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Indigenous Doulas: A literature review exploring their role and practice in western maternity care

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ABSTRACT

Objective: The purpose of this article is to establish a body of literature exploring the emergent topic of Indigenous doulas, in relation to Indigenous communities in remote locations, where women are routinely evacuated and no longer supported to give birth. In doing so the article will synthesise and critique key concepts in the literature and identify gaps for prioritisation in future research.
Design: The methodology is influenced by Indigenous, decolonising and feminist theoretical standpoints. A combined methodological approach of an integrative and scoping literature review was undertaken. Only published research, grey literature and grey data written in English and created between the years 2000 and 2018 was included. The search engines used were CINAHL plus, MEDLINE full text, Informat, Cochrane, Google Scholar and Google Search.
Setting: Resources originating from only Canada and America identified and despite regional similarities, no literature from Australia or Greenland was sourced.
Participants: Of the entirety of identified resources two author's Indigenous identity was readily identifiable; and in the research articles there was a total of 191 research participants identified as Indigenous. Much of the grey literature and grey data included quotations from Indigenous women.
Interventions (if appropriate): N/A.
Measurements and findings: Key concepts about the role and practice of Indigenous doulas were identified: reclaiming and supporting cultural practices; sovereignty over lands and bodies; strengthening families, training, work models and defiance of evacuation policies on the pathway to returning birth. Critique of these concepts suggests that Indigenous doulas have a unique role and practice scope in Western maternity care, which is readily distinguished from standard doula practice. Research gaps worthy of future research prioritisation include: Indigenous women's perspectives as recipients of Indigenous doula care, Indigenous doulas as a pathway into midwifery, escort policy and impacts on Indigenous doula provision; evaluation and alternative research settings.
Key conclusions and implications for practice: The role and practice of Indigenous doulas offers a promising approach to redressing the colonisation of Indigenous childbirth while contributing to improving Indigenous maternal and infant outcomes. Indigenous doula practice shares many best-practice characteristics with Indigenous Healing Programs and as such is also likely to also promote inter-generational healing. Most of the resources located were descriptive, but this emergent topic is worthy of further applied research.

Introduction

Globally, Indigenous people experience significant inequities across many measures of health and wellbeing (IASG, 2014). In Northern Australia and similar remote jurisdictions such as Alaska, Arctic Canada and Greenland, Indigenous women have limited options in planning their preferred birthplace location. While a very small number of remote healthcare services do offer childbirth care, most Indigenous women living in these remote areas are routinely evacuated and have no option but to travel vast distances to give birth in an urban hospital. Across these regions, the combined complex medical and social impacts of colonisation and obstetrical evacuation policies are profound, personalised and multileveled for Indigenous women, families and their communities. Some of

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these impacts include distress and negative experiences around giving birth alone and unsupported (Kornelson and Grzybowski, 2005; Lawford et al., 2018); disruption to family dynamics and child safety (Kornelson and Grzybowski, 2005; Varcoe et al., 2013); discontinuity and damage to cultural practices and customs(Adams et al., 2017; Kildea, 1999); and at a community and economic level the loss of local career pathways in midwifery (Ireland et al., 2015).

In such settings, increasing pressure to reform remote Indigenous maternity care sensibly includes an emphasis on Indigenous women's inclusion in the maternity workforce and the provision of more culturally sensitive and respectful healthcare for Indigenous women and families (Bourgeault et al., 2004; Couchie and Sanderson, 2007; Kildea et al., 2017; Kildea, 2017; Skye, 2010; Varcoe et al., 2013). Within the current policy milieu of removing childbirth from communities coupled with the compulsory evacuation of pregnant women, the role of Indigenous doulas may be one approach for attracting Indigenous women into the maternity workforce and for improving Indigenous women's maternity care. This leads to obvious questioning concerning what is known about the role and practice of Indigenous doulas? Could Indigenous doulas improve evacuated Indigenous women's childbirth experiences? Could doula practice build a career pathway for Indigenous women into the maternity workforce? The purposes of this article are therefore threefold: to establish a body of literature exploring the topic of Indigenous doulas in relation to remote communities; to synthesis and critique key concepts in the literature and lastly identify gaps for prioritisation in future research agendas.

Background

The term doula was first coined by American female anthropologist Dana Raphael (Darby, 2018; Morton and Clift, 2014) and has its origin in Greek meaning 'female slave' – thus a woman who gives service to another woman (Mahoney and Mitchell, 2016; Morton and Clift, 2014). Doulas are an unregulated profession and work as non-medically trained childbirth companions, assuming continuity of support and advocacy for women during their childbirth experiences. According to Morton and Clift (2014) doula training first occurred in the United States in 1985 and has since grown across developed nations into a movement representative of broader social agendas of promoting physiological childbirth and empowering women during their reproductive experiences. In response to growing social justice concerns the definition of childbirth companion has broadened to include 'full-spectrum' and 'radical' doula whereby companionship is offered to pregnant people (inclusive of their gender identities) through the whole breadth of reproductive experiences including childbirth, miscarriage, surrogacy, adoption, abortion and stillbirth (FSD, 2018; Mahoney and Mitchell, 2016; Zoila Perez, 2012). Different funded doula practice models exist ranging from paid private practice to hospital/clinic coordinated volunteer (unpaid) programs offering doula support to vulnerable and minority women during their childbirth and abortion experiences (Mahoney and Mitchell, 2016; SFGH Doulas, 2018). A correlated industry of doula trainers and training has flourished with a range of accredited and non-accredited training packages (CBI, 2018; Lantz et al., 2005).

While sharing similarities with other obstetric and cultural roles such as a 'lay midwife', 'traditional midwife' or 'traditional birth attendant', the literature suggests (DONA, 2017; Mahoney and Mitchell, 2016; Morton and Clift, 2014) that doulas and their practice are distinguished by the combination of four features: unregulated practice, participation in organised training, speciality skills in the provision of physical and emotional support during reproductive experiences; and an absence of participation in clinical procedures and decision making. As such the role of the doula in contemporary maternity care appears unique. Both the complimentary and conflicting features of the role and practice of doulas in standard Western maternity care is a recognisable feature in healthcare discourse. Doula practice has been cited as a practical approach to fixing the inevitably 'broken system' of medicalised Western maternity care (Stevens et al., 2011). With strong evidence that continuous support during childbirth is associated with a range of improved maternal and infant outcomes (Bohern et al., 2017), doula care appears to be in continued demand and fills a care gap that current midwifery practice in hospitals struggles to close.

Though it is evident that research and consumer interest continues to expand in line with the use and popularity of doulas in standard Western reproductive health care, little attention has been given to Indigenous doulas. Due to overwhelming Indigenous health inequities, it is important to understand the emerging potential benefits that Indigenous doulas may have in addressing Indigenous women's reproductive health and workforce inequities, especially in settings challenged by remote geography. Indigenous doulas may be especially important in ameliorating the impacts of obstetrical evacuation policies that prevent Indigenous women from accessing appropriate emotional and psychosociocultural care during childbirth and other reproductive experiences. It is also probable that accredited doula training could offer Indigenous women a credible and culturally sensitive pathway into formal midwifery training.

Methodology

The focus of this literature review is Indigenous doulas and an exploration of their role and practice. While identifying as non-Indigenous women, the synthesis of this review openly draws influence from Indigenous (Foley, 2003), feminist (Hooks, 2000) and decolonising (Smith, 2012) theoretical standpoints that intentionally privilege Indigenous people's world views, the lived-experiences of women and is mindful of the ongoing colonial power legacies which impact Indigenous women's well-being and access to maternity care. No ethical clearance has been obtained as this is a review of literature and has not involved human research participants.

