PHN PUBLIC HEALTH NURSING

Public Health Nursing
0737-1209/© 2014 Wiley Periodicals, Inc.
doi: 10.1111/phn.12137



# Doulas' Perspectives about Providing Support to Incarcerated Women: A Feasibility Study

*Rebecca J. Shlafer, PhD,[1] Wendy L. Hellerstedt, PhD, MPH,[2] Molly Secor-Turner, PhD, RN,[3] Erica Gerrity, LICSW,[4] and Rae Baker, CD(DONA)[4]*

*[1]Division of General Pediatrics & Adolescent Health, University of Minnesota, Minneapolis, Minnesota; [2]Division of Epidemiology & Community Health, University of Minnesota, Minneapolis, Minnesota; [3]Nursing Department, North Dakota State University, Fargo, North Dakota; and [4]Isis Rising – Everyday Miracles, Minneapolis, Minnesota*

*Correspondence to:*
*Rebecca J. Shlafer, Division of General Pediatrics & Adolescent Health, University of Minnesota, 717 Delaware Street SE, Minneapolis, MN 55414. E-mail: shlaf002@umn.edu*

**ABSTRACT** ***Objective:*** To document the logistical feasibility of a doula program for pregnant incarcerated women and to assess doulas' perceptions of their achievements. ***Design and Sample:*** Six doulas provided written case notes (birth stories) about their experiences with 18 pregnant women in one Midwestern state prison. ***Measures:*** The birth stories were analyzed by two coders to identify major themes related to doulas' perceptions about providing support to incarcerated women. Analyses involved coder consensus about major themes and doula affirmation of findings. ***Results:*** All doulas reported that they met key objectives for a successful relationship with each of their clients. Key themes were their ability to empower clients, establish a trusting relationship, normalize the delivery, and support women as they were separated from their newborns. ***Conclusions:*** The intervention was logistically feasible, suggesting that doulas can adapt their practice for incarcerated women. Doulas may need specific training to prepare themselves for institutional restrictions that may conflict with the traditional roles of doula care. It may be important for doulas to understand the level of personal and professional resources they may have to expend to support incarcerated women if they are separated from their infants soon after delivery.

Key words: doulas, narratives, pregnancy, prisoners, qualitative research, women's health.

## *Background*

Over the past two decades, the number of women in prison in the United States (US) has dramatically increased. In 1990, there were 43,845 women incarcerated in state or federal facilities in the United States (Cohen, 1991). By 2011, that number nearly tripled to 111,387 (Carson & Sabol, 2012). Approximately, 76% of incarcerated women are of childbearing age (between 18 and 44 years old) (Carson & Sabol, 2012) and 61% are mothers (Glaze & Maruschak, 2008). It is estimated that between 3% and 4% of imprisoned women in the United States are pregnant at the time of admission (Maruschak, 2008).

Physical and mental health problems are more common among prisoners than in the general population (Fazel & Baillargeon, 2010). Among state inmates, approximately 43% report a chronic medical condition and one in four report a current mental health condition (Wilper et al., 2009). Compared to the general population, prisoners experience higher rates of physical health problems, including hypertension, diabetes, and asthma (Wilper et al., 2009). In addition, rates of depression, personality disorders, and substance use are substantially higher among inmates than in the general population (Wilper et al., 2009).

Women in prison, particularly those who are pregnant, experience additional health risks (Fisher & Hatton, 2009). When compared to women in the general population, pregnant prisoners are more likely to have risk factors associated with poor perinatal outcomes, including preterm and small for gestational age infants (Bell et al., 2004; Knight & Plugge, 2005). These outcomes are likely a result of several risk factors that may or may not have preceded incarceration, including substance use (Knight & Plugge, 2005), chronic medical conditions (Knight & Plugge, 2005), stress and depressive symptoms (Hutchinson, Moore, Propper, & Mariaskin, 2008), violence exposure (DeHart, 2008), poor nutrition (Ferszt & Clarke, 2012), sexually transmitted infections (Clarke et al., 2006), and limited access to reproductive care (Clarke et al., 2006). In addition, African American, Native American, and Hispanic women are disproportionally represented in the prison system (Glaze, 2010) —three groups that are also at highest risk for poor pregnancy and birth outcomes (Hamilton, Hoyert, Martin, Strobino, & Guyer, 2013; MacDorman, 2011). The success or failure of prison systems to address reproductive health not only compromises women's health. If women are pregnant while incarcerated and/or their general health is poor after their release and they become pregnant, there may be long-term implications for their health and that of their offspring (Lu & Halfon, 2003).

