterine contractions, slower dilation rates and longer labors. ¹¹ It is believed that the friendly, uninterrupted nature of the mother-doula relationship results in the mother's production of oxytocin and opiods, which counteract and reduce the catecholamine levels in her bloodstream. This, in turn, facilitates the positive obstetric outcomes observed in laboring women with doula companions.

Doulas in Correctional Settings

In response to the unique circumstance and stress experienced by women who deliver babies during detention, Seattle's King County Jail experimented with a doula birth support program. The jail-based program was a collaborative effort among local doulas, jail health care providers, correctional staff and local hospital delivery personnel.

Prospective doulas were selected and received two hours of correctional orientation training by the facility and 16 hours of doula-specific training by the Pacific Association for Labor Support. The doula training involved instruction on the hospital's delivery routines; an overview of the foster care system; and information on addiction and pregnancy, labor, past sexual abuse, and other related issues.

Pregnant women who would deliver while in detention were recruited for the program. Each woman was assigned a primary and back-up doula whom she met prior to delivery. Doulas were notified when the women arrived at the hospital in labor. Once there, they offered continuous support to the mother throughout labor, birth and up to three days post-birth.

Eighteen offenders, attending nurses and physicians, and correctional officers, were surveyed post-birth. All expressed a high level of satisfaction with the perception of the offender response, doula services and the program overall. ¹² Comments from the female offenders included:

- "I would have been absolutely petrified if I had been by myself."
- "It helped me have a positive experience even though I was in custody. There was a guard standing at the door; she let me forget he was there."
- "Nurses were very supportive in their medical way ...
 monitoring, seeing I'm breathing, stimulating the
 baby's heart beat when it dropped ... where the doula
 was holding my hand, telling me it was going to be
 OK."
- "The doula gives steady support and values you.
 Makes you feel good all over."
- "A lot of times I had no clue what [hospital staff] were talking about. ... The doula was explaining to me about the epidural; it helped me focus."
- "I would do anything to help support this program.
 You need somebody to support you, not just an officer staring at you."
- · "I felt like there was somebody on my side."

The use of doulas has a very strong evidence base among women in the general population as well as highrisk women. Doulas have been effectively used in correctional settings, and a case could be made that incarcerated women delivering alone may need this service most. For a relatively small investment of \$50 for pre- and post-birth doula visits and a flat fee of \$175 for doula support at birth, regardless of the length of labor, this practice has demonstrated improved birth outcomes, as evidenced by study findings. These outcomes could reduce correctional facilities' health care expenses through the reduction of cesareans, requests for epidurals, pain medication, forceps deliveries and labor times. While it is now known how widespread the

use of doulas is in correctional settings, Oregon's and Washington state's departments of correction have longstanding programs.

ENDNOTES

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- ⁵ Hodnett, E.D., S. Gates, G.J. Hofmeyr and C. Sakala. 2003. Continuous support for women during childbirth. *Cochrane Database of Systematic Reviews*, issue 3.
- ⁶ The Apgar score is a simple and repeatable method of assessing the health of a newborn immediately after birth. It is determined by evaluating the newborn on five simple criteria on a scale from zero to two and obtaining the sum of the five values obtained.
- ⁷ Campbell et al. 2006.
- ⁸ Ibid.
- ⁹ Oxytocin is a hormone that acts as a neurotransmitter to the brain. In women it is released in large amounts after the distension of the cervix and vagina. In the brain, it is thought to be involved with social recognition, bonding, the formation of trust between individuals and generosity. See Kosfeld, M., M. Heinrichs, P.J. Zak, U. Fischbacher and E. Fehr. 2005. Oxytocin increases trust in humans. *Nature*, 435(7042): 673-676; Zak, P.J., A.A. Stanton and A. Ahmadi. 2007. Oxytocin increases generosity in humans. *PLoS ONE*, 2(11):e1128; Stanton, A.A. 2007. Neural substrates of decision-making in economic games. *Scientific Journals International*, 1(1):1-64.
- 10 An opiod is a chemical substance that causes a morphine-like reaction in the body; it acts as a pain killer.

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The Davidson County Jail for Females

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