We have drawn on the complementary combined methodologies of an *integrative* (Torraco, 2005) and *scoping* (Arksey and O'Malley, 2005) literature review. In this manner we seek to identify, then critique and analyse key concepts in the literature but also to establish research gaps. This combined approach has been successfully used to synthesis literature on other emerging topics such Indigenous vocational education training (Frawley et al., 2017) and offers similar applicability in this context because of needing to both 'scope' and 'integrate' the literature on Indigenous doulas. The resources considered appropriate to include in this review were standard academic literature and research published in peer reviewed journals. It was also important to include grey literature (not controlled by commercial publishing) and grey data (user generated, web based) (Adams et al., 2016) to increase the likelihood of capturing academically marginalised resources created by Indigenous community-based organisations and/or Indigenous women themselves. From our theoretical standpoint this is a strategy to enhance the methodological rigour of the review.

In September 2018 the key search terms of doula and Aboriginal OR Aborigine OR Inuit OR Eskimo OR "Native Indian*" OR "Native American*" or Metis OR "First People*" OR "First Nation*" OR "Torres Strait Islander*" were used in search engines CINAHL plus, MEDLINE full text, Informat, Cochrane, Google Scholar and Google. Literature and data was only included if it was written in English and produced between the years 2000 and 2018. In the case of Google Scholar and Google Search the review was restricted to first ten pages of tabulated results and content information for

Table 1
Indigenous nations and identities as noted in the resources.

Creenations	Firstnations	Indigenous identities
Norway house	Katzie	Cree-Saulteaux
Nisichawayasihk	Nuxalk	Metis
	Haida	Anishinaabe Objibwe
	Namgis	Nehiyaw
	Alexander	Haudenosaunee
	Alexis	Cree
	Enoch	Stoney
	Paul	

each site was systematically and intuitively reviewed for inclusion of search keywords and relevance. Review of content and reference lists yielded a small number of further resources. After deleting for duplications, this complete search strategy yielded in total 24 resources which included academic articles ($n=8$), grey literature ($n=12$) and grey data ($n=7$). All the resources originated from Canada and America. Five resources (research articles $n=4$ and grey literature $n=1$) were either discarded after initial review because they did not align with the topic and one was unable to be accessed. Despite not being solely on the topic of Indigenous doulas and due to the emergent nature of the research topic the remaining academic papers were included. Of the grey resources six were related to the Manitoba Indigenous Doula Initiative – a Canadian research collaboration between social enterprise, Indigenous communities and University that has not been academically published (MIDI, 2018). Of the entirety of resources, two authors' Indigenous identity was readily identifiable; and in the research articles there was a total of 191 research participants identified as Indigenous. There were a variety of Indigenous nations and identities referred to in the resources and they are listed in Table 1.

Synthesis and critique

Reclaiming and supporting cultural practices

Though closely aligned with standard doula practice (DONA, 2017), Indigenous doula work is uniquely positioned as based on a range of cultural practices linked to and linking Indigenous knowledges, traditions and ancestors. Indigenous doulas use their role and authority to reclaim and make visible, often in the clinical environment of a hospital (Curry, 2018; Latimer, 2018), their culture's childbirth customs. Specific cultural components of Indigenous doula practice cited in the resources include drumming, fanning with eagle feathers, ceremonial singing, practicing ceremonies (related to placentas, umbilical cords and community connections) spritzing of sacred/cedar water, medicinal teas prayer, storytelling, medicinal oils and music (CBC Radio, 2016; Cruickshank, 2016; Curry, 2018; Latimer, 2018). In an act of cultural reclamation, some Indigenous doulas wear their traditional dress and costumes when attending women in labour (Curry, 2018; Latimer, 2018). Indigenous doula practice seeks to re-centre the spiritual reverence for childbirth while emphasising the sacred and powerful qualities of parturient women (Bachlakova, 2016; Erynne Gilpin, 2017; Latimer, 2018). One piece of grey data notes that the practice of Indigenous doulas gives women 'culturally based' support that allows them 'to connect spiritually through traditions and ceremonies' (Phanlouvong, 2017, p. 2). The Indigenous doula role is often compared to other traditional Indigenous cultural roles such as that of 'Aunty' (Perinatal Services BC and First Nations Health Authority, 2011). These specific cultural skill-sets make Indigenous doulas practice unique and a likely source of cultural security and safety for Indigenous women during their childbirth experiences.

Sovereignty over land and bodies

In the face of Indigenous women's land and bodies being colonised, Indigenous doula practice is a political act of maintaining sovereignty (Bachlakova, 2016; Erynne Gilpin, 2017; Hicks, 2018). When the cultural roles of motherhood are eliminated, the ability to reproduce culture is inhibited, allowing the colonising society to change people's beliefs to their own ideals (Leibel, 2014). While standard doula practice is often linked to political agenda of promoting physiological childbirth and positive childbirth experiences for women (DONA, 2017; Morton and Clift, 2014), Indigenous doula practice resists the ongoing colonisation of women's bodies and ancestral lands. To promote cultural resilience and survival, Indigenous doula practice overtly encourages women and their families to connect to pre-colonisation ways of being, doing and thinking (Bachlakova, 2016; Diubaldo, 2017; Emilee Gilpin, 2017; Hicks, 2018). As Hicks (2018, p. 2) explains, Indigenous doula's are 'trying to reconnect women and families with the knowledge that Indigenous communities used to have prior to colonization'. This disruption to the colonial power imbalance over childbirth is positioned as a method for empowering Indigenous women (Bachlakova, 2016; Emilee Gilpin, 2017; Hicks, 2018) and decolonising childbirth experiences.

Strengthening families

While acknowledging that Indigenous families are often over-represented in government child protection and welfare systems, Indigenous doulas are reported in some resources as one way of addressing this trend (Hicks, 2018; Latimer, 2018) . This focus is not evident in other literature describing standard doula practice (DONA, 2017; Lantz et al., 2005; Morton and Clift, 2014). Indigenous doula practice nourishes families through nurturing the strength of relationships and bonds between women, babies, families and communities; and often achieves this through using Indigenous knowledge and practices (Hicks, 2018; Latimer, 2018; Samson, 2016). One example of Indigenous doula practice strengthening relationships involves the Placenta Ceremony, where a mother, newborn and their community pledge to work together in supporting the wellbeing of their relationships (CBC Radio, 2016; Samson, 2016, p. 2). Relationships between families and connection to the land are strengthened by burying the placenta in the earth after birth, with the belief that structural issues will come back in to balance (Olson, 2013). Indigenous doula practice is also explained as a way of reducing maternal distress around the time of childbirth (Samson, 2016). This is significant as maternal distress is known to adversely impact the hormonal physiology of normal childbirth and early mother crafting instincts (Buckley, 2015) and thus contributes to poorer maternal and infant outcomes.

Training

The resources available provide superficial information regarding the training of Indigenous doulas. The one exception to this is the Perinatal Services British Columbia and First Nations Health Authority Doula Training manual which provides a detailed example of Indigenous doula training that aimed to expand on the traditional female role of Aunty (Perinatal Services BC and First Nations Health Authority, 2011). The purpose of the manual was to provide an introduction and encouraged women to complete further training to become certified by a peak professional body called Doulas of North America International (DONA International) (DONA, 2018). The training is structured: has a Western biomedical focus; and assumes a standard level of functional English which may be prohibitive to women with low prevocational skills and readiness (see Table 2). In British Columbia, a grant program exists

Table 2
Aboriginal doula training manual themes and topics sourced from Perinatal Services BC and First Nations Health Authority (2011).