Health care services for women in prison have often been considered inadequate (Clarke et al., 2006; Ferszt & Clarke, 2012; Wilper et al., 2009). In their study of the health care practices of pregnant women in 19 state prisons, Ferszt and Clarke (2012) described living conditions, health care, and counseling practices that failed to meet women's basic needs. For example, they found that some of the study's state prisons failed to meet the nutritional recommendations for pregnant women or accommodate the labor, rest, sleep, and clothing needs of pregnant women. Further, a minority of the surveyed prisons provided psychosocial support services or educational programming for pregnant women. In a national survey of inmates, Maruschak (2008) found that only about half (54%) of pregnant women in state prisons received some type of pregnancy care. Given their increased prenatal risk and likelihood of obstetric complications (Hotelling, 2008), providing specialized care, prenatal education, and continuous labor support to pregnant women in prison may improve maternal, fetal, and infant outcomes.

Prenatal and postpartum support could be provided by a doula, defined as "a woman who provides physical, emotional, and informational support to the laboring mother throughout her entire labor" (Simkin & Way, 1998). According to Doulas of North America (DONA) International (2014), the eight objectives of a birth doula are to: (1) recognize birth as salient event in the life course; (2) understand the physiological and psychological elements of labor; (3) assist the woman in preparing for and carrying out her birth plan; (4) provide continuous support throughout the labor and delivery; (5) provide emotional and informational support; (6) facilitate communication between the woman, her partner, and other care providers; (7) recognize her role as nurturing and protective of the woman's memory of the birth experience; and (8) allow the woman's partner to participate at his/her comfort level. Doulas' roles commonly include using lay language to explain how the labor is progressing; providing reassurance through emotional support; offering physical comfort through massage, repositioning, and gentle touch; and keeping their own records of their clients' labor and delivery experiences, which may comprise a "birth story." Unlike nurses or midwives, doulas do not provide medical support or have clinical responsibilities. In this way, their support may complement the roles of other health care professionals working with pregnant women (Ballen & Fulcher, 2006).

In their systematic review, Hodnett, Gates, Hofmeyr, and Sakala (2012) found that women who received continuous intrapartum support by providers with a variety of experiences (e.g., nurses, midwives, doulas) had shorter labors, were more likely to have spontaneous vaginal deliveries, and were less likely to report dissatisfaction with their childbirth experiences. Through improved birth outcomes, doula-supported births have potential cost savings, particularly among low-income women (DONA International, 2014).

Recently, doula support has been offered to pregnant and laboring women in several corrections facilities across the United States, although published program descriptions and evaluation studies are rare. Schroeder and Bell (2005)

described a pilot project that provided doula support to pregnant women incarcerated in urban jail settings in Washington State. In these facilities, 18 pregnant women who expected to be incarcerated at the time of birth were offered doula services and all accepted such services. Doulas provided women with emotional and physical support before, during, and after labor and delivery. Using interviews from 14 of the 18 women who participated in the project, Schroeder and Bell (2005) described their observations of the typical labor and delivery experiences of jailed women:

> Incarcerated pregnant women were typically transferred to a local hospital in early labor to forestall birth in jail, often arriving in leg irons or handcuffs. Once admitted, they were not permitted to leave the hospital room, have visitors, or use the phone. Labor and birth routinely took place in the presence of multiple unfamiliar providers, under constant sight surveillance of armed officers. After birth, mothers were usually transferred back to the jail within 24 hr, while their babies were placed with a relative or foster family supervised by child welfare services. Often, infant placement could not be arranged before birth, adding to the mothers' anxiety. (p. 53)

### *Research questions*

To build on Schroeder and Bell's (2005) work, and to address the paucity of research on doula care for incarcerated women, this feasibility study examined the perspectives of six doulas who provided services to 18 pregnant women, all of whom delivered their infants during their incarceration in a state prison. The aims of this study were to assess two elements of implementation (Bowen et al., 2009):

1. Was the intervention logistically feasible and were the doulas able to perform their roles in this unique context?

2. Were the doulas able to meet the fundamental goals of doula practice and provide substantive support to the women they were serving?

This study, about the logistical and practical realities of providing doula services to incarcerated women, was intended to inform training objectives for doulas and other professionals who work with this vulnerable population. The psychological and practical needs of incarcerated pregnant women are extraordinary and doulas may complement the roles of public health nurses (Ballen & Fulcher, 2006), who may serve as the front-line health care providers during incarceration and provide care to women when they return to the community.

## Methods

### *Design and sample*

Data were collected as part of a feasibility study of *Isis Rising*, a prison-based doula program at a women's state prison in the Midwestern region of the United States. The program was implemented in the only women's prison in the state, which housed female offenders at all security levels (minimum to maximum). The feasibility study was comprised of two interrelated components: (1) a 12-week Pregnancy and Mothering Group and (2) Doula Support. In March 2010, prison administrators granted permission for program staff to facilitate the Pregnancy and Mothering Group. In November 2010, permission was given to incorporate Doula Support. Formal evaluation activities to document women's physical and mental health, and their participation in the program, began in July 2011. This study examined doulas' perspectives of the Doula Support component of the program. Additional information about the Pregnancy and Mothering Group has been presented elsewhere (Shlafer, Gerrity, Baker, & Secor-Turner, 2013).