Manual section	Topics
Doulas	Definition, history, role, practice and meaning
Doulas and midwives	Working relationship
Aboriginal birth and doula	Stories from British Columbia
Communication	Active listening and counselling skills
Prenatal birth and partner support	Prenatal visits, doula and partners, dads and doulas, preparing siblings
Preparing yourself	Doula client information and documentation, information sheets, birth wishes, newborn care plan, postpartum care plan, confidentiality form
Doula support during labour and comfort measures	Doula kit suggestions, examples of comfort techniques
Unexpected labour situations	Complications and challenges to the doula role
Breastfeeding and bonding	Newborn feeding immediately postpartum
Processing the birth experience and closure	Processing birth experiences, doula suggestions
Becoming DONA (Doula of North America) certified	Certification, DONA International, standards of practice, scope, continuity of care, code of ethics, training and experience, rules of conduct, ethical responsibilities
Sharing thoughts	Reflection on the experiences of being a doula

whereby Indigenous women can access funds for doula care, but the actual doula is required to be certified by DONA International.

The emphasis on DONA International certification is absent in the other resources. Many of the other resources position the unregulated nature of Indigenous doula training and practice as positive features. Positive because the lack of regulation allows women, regardless of low educational levels to access training and contribute their skills to the care of other Indigenous women in their community (Hicks, 2018). Latimer (2018, p. 3) reports that Indigenous doulas embrace the flexibility of their role as a way of 'collaborating with resources to implement our own solutions' and that the design of the training can happen 'organically' without adhering to other people's standards or regulations. Hicks (2018, p. 2) reports that 'Indigenous doula training has been developed by Indigenous women for Indigenous women' and as such is reflective of Indigenous self-determination. The curriculum is noted for being 'culturally-based' (University of Winnipeg, 2017) including Indigenous knowledges, trauma-informed care, traditional languages, medicines, songs and spiritual beliefs (Diubaldo, 2017; Emilee Gilpin, 2017; Hicks, 2018). In these ways Indigenous doula pedagogy may disrupt the epistemological racism that is often experienced by Indigenous people engaging with the Western academy and education (Bodkin-Andrews and Carlson, 2016). As one Indigenous doula noted (Emilee Gilpin, 2017, p. 20) training offered by a peak professional doula body (DONA international) provides no perspectives on racism or a decolonising approach to doula practice.

The content of all training seems to focus almost exclusively on the childbirth experience with few mentions of full spectrum care - that is, doula practice that supports women/people through any reproductive experiences such as abortion, still birth or adoption (FSD, 2018; Mahoney and Mitchell, 2016; Zoila Perez, 2012). However one blog by an Indigenous woman did explain her positive experience of undertaking full spectrum doula care which included birth and postpartum care, miscarriage and abortion care, intergenerational trauma, matrilineal DNA and reflection on a variety of Indigenous nation's birth, adoption and end-of-life beliefs and ceremonies (Dawne, 2016). While this may suggest that full-spectrum care is an emerging feature currently not well addressed in Indigenous doula practice, it may also reflect the inequity that many remote Indigenous women face in accessing birthplace choice; and a history of colonial violence impacting women's family formation and reproductive autonomy.

Work models

A recent Cochrane review notes the importance of further research into different childbirth companion models and impacts on improving perinatal outcomes (Bohren et al., 2019). The resources indicate a range of work models for Indigenous doula practice but there is a paucity of explanation about if or how the Indigenous doula role is formally incorporated into Western maternity care systems. Certainly the research articles superficially cite general community support and/or recommendation that Indigenous doulas should be involved in supporting Indigenous women during their pregnancy and childbirth experiences (O'Driscoll et al., 2011; Varcoe et al., 2013; Wiebe et al., 2015). Examples of models from the resources include: Tripartite First Nation Aboriginal Doula Initiative; grants for Indigenous women and families to access private doulas; private Indigenous doula practice; and a community development research partnership model (see Table 3). The only model which has been formally evaluated was the Tripartite First Nation Aboriginal Doula Initiative (Mackinnon Williams, 2010), which recommend and resulted in the program being returned to Indigenous community. Though the explicit reasons for this return back to the community was not able to be located in the literature, it is likely that the initiative continued to face challenges that were described in the evaluation around certification and sustainability of doula practice (Mackinnon Williams, 2010). While the grant model offers Indigenous women and families accessibility to doula care, some Indigenous doulas have been critical of the program that they believe unfairly restricts the grant being used for doulas without DONA certification, many of whom are Indigenous (Emilee Gilpin, 2017).

Defiance of evacuation policy on the pathway to returning birth

Many of the resources lament the harm caused by routine obstetrical evacuation policies and state that the ultimate outcome of maternity care reform should be the return of Indigenous women and their childbirth experiences back to their Indigenous families and communities (Bachlakova, 2016; CBC Radio, 2016; Cruickshank, 2016; Samson, 2016). Indigenous doula practice is therefore often seen as a direct response to the routine evacuation of women from remote communities and a pressing need to improve women's childbirth experiences. For many communities the joyful ceremonies and celebrations of welcoming a newborn infant have been lost due to the removal of childbirth and instead most community gatherings are dominated by death and grieving (Samson, 2016). Standard doula practice is sometimes seen as a necessary way of 'fixing a broken system' of maternity care (Stevens et al., 2011), perhaps the practice of Indigenous doulas can be understood as temporary 'band aid' over the wounds of colonisation until childbirth is returned to communities. In two research articles, Indigenous participants talked positively about the potential role Indigenous doulas could have in improving the childbirth experience for women who give birth away from their home community (O'Driscoll et al., 2011; Varcoe et al., 2013). In one piece

Table 3
Indigenous doula work models.

Work model	Details
Tripartite First Nation Aboriginal Doula Initiative	Was a partnership among Provincial, federal, and First Nations governments, piloted over the years 2011–2013 to develop a sustainable doula service model for Aboriginal women. While an evaluation in 2014 highlighted many successes of the program, the initiative on recommendations in the report was handed back to Aboriginal communities with the intent that they could 'choose, train, and support the people they decide are the right fit as a doula in their community' (Perinatal Services BC, 2018). To assist Aboriginal communities with their self-determination of doula services the First Nations Health Authority (FNHA, 2018) hosts a range of digital and printable resources on their website to assist communities and individuals to undertake training and better understand the process involved in starting and promoting a doula business.
Grant for Private Fee-For-Service	Aboriginal women and families are eligible to apply for a $CAD1000 grant for care to pre-approved doulas. Doulas must be pre-approved as eligible through providing certificates of training and proof of membership of the identified industry representation organisations. The grant can be used for either childbirth and postnatal care; or both (BCAAFC, 2018)
Private Fee or Indigenous Cultural Exchange Protocol-For-Service	Indigenous women create their own collective and offer private services to other Indigenous women. These are fee-for-service or, in cases of financial hardship cultural-exchange-for-service. Example see: https://ekwi7tldoulacollective.org/
Community Development Partnership: Indigenous Community Social Enterprise, and University	The Wiijii'idiwag Ikwewag – Manitoba Indigenous Doula Initiative (MIDI, 2018) is a research project currently underway investigating the impacts of doula care for women who are evacuated for childbirth They are seeking to train a cohort of doulas in the women's home community and referral centre community (FNHSSM, 2018). It is a collaboration with the Indigenous community, social enterprise and University

of grey literature, an Indigenous midwife was noted as saying that Indigenous doulas are not the 'solution to women having to leave the community to give birth, but a way to make them feel more comfortable' (Samson, 2016, p. 3).

Discussion and research gaps

Due to overwhelming Indigenous health inequities, it is important to understand the emerging potential benefits that Indigenous doulas may have in addressing Indigenous women's reproductive health and workforce inequities, especially in settings challenged by remote geography. Indigenous doulas may be especially important in ameliorating the impacts of obstetrical evacuation policies that prevent Indigenous women from accessing appropriate emotional and psycho-sociocultural care during childbirth and other reproductive experiences. It is also probable that accredited doula training could offer Indigenous women a credible and culturally sensitive pathway into formal midwifery training.

For the first time this review has synthesised what is currently known about the emerging role and practice of Indigenous doulas in Western maternity care, especially in the context of caring for Indigenous women who are routinely evacuated from their remote home communities to give birth. The synthesis using a combined *integrative* and *scoping* methodological approach is not without limitations. We openly acknowledge that though there is replicability in our search methods, there is an obvious challenge in replicating the same results from internet searches (such as Google). However this limitation is noted in the literature and can in part be addressed through overlapping search strategies (Adams et al., 2016). Certainly, this was a design feature in our synthesis whereby internet searches were overlapped with research database searches. Further, we importantly note that inclusion of internet searches is a crucial strategy for capturing grey information and grey data on Indigenous topics and Indigenous generated content which enhances the rigour of the literature review. Overall the synthesis has demonstrated that the Indigenous doula role, though comparable to the work of a standard doula, has unique features including the use and reinvigoration of cultural caring practices, and an identifiable political agenda to redress colonisation of Indigenous childbirth. These are salient features considering the difficulties that many Western health services have in meeting the needs of Indigenous women and their families.

Better understanding about the role and practice of Indigenous doulas and their potential to improve reproductive health outcomes is pertinent in the context of colonisation, profound Indigenous reproductive health inequities and the negative impacts from routine obstetrical evacuation. While centred on the reproductive care of women, Indigenous doula practice is likely to transcend this focus and contribute broadly to the intergenerational healing of Indigenous communities from the trauma of colonisation. Many key features identified as being best-practice qualities of Indigenous healing programs (McKendrick et al., 2013, p. 2) are also evident in the literature about Indigenous doula practice, that is:

- Indigenous doula practice is developed to address issues in the local community- often the removal of childbirth and the loss of culturally appointed childbirth companions.
- Initiatives are driven by local Indigenous leadership.
- Informed by an understanding of the impact of colonisation and intergenerational trauma and grief that has impacted childbirth and women's reproductive experiences.
- Based on both evidence and theory that continuous support during childbirth is associated with improved maternal and infant outcomes, and that Indigenous childbirth knowledge has successfully sustained countless generations before colonisation.
- Combines Western methodologies (including trauma-informed therapeutic practice) and Indigenous healing (strengthening connection to culture, country, family and community) into the care of women during childbirth and reproductive experiences.
- Builds individual, family and community capacity and Indigenous healing by strengthening connection to culture, country, family and community during childbirth.
- Indigenous doula care is pro-active in preventing the perpetuation of ongoing harm during childbirth and reproduction rather than reacting to the poor maternal and infant outcomes.

While most of the synthesised literature has been descriptive, the topic of Indigenous doulas is worthy of further applied investigation to better understand the operationalisation, impacts and outcomes of doula practice for Indigenous women and their families. Research gaps identified through this review will now be detailed and include:

Indigenous women's perspectives as recipients of Indigenous doula care

All the synthesised literature describes the practice of Indigenous doulas from their own perspectives and not from the perspective of Indigenous women as recipients of doula care. As a salient feature of quality in maternity care, it is important to better understand what Indigenous women's satisfaction and experiences of Indigenous doula care are.

Indigenous Doulas as a pathway into midwifery

Health researchers have often advocated for increased participation of Indigenous women in the maternity care workforce, especially as midwives. In one survey of standard doulas around 30% were using their practice as a career stepping-stone into midwifery (Lantz et al., 2005). Doula practice may have similar benefits for Indigenous women and as the literature review suggests may be accessible to women who currently have low prevocational skills and is appealing to Indigenous women because it uses Indigenous epistemologies. While one piece of research about the motivations of women of colour to become doulas (which included three Indigenous participants) reported that their practice was never a career pathway into midwifery (Hardeman and Kozhimannil, 2016), this potential career entry point and pathway for Indigenous women requires further investigation.

Escort policy and impacts on Indigenous doula provision

The operationalisation of accessing and/or financing the role of Indigenous doulas is poorly understood in the current literature. This is of importance for remote Indigenous women of whom the vast majority are not financially supported to have an escort accompany them. While not mentioned in the resources, this aspect of remote obstetrics is likely in breach of human and Indigenous rights (United Nations, 1948, 2008) in particular, the rights of Indigenous peoples to maintain and use their health systems alongside the revitalisation and practice of cultural traditions, customs and languages (United Nations, 2008, Sections 11 and 12). It may also contravene States' continued obligation to provide Indigenous peoples access to discrimination-free health care (United Nations, 2008, sec. 24). These aspects of Indigenous doula practice require more attention.

Evaluation and outcomes

There is little applied research to identify whether Indigenous doula care impacts maternal and infant outcomes. It is likely that this gap will soon be addressed by the Wiijii'idiwag Ikwewag – Manitoba Indigenous Doula Initiative.

Alternative research settings

The resources located in this review suggest that Indigenous doula practice is centralised to American and Canadian settings. Sharing many similarities in remote geography, removal of childbirth and colonisation, research in settings outside America and Canada such as Australia and Greenland would be welcome contributions to understanding the applicability and operationalisation of other Indigenous doula practice.

Conclusion

While Western maternity care makes important contributions to biomedical safety during pregnancy and childbirth, it also causes harm to Indigenous women and their families, especially for those women whom are routinely evacuated for childbirth and separated from family, community, culture and language. The continued high rates of poor Indigenous perinatal outcomes demand that Western maternity care prioritise the maternity needs of Indigenous women. Incorporation of Indigenous doulas into standard Western maternity care appears to disrupt the colonisation of childbirth, while making many positive contributions. This includes building community capacity through training and education opportunities, recognising the importance of Indigenous childbirth knowledge and providing spaces for intergenerational healing. Until childbirth is returned to remote communities, Indigenous doula practice will remain an important adjunct to standard Western maternity care which is worthy of further interest, investigation and research.

Conflict of interest

There is no conflict of interest.

Ethical approval

As this was a literature review an ethics application is not necessary.

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Clinical trial registry and registration number

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Beyond Holding Hands: The Modern Role of the Professional Doula

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This article illustrates the five main aspects of the doula's role: providing specific labor support skills; offering guidance and encouragement; assisting mothers to cover gaps in their care; building a team relationship; and encouraging communication between patient, nursing staff, and medical caregivers. The roles of both nurses and doulas are discussed, including the complementary nature of their roles, and also strategies for preventing conflict between doulas and nurses. A modern perspective on birth plans and the doula movement are included. *JOGNN, 31, 762–769; 2002.* DOI: 10.1177/0884217502239215

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Doula refers to a supportive companion (other than a friend or loved one) who is professionally trained to provide labor support. Many mothers can benefit from the presence of a doula whether they are planning a medicated birth, an unmedicated birth, or a scheduled cesarean section. "In addition to the safety of modern obstetrical care, and the love and companionship provided by their partners, women need consistent, continuous reassurance, comfort, encouragement and respect. They need individualized care based on their circumstances and preferences. The role of the doula encompasses the non-clinical aspects of care during childbirth" (Doulas of North America, 1998).