Case managers referred all pregnant women to the program when they entered the facility. Pregnant women who wished to receive doula support were matched with a doula. A doula met individually with the expectant mother at least twice prior to her labor and delivery. These meetings took place in a private space in the prison and involved prenatal education, birth planning, and emotional support. When an expectant mother was determined to be in active labor by prison medical staff, she was transferred to the local hospital. At that point, the prison watch commander called the doula to inform her that her client had been transferred. Depending on the information available to the watch commander at the time he called the doula, the doula made a follow-up call to the hospital to assess the woman's status. The doula inquired about whether her client had been admitted and how the labor was progressing.

Six female doulas provided support for 18 pregnant women who referred to the program and received services. The doulas were employed by a local nonprofit organization that was not affiliated with the prison or the local hospital in which their clients delivered. The doulas were trained and certified by DONA International (2014). They all participated in mandatory training about the Department of Correction's policies and facility rules, and were approved for admittance to the facility through standard background checks for all volunteers at the facility. The doulas also participated in a mandatory training about human subjects research. As part of their ongoing certification, and not required as part of the current research, the doulas also participated in approximately 14 hr of continuing education each year (range: 0–40 hr).

The doulas ranged in age from 29 to 64 years ($M$ = 39 years). Four of the doulas were White; two of the doulas were Hispanic. Three doulas reported speaking Spanish as a second language. On average, the doulas for this program had been providing doula care for 8 years ($M$ = 8.3 years; range: 4–12 years) and had attended an average of 30 births per year (range: 6–60 births). Four of the six (67%) doulas reported having a relative with a history of incarceration in either jail or prison. None of the doulas had personally experienced a history of incarceration.

The University's Institutional Review Board approved all research procedures. In addition, the study state's Department of Corrections has a separate Human Subjects Review Board that reviews all research protocols involving inmates. Combined, the approval process took approximately 6 months to complete. Additional details about the process of conducting research with incarcerated pregnant women and some of the challenges are detailed elsewhere (R. Shlafer, E. Gerrity, & G. Duwe, under review).

### *Measures*

Following each birth, the doula prepared a short narrative about the labor and delivery from her perspective. Doulas often refer to such case notes as "birth stories." Doulas were instructed to write their stories in the first person. The doulas were not given specific instructions, questions to answer, or topics to address. Instead, they were asked to reflect on their own perceptions of the process. The narratives often contained a general timeline of events, including information about when the doula received a call from the prison that her client was transferred to the hospital, when the doula arrived at the hospital, the status of her client when she arrived, and how the labor progressed. In addition, doulas frequently reflected on their perceptions of their client's experiences, including the care the woman received from other health care providers and interactions with corrections staff. The narratives contained additional reflections about the woman's separation from her infant when she was transferred back to the prison. Birth stories ranged from 294 to 852 words ($M$ = 483 words; $SD$ = 188.69) in length.

### *Analytic strategy*

Descriptive data were collected to characterize the doulas and their clients. To assess whether doulas met the fundamental goals of their practice, the birth stories were coded using a phenomenological approach, with a focus on understanding the essence of doulas' experiences when providing support to pregnant women in prison (Creswell, 2012). Using a systematic process to code the doulas' birth stories, two coders identified themes related to the doulas' perceived accomplishments that were common across the birth stories. Two of the coauthors (R. J. S. and M. S. T.) independently read each of the 18 birth stories written by the six doulas. The coders represented different academic disciplines: the first coder (R. J. S.) was trained in developmental psychology and is an expert in maternal incarceration, and the second coder (M. S. T.) was trained in nursing with experience in neonatology and has expertise in qualitative research.

The first step of coding involved identifying initial codes related to doulas' responsibilities and activities, their perceptions of women's experiences during labor and delivery, and their perceptions of women's reactions during separation from their infants. Then, coders independently grouped statements into meaningful themes. As a third step, following their independent review, the coders met to discuss each of the themes that they had independently derived; they discussed how their collective themes were comparable and how they conformed to the professional goals of doulas. They then independently re-read the stories and again met to discuss the key themes until consensus was reached.

This fourth step involved merging closely related concepts into single categories and highlighting content by selecting key quotes from the doulas that best reflected each of the identified themes. The final step involved sharing the agreed upon themes—the "essence" of the doulas' experience (Creswell, 2012)—with the doulas themselves. These "member checks" allowed the doulas to comment on how well they felt the themes represented their collective experiences. The fourth and fifth steps ensured that the coders considered multiple interpretations of the doulas' stories (Patton, 2002). The doulas reported that the themes were consistent with their experiences and accurately represented their roles in the program. One doula suggested revisions to the manuscript to clarify some of the policies and procedures, but no revisions were suggested regarding the themes or the selected quotes.