Doulas provide one-on-one caring to women who have a wide range of needs and goals for childbirth. Mothers who seek a doula often want a familiar face as they labor. Some mothers are alone or have partners/husbands who need additional support. Others want to understand medical interventions that may arise in labor and be reminded by the doula that they can ask basic questions. In this era of managed care, many women are obligated by their insurance plans to specific physicians or obstetric groups, and the most compatible care provider may not be available to them. Mothers may have a preexisting health condition that limits their choices, or have developed concerns or issues with a care provider's interventive or personal style. These women often seek out a doula. In these instances, doulas encourage care providers, mothers, and families to discuss each other's concerns and negotiate.

Most articles about the doula's role have primarily focused on the labor support and positioning strategies that doulas use to help mothers cope with labor. This article explains how the doula functions with other members of the maternity care team and fits into the larger network of medical care. Doulas have an evolving role that serves as a bridge between mothers and caregivers, often spanning different philosophies and perspectives about normal birth. They help bridge the gap between the dreams and realities of this transformative life experience for mothers and families. Their verbal and nonverbal communication skills must be excellent to help mothers, nurses, and medical caregivers feel comfortable with one another in unfamiliar territory.

Brief History of the Doula

Like many social movements, the rapid rise of the doula stems from several different sources. Unfortunately, there has been little written about the evolution of this role in modern times. From anecdotes and verbal histories, it is apparent that many moth-

ers felt that having an experienced support person during labor would be helpful to them. Husbands, partners, and families without prior childbirth experience often felt insecure in the role of "coach" and began to seek outside help. Mothers and families often asked friends who had given birth, their childbirth class instructor, or an obstetric nurse they were friendly with to be with them during childbirth for labor support. In the 1980s, manuals of many childbirth education organizations, such as the International Childbirth Education Association, encouraged their instructors to attend births when possible (1987). After attending the births of their students informally, the next logical step was attending births professionally (Haaf, 1992).

In the early 1980s, there was growing consumer awareness of the rapid rise in the American cesarean birth rate. The cesarean prevention movement grew from this concern, and women who wanted to avoid cesareans were encouraged to have a labor advocate whose purpose was to help them avoid routine procedures that could lead to cesarean surgery. Nancy Wainer Cohen's popular book *Silent Knife* (1983) actively encouraged mothers to refuse procedures and outlined strategies to prevent cesareans, such as signed "birth request" forms (Cohen & Estner, 1983). Unfortunately, these strategies alienated many hospital staff members to the idea of a professional labor support person. Although this militancy was a part of the early history and growth of the doula movement, it has not been advocated by any professional doula organization.

Several published articles and research studies also stimulated interest in labor support. In the late 1970s, Klaus and Kennell unintentionally discovered the effects of a supportive woman accompanying a mother during labor while doing a breastfeeding study in Guatemala (J. Kennell, personal communication, January 1998). Subsequent research found that women who had labor support by doulas had lower rates of cesarean section, fewer requests for pain medication, fewer epidurals and narcotics, and shorter labors than women who were not supported in labor (Kennell, Klaus, McGrath, Robertson, & Hinkley, 1991; Sosa, Kennell, Klaus, Robertson, & Urrutia, 1980).

Simkin published studies about the significance of birth memories, finding that mothers who received positive support and encouragement during labor felt more positively about themselves and their births as long as 20 years later (Simkin, 1991, 1992). One of the most striking findings was that procedures and pain level *did not* influence a mother's perception of her birth experience as positive or negative. "Mothers with the highest long term satisfaction ratings thought they had accomplished something important, that they were in control of what happened to them, and that the birth experience contributed to their self-confidence and self-esteem" (Simkin, 1991). Mothers' need for knowledgeable companionship, combined with a growing awareness of the benefits of labor support, have propelled doula care into the mainstream.

Many doulas begin their careers by attending a training program providing at least 18 hours of instruction. Completing required reading, education in childbirth and breastfeeding, and attendance as a friend or observer at births are encouraged before attending a workshop. Certifying organizations expect doulas to be familiar with female anatomy and physiology, routine interventions, medical terminology, pain medications, and cesarean surgical procedures. To achieve certification, doulas must provide satisfactory evaluations by mothers, nurses, and medical care providers from several births. There are four main certifying organizations, each with additional requirements beyond these basics: (a) Doulas of North America, (b) International Childbirth Education Association, (c) Childbirth and Postpartum Professional Association, and (d) Association of Labor Assistants and Childbirth Educators. Doulas of North America requires all certified doulas to sign a code of ethics and scope of practice agreement and has a follow-up grievance procedure in place if parents or health care professionals feel that the Doulas of North America standards have not been met.

Role of the Doula

Doula care has been integrated into Western childbirth in many forms. Many hospitals in the United States and Canada have hospital-based doula programs. For instance, social service agencies such as the Chicago Health Connection and the Easter Seals Society in Rockford, IL, provide doulas for qualifying clients. Some obstetric practices have doulas on their staff for patients, thus ensuring a positive working relationship among professionals who know one another. However, most doulas have independent private practices and are hired by mothers or couples to attend their births. Regardless of how mothers and doulas come together, there are five consistent aspects of the doula's role:

1. Providing specific labor support skills, techniques, and strategies.
2. Offering guidance and encouragement to laboring mothers and their families.
3. Building a team relationship with nursing staff.
4. Encouraging communication between patient and medical caregivers.
5. Assisting mothers to cover gaps in their care.

Labor Support Skills

Doulas use specific strategies and techniques to help mothers in labor. These approaches accomplish several goals: (a) to provide comfort, (b) to accelerate labor or strengthen contractions, (c) to aid fetal descent or posi-

tion, and (d) to help mothers cope. These labor support skills, shared by doulas and nurses, often include nonpharmacologic methods of pain relief (see Simkin & O'Hara, 2002).

Providing Guidance and Encouragement

Providing guidance and encouragement to laboring mothers and families is the most visible and definable part of what a doula does. With every contraction, a soft voice may say, "That's the way, just like that." When labor gets rough, a doula may become more instructive and active with coaching to help mothers cope. "Look at my eyes, breathe with me, we'll do this together." Doulas often match mothers' rhythms and hold their coping rituals intact throughout the first stage of labor to minimize their pain and fear or uncertainty.

When doulas have established a trusting relationship prenatally or in early labor, mothers can maintain confidence in doulas' guidance during the most trying of times. For example, Janey, a teenage mother, had been in labor for about 6 hours and had received analgesics for pain relief earlier in her labor. Late in second stage, her baby was showing signs of distress. There was no opportunity to change her position, and Janey repeatedly said she was pushing as hard as she could. Her sensitive and caring physician told her to "Push harder!" and there was growing concern in his voice. Her doula leaned forward and said, "Janey, I know you're pushing as hard as you can. But your baby really needs to be born, so you've got to get him out NOW." The doula's communication was designed to acknowledge her efforts and tell her exactly what to do. Because of their relationship, she knew Janey was focused on thinking, "I *am* pushing harder!" rather than hearing the important message. Progress was swift with Janey's renewed efforts, and baby Jason emerged less than 2 minutes later.

Both obstetric nurses and professional doulas can expect to develop a collegial relationship based on mutual respect for each other's different roles.

Building a Team Relationship With Nursing Staff

Complementary Roles of the Nurse and the Doula. The roles of the obstetric nurse and the professional doula differ markedly, yet they also overlap somewhat and should complement each other. Most doulas have the advantage of knowing the mother's dreams, fears, hopes, and desires for her birth experience. The doula has often been a resource to the mother for weeks or months, and may have insight into relationships within the family. On the other hand, nurses know more about the facility, hospital policies, and idiosyncrasies of the attending physician than the doula. With this knowledge, nurses can be valuable allies in helping mothers sidestep routines or protocols that the mother wishes to avoid and are not medically required. The nurse's role involves clinical skills (such as vaginal examinations) and administrative responsibilities (such as charting, caring for other patients) that are not a part of a doula's role, yet both can provide information about labor progress. Most nurses have attended more labors and births than most doulas. However, doulas usually have seen more entire labors from start to finish than have most nurses.

Obstetric patients often expect a high degree of involvement from their nurse. In a study examining pregnant mothers' expectations, nulliparous mothers expected their nurse to spend 53% of her time offering physical comfort, emotional support, information, and advocacy (Tumblin & Simkin, 2001). This is in sharp contrast to work sampling studies of nurses' activities, where only 6% to 10% of their time was actually engaged in these labor support activities (Gagnon & Waghorn, 1996; Gale, Fothergill-Bourbonnais, & Chamberlain, 2001; McNiven, Hodnett, & O'Brien-Pallas, 1992). In clinical studies, postpartum mothers repeatedly state the value of their nurses' caring behaviors to the quality of their experience (Corbett & Callister, 2000; Manogin, Bechtel, & Rami, 2000). Obstetric nurses show their confidence and willingness to spend more time in labor support activities and have begun to outline the factors that both assist and prevent supportive practices (Davies & Hodnett, 2002; Kardong-Edgren, 2001).

The sensitive doula recognizes that most obstetric nurses started their careers because they enjoyed caring for laboring mothers. The helping and the teaching-coaching functions are two of the most important domains of nursing practice (Benner, 1984). Both are central to caring for laboring mothers. However, nurses often care for more than one laboring mother and have other nursing duties that prevent them from being the primary emotional support mothers often need. Both the nurse and the doula have "unique knowledge," and both are critically important to successful birth outcomes.

The doula's care often spans several nursing shift changes. To encourage a team relationship, the doula may employ several strategies. The doula can introduce the new nurse to the patient and can update her on labor support techniques that have been helpful. The doula can also review issues, concerns, or special requests that the mother may have. Doulas usually try to physically move out of the way, or take breaks, so that the oncoming nurse can talk and get to know the client, as well as performing patient care. By making room for nurses to be emotional-

ly supportive and physically care for their patient, doulas show that they value the quality of mother's health care and birth experience.

Conflict Between Nurses and Doulas. Sometimes the relationship between doula and nurse does not progress smoothly, particularly when one or both do not appreciate the complementary nature of their individual roles. The doula may be new and overeager or may not have attended a comprehensive training program. She may also be carrying her own birth experience with her into her client's birth rather than leaving it at the door. Many doulas and nurses have had birth experiences they would classify as negative for a wide variety of reasons. This may fuel their passion about making birth experiences positive for others. However, the mother's labor and birth needs to be totally hers.

It should be obvious that conflict between the doula and nurse is highly undesirable. It undermines the mother's confidence in the nurse, doula, medical provider, facility, or any combination of these. In these situations, the nurse rather than the doula may need to be open and inclusive in her attitude. For whatever reason, the mother has chosen this doula as her companion. When the nurse is open and welcoming to the doula, she increases the likelihood of developing a positive working relationship and maintaining the mother's confidence. These situations pertain more to individual personalities of doulas and nurses than they do to their actual roles. But conflict among caregivers can have extremely negative consequences for all involved.

Possibly the most difficult area of conflict arises when the nurse feels frustrated by what the doula is doing and is uncertain about how to intervene. In her enthusiasm to help this mother, the doula may seem to be challenging the rest of the health care team. She may be working toward professionalism as a doula but not quite achieved it. Similar to the novice nurse, she is basing her actions on remembered rules rather than taking situational factors into account (Benner, 1984). With experience, she will develop into a professional doula. A list of expectations of the professional doula is included in Table 1.

At other times, a nurse may feel uncomfortable because she wants to do what the doula is doing: connecting on a personal level with the laboring mother. The dynamic between the doula and mother may preclude the nurse's involvement, or her other responsibilities may keep her too busy. Both of these intricate situations are unique to the dynamic of the individuals involved. Deciding the appropriate action to take is contextual and also depends on the nurse's experience. This is the nurse's opportunity to create a team relationship with the doula, mother, and her family. One possible way to start is to acknowledge the doula's efforts, blend into the rhythm with the mother and her attendants for several contractions, and then gently become more involved with the labor support. Then it may be possible for the nurse to be more directive and lead into a more effective strategy or position.

TABLE 1
Expectations of the Professional Doula

Professional doulas can be expected to

- Provide *continuous care* through labor and birth and several hours afterward
- Bring labor support items such as physical therapy balls, massage oils, hot and cold packs, music, and flowers
- Become entrained with the mother, understanding her needs, her fears, and her concerns
- Involve nurses in labor support tasks as much as she is able and in accordance with the mother's and family's wishes
- Avoid giving medical advice, or expressing either approval or disapproval of the patient's decisions
- Ask an especially supportive or effective nurse to find someone similar on the next shift if possible
- Maintain the mother's rhythm and ritual through position and location changes and ask others to do so when she needs a break
- Fetch ice chips, carry drinks, and pick up the labor room during down times

A more complicated situation arises when doulas feel that nurses do not understand their client's wishes for an unmedicated birth or one without interventions. An example comes from Barbara, a professional birth assistant in Florida. "There is one nurse in my local hospital who always offers pain medication and 'clucks' at mothers who refuse. It doesn't matter what I say or what the birth plan says, she just does it anyway and takes it personally when they say no." In this situation, the nurse communicated her disapproval of the mother's birth choices.

Sometimes nurses don't understand their patients' requests because they're unfamiliar with what mothers are asking. At several hospitals in Wisconsin, groups of nurses admitted that they rarely see spontaneous pushing or birth in other than a semi-sitting position. In these situations, it seems likely that the mother's requests are outside the medical staff's comfort zone. Many doulas read obstetric, midwifery, and nursing journals and keep up with evidence-based medicine. When professional journals report improved outcomes from specific practices, doulas will often encourage their clients to pursue these options. Consumer pressure to change is not new; however, it feels uncomfortable to those being asked to do something unfamiliar.

The last primary area of conflict arises when doulas are blamed for their client's behavior or actions. In the words of DeeDee Farris-Folkerts, a certified doula in Missouri,

My client had a VBAC birth. The next day, my nurse friend said that I had upset a lot of people "bringing this screaming VBAC mom in fully dilated." The hospital staff nurses assumed that this mom was screaming at home and that I had made her stay home so long! The mom has told them that she made the decision when to go to the hospital and I was one hundred percent supportive. She went through a very fast transition in the car on the way to the hospital. Generally I have had a very good working relationship with these nurses. Can I make this right? Or should I just keep doing good work and let that speak for itself? (Ferris-Folkerts, 2001)

Such a dilemma is not uncommon. Rather than realizing that the doula acted quickly to prevent an accidental home or roadside birth, others may blame her for not arriving soon enough. Such events may be beyond the doula's control because she takes her cues from the mother's specific wishes or her labor situation.