## Results

### *Logistical considerations: Could the doulas provide services in a prison system?*

The doulas were able to provide professional services for incarcerated women. Between July 2011 and December 2012, 19 pregnant women were incarcerated and all elected to receive Doula Support. They also all provided written informed consent to participate in evaluation of the program. One woman's delivery date was after her anticipated release date. Per the study state's Department of Correction's policy, the doulas could only have contact with pregnant or postpartum women during their incarcerations and not after their release from prison. Thus, doula services were not provided to the one woman whose due date was after her release date.

The 18 women who were matched with doulas were, on average, 28 years old and had completed about 11 years of education. At the time they were matched with a doula, the women had served about 3.5 months in prison and had about 2 years left to serve of their sentences. Prior to their incarcerations, all but one woman had given birth to at least one child. The 18 women had a range of zero to nine previous live births.

The process of providing prenatal counseling was generally straightforward and met practical service goals. Doulas worked with prison case managers to arrange a time for professional visits with their clients in a private space. These visits took place as scheduled, with the exception of a few instances when the facility was on lock-down and no visitors were allowed in the facility.

The doula's ability to provide support during delivery varied slightly for each client. In some instances, women were transferred to the hospital, and then were transferred back to the prison when their labor was not progressing. A doula might have been called to the hospital, only to find that her client had been transferred back to the prison. The doula would then return home and return back to the hospital when she was called again. For some doulas, particularly those with clients whose labors progressed very quickly, the time between the call from the watch commander and the doula's arrival at the hospital was very short. In other instances, the call from the watch commander was delayed and the doula arrived at the hospital hours after her client had been transferred (but not before her client had delivered). Such variation was expected given the unpredictable nature of childbirth and the challenges encountered when implementing a feasibility study of this nature in an institutional setting.

When the doula met her client at the hospital, she remained with her client throughout labor and delivery, and during the postpartum period. On average, the doula was at the hospital with the woman for 8 hr (range = 2.17–19 hr, $SD$ = 4.58 hr). During this time, the doula was permitted to take pictures of the mother and her infant and was allowed to share five of those photos with the mother after she returned to the prison. The project staff retained the digital copies of all photos and provided them for the mother when she was released from prison, upon request. Most women remained in the hospital with their infants for 48–72 hr.

On the second day, the doula called the hospital and inquired about the mother's expected discharge date and time. The doula then met her client at the hospital and provided support to her when she was separated from her infant. When the woman was discharged from the hospital and returned to the prison, the infant was usually placed with a relative, who had been previously identified by the mother as a placement resource.

In most cases, the infant was placed with the maternal grandmother; rarely was the infant placed in foster care. After the woman returned to the prison, the doula met her client twice and provided postpartum support.

### *Nature of the services provided: Could doulas meet their professional goals?*

The two coders identified four themes that highlighted the doulas' perceptions of their achievements and their experiences providing services to pregnant incarcerated women. These themes were not mutually exclusive. The following summarizes each of these themes, highlighted with representative quotes from the birth stories.

**Establishing a trusting and valued relationship.** In a short time period, doulas must develop a mutually trusting and valued relationship with their clients. This relationship serves as the foundation for their work and facilitates doulas meeting their professional goals. Several doulas noted how happy their clients were to see them when they arrived at the hospital. One doula wrote, *She was happy to see me, it made my whole day! The nurse said she did not want to get out of bed or do anything until her doula arrived.*

For incarcerated women, feeling isolated and unsupported may be especially common, particularly considering that they cannot have a partner with them at the hospital. One woman described to her doula how important it was to have her there. The doula reported that the woman stated, *You are a great support and help when there is no family around for support.*

**Empowerment.** The doulas' stories reflected their roles in helping the women feel strong, capable, and prepared for labor and delivery. Some of the doulas' stories referenced the women's birth plans and their satisfaction that things had gone as they had anticipated. One doula wrote, *She was at 9 cm and really focusing through the contractions. Soon it came time for pushing, she remained very calm and focused…She had the natural labor she planned for, although she says it was her longest labor at 6 hr.*

Throughout the birth stories, the doulas reflected on the physiological and psychological elements of labor, and noted the women's strength and their control over their own bodies and pain. One doula wrote, *She was coping with the contractions beautifully. She enjoyed the bathtub and stayed submerged in it for a long time.* Another doula expressed her observations of a different woman, *Things progressed quickly after the AROM [artificial rupture of membranes]; she dilated completed by 10:55 and pushed for 10 min. She was in complete control of her body and the pain. I was so impressed with her.*

**Normalizing the birth.** When providing care for pregnant incarcerated women, prison doulas encounter a number of issues that they would not likely encounter with a client in a community setting. For a prison doula, their client arrives at the hospital with two correctional officers and shortly after delivery, the woman is securely bound to the bed with soft restraints. There are also traditional roles of a doula in the community that are different for a prison doula. Women in custody have limited contact (and only by phone) with their loved ones during their short hospital stay. While a prison doula may reflect on the phone call with the woman, there are not opportunities to facilitate communication between the woman and her partner (or another support person) in the ways a community-based doula would. Further, allowing the woman's partner to participate in the labor—another typical role of a birth doula in the community—is not permissible in this setting.