Nurses often care for more than one laboring mother and have other nursing duties that usually prevent them from being the primary emotional support that mothers often need. Both the nurse and the doula have unique knowledge, and both are critically important to successful birth outcomes.

Sometimes women who know they are emotionally needy seek out doulas. They may have unusual coping mechanisms or a fear of labor or hospitals. Although nurses and physicians may believe that the doula has created these idiosyncrasies in her patients, in fact it may be that those clients knew they needed additional support and for that reason, they hired a doula. To prevent misunderstandings and scapegoating, nurses should ask the doula what she knows about the mother's personality, needs, and history. Clear discussion and active listening can prevent conflict.

Encouraging Communication Between Patient and Care Provider

Information Sharing. The goal of encouraging communication is to empower the mother to be an informed participant in her care. Throughout a pregnancy, mothers and fathers often ask their doula for information about prenatal tests, birth procedures, and infant care. This is a natural outcome of their lengthy prenatal visits (1 to 2 hours). Pregnant women are eager for information, and medical provider visits are usually very short. A professional doula gives information but should not give medical advice or freely share her opinion. When the doula provides information without directing the mother to a course of action, the mother becomes informed, is able to discern what she wants, and may discuss this with her physician or nurse-midwife.

When a mother has a specific concern or question, the professional doula encourages her to go directly to her care provider. During the process of pregnancy, mothers usually develop an image of the birth they would like to experience. They reflect on aspects of labor such as whether to have an epidural or how they view technology. In other words, their philosophy of birth begins to emerge. Mothers may realize that their philosophy differs from their caregiver's enough that they are uncomfortable. If a mother in this situation asks the doula for help, the doula can provide referrals to other physicians or midwives who are more compatible with that mother. More important than the actual philosophy is an appropriate match between patient and health care provider. Actively making decisions that affect their childbirth care is an important personal growth step for many mothers.

Birth Plans. Another way that doulas work prenatally to enhance communication between medical caregivers and mothers is through the development of a birth plan. Some nurses and physicians love birth plans, and others despise them. This range of passion deserves comment.

Almost 20 years ago, birth plans began as contracts between physicians and patients about how labor and birth would be conducted. Some early birth plans went so far as to outline the number of vaginal examinations, what kind of technology was permitted, and who was allowed to be near the mother (Cassidy-Brinn, Hornstein, & Downer, 1984; Cohen & Estner, 1983). Patients often viewed birth plans as a shield against unwanted interventions, whereas physicians felt defensive and nurses felt offended. To some, birth plans seemed to signify an adversarial relationship in which a mother could not trust her care providers to act in her best interest. Some nurses declined to care for mothers with birth plans, feeling that these mothers had unreasonable expectations. Even now, a mother with a birth plan is sometimes perceived as a "cesarean waiting to happen."

Perinatal educators today often refer to birth plans as a list of "birth hopes" or "birth preferences." Many hospitals have developed their own "point and click" birth plans on their Web sites and use those menus of choices to attract clients. However, neither of these surface changes gets to the heart of the matter. Women who write birth plans are communicating their hopes and dreams to hospital staff. This communication occurs when mothers

are not in labor and have a chance to review options and are less likely to forget a special request. Although all women have desires, goals, and expectations for their births, mothers with birth plans have taken the opportunity to communicate them to their future caregivers.

Recently, an experienced obstetric nurse, Molly, expressed how "disappointed" she felt for women who have birth plans. "I just feel sorry for them, I worry that they aren't going to get what they want and will end up disappointed." Molly said she wished women didn't make birth plans. The paradox is that Molly could not be disappointed for the women *without* birth plans, because with their needs unspoken and unwritten, she *could not know* when their needs were not met. Not communicating their preferences did not mean that these mothers did not have preferences. Birth plans can be an effective way to communicate laboring mothers' hopes or preferences to the nursing staff.

An effective birth plan highlights only the most important things a mother desires, uses positive language, and gives concrete examples of what she wants. It has a few introductory sentences explaining about the mother or the couple and why they chose this facility. An effective birth plan fits on one page, and key phrases can be highlighted with a marker so a busy resident or oncoming nurse can glance at the page and know in less than 30 seconds what makes this patient different from the one next door. In some cases, the client's birth plan may not be as short or positive-sounding as a doula may wish. Nurses should bear in mind that some patients are more difficult than others and that demanding and defensive patients can be a challenge for doulas as well as for hospital staff.

Doulas encourage clients to write birth plans in order to help them clarify wants and needs. Clients take their plans to their caregivers to get feedback and to give them a focal point for their prenatal discussions. Sending birth plans in advance or bringing them to the hospital can help the charge nurse make a good match between the patient and her obstetric nurse. Birth plans can give the obstetric nurse insight into what is important to this mother and help tailor her care more effectively.

During Labor. A doula encourages her clients to ask questions about procedures. When the unexpected comes up, understanding the situation completely can help mothers feel less out of control. One of the key components of a positive birth memory is feeling like birth happened *with* the mother, not *to* the mother (Dannenbring & Stevens, 1997; Simkin, 1992). Doulas will frequently prompt their clients with, "Did you have any questions about that?" Below are typical questions that doulas encourage parents to ask.

1. "Is this an emergency or do we have time to talk about this?"
2. "What are the risks and benefits of this to me and my baby?"
3. "What I heard you say was . . ."
4. "Are there any alternatives we might try?"

Sometimes the relationship between doula and nurse does not progress smoothly, particularly when one or both do not appreciate the complementary nature of their individual roles.

Sometimes physicians or midwives who are not accustomed to being asked questions or who have a more autocratic style may feel their authority is being questioned. Yet patients are simply trying to enhance their understanding and lower their anxiety. Studies have shown that higher levels of information and involvement in decision making are associated with higher patient satisfaction (Halldórsdóttir & Karlsdóttir, 1996; Lyons, 1998; Wilcox, Kobayashi, & Murray, 1997). By enhancing communication and encouraging dialogue between caregivers, nursing staff, and the patient, doulas are helping to secure informed consent.

Doulas and Care Providers. Doulas counsel their clients to ask questions of their physicians or nurse-midwives about their intervention rates and their philosophy of birth. It is important for the mother's and the care provider's philosophies to be similar. The greater the difference between a mother and her caregiver's points of view, the greater is the potential for dissatisfaction and misunderstanding. Doulas will also encourage patients to ask for what they want. A typical doula response might be, "If you want to give birth on your hands and knees, then you need to discuss that with your doctor prenatally." To pressure a care provider to work entirely outside of his or her comfort zone makes everyone nervous and increases the potential for conflict and tension between care provider and patient during labor. Most doulas actively discourage this approach and will suggest to clients to find someone who is closer to their philosophy or be prepared to compromise.

In general, with a doula in the labor room, physicians and nurse-midwives can receive a more complete picture of how a mother has been laboring, such as what her contractions are like and what strategies she has tried. They can be assured that patients will ask questions about their care, enhancing their mutual need for informed consent about procedures. Patients increasingly are satisfied with their birth experiences when a doula is present (Gordon

et al., 1999; Hofmeyr, Nikodem, Wolman, Chalmers, & Kramer, 1991; J. Kennell, personal communication, January 1998; Wolman, Chalmers, Hofmeyr, & Nikodem, 1993).