Despite these atypical labor and delivery experiences, the doulas' narratives reflected their ability to provide structure and routine for their clients and create a sense of normalcy. The prison doulas were able to provide the same type of support that they would routinely provide to their clients in the community. For example, the doulas provided continuous physical, emotional, and informational support for the women during labor, such as repositioning the women to get them more comfortable, helping them relax, providing encouragement when they were pushing, and answering their questions about the process. One doula wrote as follows:

> I learned from my client that she had arrived at the hospital around 11:00 a.m. She confessed her frustration to me, since she came in with 3 cm dilation and it was 5:00 p.m. and she was still at 3 cm dilation. We decided to use the ball [a large

> exercise ball used to increase a woman's flexibility to position themselves during labor] for a few minutes. She didn't like it much and then we tried to go on all fours on the bed. My client did not like being on all fours due to back pain. After a few hours had gone by, we decided to go in the tub. The nurse brought a lavender inhaler and my client loved to smell the sweet smell of lavender.

Following delivery, the doulas assisted the mothers with breastfeeding their infants. Although there is no institutional support for mothers to continue pumping breast milk after separation from their infants, the doulas supported women who chose to initiate breastfeeding, even though the mothers would only spend a few hours with their infants. For example, one doula wrote, *Her baby was great learning to breastfeed. She latched on to her mother with no help, completely natural.*

The doulas also played a key role in recording the birth experience and recognizing the woman's birth as a salient event in her life course. For non-incarcerated women, the child's father or another family member typically fulfills this role. Because family members cannot be with incarcerated women at the hospital, photos of the baby would likely not have been taken without the doula. Doulas reported that, while nursing staff may have been available to take photographs during labor, delivery, and postpartum periods, they also had other duties. Similarly, the corrections staff was tasked with maintaining safety and security. Thus, documenting the birth through pictures allowed the doula to fulfill other professional goals by recognizing the birth as a key experience in the mother's life and helping preserve the woman's memory of her birth experience.

**Support during separation.** A unique role for the doulas in the correctional setting was providing emotional support when incarcerated women were transferred back to the prison and separated from their infants. This separation was very difficult for incarcerated women. Because the women were in custody, they were not allowed to have direct contact with anyone except prison and hospital staff. Thus, without the doula, the mother would have been left alone during separation from her infant. The following description by one doula illuminates her client's emotional struggle during the separation visit, and the doula's role in providing emotional and instrumental support during this difficult time.

> I arrived on the day that my client was to be released back to prison. When I arrived she was eating breakfast with her baby snuggled in with her. She told me about the 2 days she spent with her daughter, hardly putting her down at all. She breastfed the whole time and the baby was doing very well at latching on. She was terribly sad that the baby would have to switch to formula. Her mom was set to come at 10:00 a.m. to pick the baby up. She was very sad, but was also feeling happy that her mom would be able to bring the baby to visit often. She ended up getting to spend a good part of the day cuddling her baby. She changed back into the clothes she came to the hospital in and got ready to be shackled for the ride back to prison. I asked that they bring a wheelchair in and I grabbed a blanket out of the closet. Once she was shackled and sitting in the wheelchair, I put the blanket over her lap. I picked up the baby and held her up to my client's face so she could kiss her; my client quietly cried. The officers started to push her out into the hallway. Her nurse walked alongside pushing the baby bassinet all the way up to the door. The nurse then picked up the baby for one last kiss. I walked with her down to the van and said good-bye to her.

Another doula wrote, *It was the hardest to see [the mother] upset and crying to see her baby taken away by the nurse. She kissed [the baby] goodbye and said, "Goodbye baby, I will always love you."* As the mother was leaving, she thanked the doula for being there to support her. Doulas' narratives reflected their recognition of the birth as a salient experience in the woman's life, and how the separation from the infant was part of this experience for incarcerated women.

Many of the doulas noted the emotion of the separation visit, including their own reactions. One doula reflected,

> It was time to say goodbye. By then the baby was back [from being taken to the visiting room to meet relatives] and was being held by my client. She started sobbing, she covered her face with her blanket. She got dressed and the shackles were placed on her wrists, feet and a chain around her waist. . .she was wheeled out of the hospital and back to the facility. She cried all the way until she got in the van and I could not be a witness to her tears anymore.

The separation was often difficult for the doulas. One wrote, *This is the hardest part of my job.*

Another doula reflected, *I prepared myself thinking "this [has got to be] easier—it's my fifth time." I couldn't have been more wrong. It doesn't get any easier.*

## Discussion

There were two aims in this feasibility study. The first aim related to the logistical possibility of implementing a doula intervention with incarcerated women. The second aim related to a more subtle issue in intervention feasibility—did the interventionists feel that they met their professional goals? There were few logistical problems, beyond those associated with rare instances in which the prison was locked down for security reasons and doulas were unable to meet with their clients, or with communication between prison staff and doulas at the time of delivery. Further, all of the eligible prisoners were interested in the intervention and all participated in the core elements of the program. Through their birth stories, the doulas indicated they met the professional goals of doula care (DONA International, 2014). To do so, they had to be creative, positive, and emotionally resilient to some of the harsh realities their clients faced. In their open-ended—and undirected—descriptions of the birth stories of their clients, they described success in establishing trusting and valued relationships, empowering their clients, normalizing the birth process, and supporting their clients through the unique circumstance of early separation from their newborns. Although most of the pregnant women in the study had typical birth experiences in terms of process and lack of obstetric complications, these experiences were juxtaposed with the very atypical circumstances that come with giving birth during incarceration. Separation from the infant was an emotionally harrowing experience for the doulas and their clients.

Incarcerated women are often considered some of the least empowered and most disenfranchised individuals in society (Snell & Morton, 1994). Prior to the implementation of this program, the birth experiences of women incarcerated at the study facility were much like those described by Schroeder and Bell (2005). Incarcerated women were transferred to the hospital for delivery and were not allowed to have contact with any support persons, including their husbands, partners, or family members. In this study, doulas provided a source of support that women would not otherwise have when giving birth in custody. The doulas provided physical, emotional, and informational support to the women during their labor, delivery, and recovery. Without a doula, only the corrections staff and other nursing and medical personnel would be present. The corrections staff members were not trained, nor were they allowed, to provide support for women during labor and delivery. While nursing staff may have been available to provide care and informational support, their availability may have been limited or intermittent due to other patient responsibilities or institutional pressures. Thus, the doulas fulfilled important roles in providing emotional care and attention to the women's needs throughout the labor and delivery, and empowering the women to have successful, meaningful birth experiences.

In addition, the doulas facilitated opportunities to strengthen maternal-child bonding, such as breastfeeding, which may have important implications for mother-child relationship quality. Future interventions should consider the potential roles for public health nurses in supporting infant health and development through home visiting with infants and their primary caregivers when the mothers are still incarcerated and with infants, caregivers, and mothers when mothers return to their communities. Among nonincarcerated women, home visiting interventions like the Nurse Family Partnership have been shown to promote healthy infant development, as well as reduce mothers' risk for arrest (Kitzman et al., 1997; Olds, Henderson, Chamberlin, & Tatelbaum, 1986). This model could offer a promising approach for pregnant incarcerated women.

In this study, the doulas also provided a unique and integral role in emotionally supporting incarcerated women when they were transferred back to the prison and separated from their infants. Not surprisingly, the separation visits were emotionally challenging for the incarcerated mothers. This study's results parallel Chambers' (2009) report of the intense emotional pain incarcerated women experienced after the physical separation from their infants. Alternatives to separation exist and should be considered. In many European countries, and in a few correctional facilities in the United States, incarcerated mothers have opportunities to reside

with their infants in prison-based nursery programs (Cardaci, 2013). Such programs have been shown to reduce recidivism and promote mother-child attachment (Byrne, 2010). Community-based residential programs that offer alternatives to incarceration, while also providing parenting education, supportive housing, and substance abuse counseling, may also be a promising approach (Women's Prison Association, 2009). Additional research on these policy alternatives and their implications for maternal and child health is sorely needed.

The narratives revealed that the separation visits were exceptionally difficult for the doulas, as well. The doulas reported feelings similar to those reported by perinatal nurses who cared for incarcerated mothers. As reported by Zust and colleagues, one nurse remarked that, "Moms know they must say 'goodbye' to the baby. This is always emotional and very painful for moms and staff" (Zust, Busiahn, & Janisch, 2013). This finding has important implications for staff training and development, as doulas' preparation for this aspect of care may be particularly important for the effective care of their clients in this setting. Similarly, nurses who provide care to this patient population may find value in additional training and support.

One of the study aims was to assess the feasibility of doula support for incarcerated women in terms of doulas' perceptions that they were meeting the essential goals of doula care (Bowen et al., 2009). Such an assessment can inform future training needs. While the findings suggest that doulas trained to serve nonincarcerated women can successfully meet their aims with an incarcerated population, the study also found that there are unique challenges. The study would have been stronger if doulas had been asked about the kind of preparation that they would suggest for doulas who work with incarcerated women and what kind of support and/or training they felt they needed (received or not received) to do their work effectively. This study is limited in that it only assessed doulas' perspectives. Additional information from incarcerated women about their satisfaction with the care they received will be an important next step in understanding program feasibility.

The study was not designed to assess the program's outcomes or costs in this study, thus future researchers should augment their work to examine doula care as it relates to the pregnancy outcomes of incarcerated women. The costs of a prison-based doula program also need examination. Short-term costs, like doulas' salaries or the expense of a cesarean section, may be easily documented. It is also worthwhile to understand long-term costs, as incarcerated women and their children are more likely than others to be dependent on government support (Glaze & Maruschak, 2008). If birth outcomes and parent-child relationships are improved by doula support, there may be significant cost savings over the life course of the women and their offspring.

All of the pregnant women referred to the study were interested in participating and receiving doula support. There is no doubt that there is a need for pregnancy support services in prisons. After a series of interviews with 25 incarcerated pregnant women, Hutchinson et al. (2008) found that stress, loneliness, and depressive symptoms were common. Further, the majority of women did not use their peers in prison as sources of social support. The authors suggested that interventions for incarcerated pregnant women should include support that is related to pregnancy-related stressors, planning for birth, and planning for motherhood. While nursing professionals are often key providers of support as well as health care, the needs of incarcerated women may exceed the amount of time they have available. Additional supports, from knowledgeable lay women, like doulas, may be important to complement the work of nursing and other prison and hospital health care providers (Ballen & Fulcher, 2006). Such support could theoretically inform inmate health-promoting behaviors and reduce obstetrical complications.

Although a wide variety of prison-based support programs exist for incarcerated mothers (Loper & Novero, 2010), little is known about the services or programs offered specifically for incarcerated pregnant women. Ongoing documentation, research, and evaluation of existing prison-based programs that serve mothers and their children—particularly those targeting pregnant and postpartum women—are sorely needed. Doulas in this study were successful in implementing a pregnancy support program in a prison setting. They also met the standard objectives for strong doula-client relationships. The doulas' documentation of success, along with their reflections of the unique and emotionally challenging realities of serving incarcerated

women, indicate the need for specific training and support for doulas working in prison settings.

## Acknowledgments

Research reported in this publication was supported by the National Center for Advancing Translational Sciences of the National Institutes of Health Award (UL1TR000114; Blazer, PI) and the Center for Leadership Education in Maternal and Child Public Health (USDHHS/HRSA T76-MC00005; Hellerstedt, PI). The content is solely the responsibility of the authors and does not necessarily represent the official views of the funding agencies. The authors wish to thank the women who participated, their doulas, and the Minnesota Department of Corrections.

*Funding agency*: National Center for Advancing Translational Sciences of the National Institutes of Health Award

*Funding number*: UL1TR000114

*Funding agency*: Center for Leadership Education in Maternal and Child Public Health

*Funding number*: USDHHS/HRSA T76-MC00005

## References

Ballen, L. E., & Fulcher, A. J. (2006). Nurses and doulas: Complementary roles to provide optimal maternity care. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN/NAACOG*, *35*(2), 304–311. doi:10.1111/j.1552-6909.2006.00041.x.

Bell, J. F., Zimmerman, F. J., Cawthon, M. L., Huebner, C. E., Ward, D. H., & Schroeder, C. A. (2004). Jail incarceration and birth outcomes. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *81*(4), 630–644. doi:10.1093/jurban/jth146.

Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., et al. (2009). How we design feasibility studies. *American Journal of Preventive Medicine*, *36*(5), 452–457. doi:10.1016/j.amepre.2009.02.002.

Byrne, M. W. (2010). Interventions within Prison Nurseries. In J. Eddy, & J. Poehlmann (Eds.), Children of incarcerated parents: A handbook for researchers and practitioners (pp. 161–188). Washington, DC: Urban Institute Press.

Cardaci, R. (2013). Care of pregnant women in the criminal justice system. *The American Journal of Nursing*, *113*(9), 40–48. doi:10.1097/01.NAJ.0000434171.38503.77.

Carson, E. A., & Sabol, W. J. (2012). Prisoners in 2011 (pp. 1–33). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from http://www.bjs.gov/content/pub/pdf/p11.pdf

Chambers, A. N. (2009). Impact of forced separation policy on incarcerated postpartum mothers. *Policy, Politics and Nursing Practice*, *10*(3), 204–211. doi:10.1177/1527154409351592.

Clarke, J. G., Hebert, M. R., Rosengard, C., Rose, J. S., DaSilva, K. M., & Stein, M. D. (2006). Reproductive health care and family planning needs among incarcerated women. *American Journal of Public Health*, *96*(5), 834–839. doi:10.2105/AJPH.2004.060236.

Cohen, B. R. L. (1991). Prisoners in 1990 (pp. 1–12). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.

Creswell, J. (2012). Qualitative inquiry and research design: Choosing among five approaches (3rd ed.). Thousand Oaks, CA: SAGE.

DeHart, D. D. (2008). Pathways to prison impact of victimization in the lives of incarcerated women. *Violence Against Women*, *14*(12), 1362–1381. doi:10.1177/1077801208327018.

Doulas of North America International. (2014). DONA International. Retrieved from http://www.dona.org/

Fazel, S., & Baillargeon, J. (2010). The health of prisoners. *Lancet*, *377*(9769), 956–965. doi:10.1016/S0140-6736(10)61053-7.

Ferszt, G. G., & Clarke, J. G. (2012). Health care of pregnant women in U.S. state prisons. *Journal of Health Care for the Poor and Underserved*, *23*(2), 557–569. doi:10.1353/hpu.2012.0048.

Fisher, A. A., & Hatton, D. C. (2009). Women prisoners: Health issues and nursing implications. *The Nursing Clinics of North America*, *44*(3), 365–373. doi:10.1016/j.cnur.2009.06.010.

Glaze, L. E. (2010). Correctional Populations in the United States 2009. Bureau of Justice Statistics. Washington, DC: US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from http://bjs.gov/content/pub/pdf/cpus09.pdf

Glaze, L. E., & Maruschak, L. M. (2008). Parents in prison and their minor children (p. NCJ 222984). Washington, DC: Bureau of Justice Statistics.

Hamilton, B. E., Hoyert, D. L., Martin, J. A., Strobino, D. M., & Guyer, B. (2013). Annual summary of vital statistics: 2010–2011. *Pediatrics*, *131*(3), 548–558.

Hodnett, E. D., Gates, S., Hofmeyr, G. J., & Sakala, C. (2012). Continuous support for women during childbirth. *The Cochrane Database of Systematic Reviews*, *10*(3), CD003766. doi:10.1002/14651858.CD003766.pub4.

Hotelling, B. A. (2008). Perinatal needs of pregnant, incarcerated women. *The Journal of Perinatal Education*, *17*(2), 37–44. doi:10.1624/105812408X298372.

Hutchinson, K. C., Moore, G. A., Propper, C. B., & Mariaskin, A. (2008). Incarcerated women's psychological functioning during pregnancy. *Psychology of Women Quarterly*, *32*(4), 440–453.

Kitzman, H., Olds, D. L., Henderson, C. R., Hanks, C., Cole, R., Tatelbaum, R., et al. (1997). Effect of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing: A randomized controlled trial. *Journal of the American Medical Association*, *278*(8), 644–652.

Knight, M., & Plugge, E. (2005). Risk factors for adverse perinatal outcomes in imprisoned pregnant women: A systematic review. *BMC Public Health*, *5*, 111. doi:10.1186/1471-2458-5-111.

Loper, A., & Novero, C. (2010). Parenting programs for prisoners. In J. M. Eddy, & J. Poehlmann (Eds.), Children of incarcerated parents: A handbook for researchers and practitioners (1st ed., pp. 189–215). Washington, DC: Urban Institute Press.

Lu, M. C., & Halfon, N. (2003). Racial and ethnic disparities in birth outcomes: A life-course perspective. *Maternal and Child Health Journal*, *7*(1), 13–30.

MacDorman, M. F. (2011). Race and ethnic disparities in fetal mortality, preterm birth, and infant mortality in the United States: An overview. *Seminars in Perinatology*, *35*(4), 200–208. doi:10.1053/j.semperi.2011.02.017.

Maruschak, L. (2008). Medical problems of prisoners. US Department of Justice, Bureau of Justice Statistics. Retrieved from http://www.bjs.gov/content/pub/pdf/mpp.pdf

Olds, D. L., Henderson, C. R., Chamberlin, R., & Tatelbaum, R. (1986). Preventing child abuse and neglect: A randomized trial of nurse home visitation. *Pediatrics*, *78*(1), 65–78.

Patton, M. Q. (2002). Qualitative research and evaluation methods (3rd ed.). Thousand Oaks, CA: Sage.

Schroeder, C., & Bell, J. (2005). Doula birth support for incarcerated pregnant woman. *Public Health Nursing*, *22*(1), 53–58.

Shlafer, R., Gerrity, E., Baker, R., & Secor-Turner, M. (2013). Doula support for incarcerated mothers. Seattle, WA: Society for Research in Child Development biennial meeting.

Simkin, P., & Way, K. (1998). Position paper : The doula' s contribution to modern maternity care (pp. 1–2). Seattle, WA: Doulas of North America Board of Directors.

Snell, T., & Morton, D. C. (1994). Women in prison. Washington, DC: US Department of Justice. Retrieved from http://www.iapsonline.com/sites/default/files/Women in Prison. PDF

Wilper, A. P., Woolhandler, S., Boyd, J. W., Lasser, K. E., McCormick, D., Bor, D. H., et al. (2009). The health and health care of US prisoners: Results of a nationwide survey. *American Journal of Public Health*, *99*(4), 666–672. doi:10.2105/AJPH.2008.144279.

Women's Prison Association (2009). Mothers, infants and imprisonment: A national look at prison nurseries and community–based alternatives. New York, NY: Women's Prison Association.

Zust, B. L., Busiahn, L., & Janisch, K. (2013). Nurses' experiences caring for incarcerated patients in a perinatal unit. *Issues in Mental Health Nursing*, *34*(1), 25–29. doi:10.3109/01612840.2012.715234.