Assisting Mothers to Cover Gaps in Their Care

Doulas can provide care for women who are not considered to be "in labor" and do not qualify for hospital admittance, as most hospitals do not admit mothers who are not in active labor. Yet mothers with a lengthy prodromal pattern are uncomfortable, sleepless, and are often emotionally overwrought. Many doulas recognize the wisdom of making a strong investment of time and energy during this drawn-out phase. Once mothers are in strong active labor, they are thrilled to be "in labor" but frequently are too exhausted and dehydrated to cope. Getting a massage, a warm bath, and a pep talk early in a puttering labor seems to help mothers to calm down, rest, and prepare for strong labor when it comes.

Another unique service is the continuity of care that a doula provides. The doula remains familiar throughout staff changes, room changes, and visits from the physicians. If surgery becomes necessary, the doula can remain with the mother and father in the operating room if policies allow (Simkin, 2001). Doulas can help hold the new baby next to the mother's face toward the end of the surgery or can keep a running commentary on the baby if she or he has been removed to the nursery. Fathers often accompany the newborn, leaving the mother alone and frightened about the health of her baby. Doulas can reassure mothers or take pictures of precious first moments that mothers might otherwise miss.

The doula can help the mother during the first breastfeedings and sit with her during her first shower. Many doulas take notes during the mother's labor and help her to fill in the blank parts that hormones and sleep deprivation make hazy. The doula can positively influence the mother's memories and how she thinks of herself. Will she see herself as a woman who "gave up and couldn't do it" or who "labored valiantly until it was more than most women could bear"? Nurses and care providers also perform this valuable service, yet their time is limited. Doulas can help mothers see that they did the best job possible, regardless of whether the birth was complicated or was not what was anticipated. Through gentle discussion and reframing, doulas can help to assure positive memories for both parents.

For example, one father recalled his intense disappointment with a previous birth because he had wanted to help his wife hold their baby skin to skin immediately after birth. The child was whisked away to the warming table and remained there despite his request. At their initial interview with this pregnancy, he had tearfully blamed himself for not being assertive enough. They wanted a doula to make sure that this situation didn't happen again. The doula gently probed and discovered that the mother had received a requested analgesic within half an hour of the baby's birth. After more questioning, the doula suspected that the baby had required resuscitation and possibly Narcan. She explained that she could not have prevented the baby being whisked away and kept in the warmer but that the parents would have known immediately what was happening and not spent 4 years agonizing over what they should have done differently. It is likely that the staff explained their baby's needs to them at the time or right afterward, but they may not have retained that information. New parents are exhausted and elated and have a mix of many emotions that may overwhelm their processing of intellectual information. A doula remembers.

Conclusion

Doulas do much more than suggest position changes or hold hands with a mother during labor. Yet, that is what they do best and what they love about their work. An effective doula builds relationships and is skilled in communicating with a variety of people with different needs and perspectives. She is responsible primarily to the mother whom she serves, yet she is also responsible to the community. Her actions help shape birth options for other women who follow. Both nurses and doulas contribute unique knowledge, caring hearts, and dedication to make birth better for women.

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Doula Services Within a Healthy Start Program: Increasing Access for an Underserved Population

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Abstract

Purpose Women of color in the United States, particularly in high-poverty neighborhoods, experience high rates of poor birth outcomes, including cesarean section, preterm birth, low birthweight, and infant mortality. Doula care has been linked to improvements in many perinatal outcomes, but women of color and low-income women often face barriers in accessing doula support.

Description To address this issue, the New York City Department of Health and Mental Hygiene's Healthy Start Brooklyn introduced the By My Side Birth Support Program in 2010. The goal was to complement other maternal home-visiting programs by providing doula support during labor and birth, along with prenatal and postpartum visits. Between 2010 and 2015, 489 infants were born to women enrolled in the program.

Assessment Data indicate that By My Side is a promising model of support for Healthy Start projects nationwide. Compared to the project area, program participants had lower rates of preterm birth (6.3 vs. 12.4%, $p < 0.001$) and low birthweight (6.5 vs. 11.1%, $p = 0.001$); however, rates of cesarean birth did not differ significantly (33.5 vs. 36.9%, $p = 0.122$). Further research is needed to explore possible reasons for this finding, and to examine the influence of doula support on birth outcomes among populations with high rates of chronic disease and stressors such as poverty, racism, and exposure to violence. However, feedback from participants indicates that doula support is highly valued and helps give women a voice in consequential childbirth decisions.

Conclusion Available evidence suggests that doula services may be an important component of an effort to address birth inequities.

Keywords Doula support · Health equity · Disparities · Pregnancy and birth outcomes · Birth inequities · Maternal health · Race · Women of color · Healthy Start

Significance

Women of color and those in areas of high poverty face persistent inequities in birth outcomes. Doula support during pregnancy and childbirth is associated with improvements in many outcomes, including lower rates of cesarean section and preterm birth, higher rates of breastfeeding initiation, and increased satisfaction with the birth experience. However, socioeconomic, cultural, structural, and systemic factors limit access to doula care and its benefits. Increasing access may help address inequities in pregnancy outcomes for Black women and women in high-poverty neighborhoods. Experience from Healthy Start Brooklyn suggests that doula support is a promising complement to other home-visiting programs.

Purpose

In the United States, women of color—particularly those living in areas of high poverty—experience disproportionately high rates of poor birth outcomes, including cesarean delivery, preterm birth, low birthweight, and infant mortality (Roth and Henley 2012; Hamilton et al. 2015; Infant Mortality 2016). These disparities in birth outcomes likely

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result from various factors, including the disproportionate burden of preexisting health conditions and risks faced by Black and Latina[1] women (Braveman et al. 2011), as well as chronic stressors such as poverty and structural, interpersonal, and internalized racism (Latendresse 2009; Rosenthal and Lobel 2011). Recent research shows even after adjusting for co-morbidities, hospitals serving predominantly Black populations have higher rates of severe maternal morbidity than hospitals serving predominantly White populations (Howell et al. 2016). The disparities in infant and maternal health outcomes reflect the stark challenges women of color face in obtaining high-quality care (Roth and Henley 2012; Gruber et al. 2013).

Continuous support during labor is a potential means of mitigating disparities in perinatal outcomes. Labor support has been linked to fewer instrumental deliveries, shorter labors, higher APGAR scores among newborns, and increased satisfaction with the birth experience (Hodnett et al. 2013; Gruber et al. 2013). One source of labor support is a doula, a trained childbirth professional who provides emotional, physical, and informational support to women during labor, delivery, and the immediate postpartum period. Supporting women and families in their decision-making during childbirth and early parenting is a central aspect of doula care (DONA International 2014). Evidence suggests that doula support provided prenatally and during childbirth may both lower maternal stress and enhance women's self-efficacy regarding their pregnancy and ability to manage labor (Hodnett et al. 2013; Gruber et al. 2013; Kozhimannil et al. 2013). In addition, a doula's respect for the autonomy of the client and emphasis on positive goal-setting during prenatal visits have been shown to increase women's empowerment and confidence regarding their ability to influence their own pregnancy outcomes (Gruber et al. 2013; Gentry et al. 2010; Breedlove 2005). Psychosocial support from a doula during labor may also attenuate maternal stress, thereby contributing to better birth outcomes (Gruber et al. 2013; Christopher and Simpson 2014).

Studies conducted with low-income Black and Latina women in programs that included prenatal, labor, and postpartum support have shown lower rates of cesarean birth, increased breastfeeding initiation, and longer duration of breastfeeding (Kozhimannil et al. 2013; Gruber et al. 2013; Harris et al. 2012; Nommsen-Rivers et al. 2009; Mottl-Santiago et al. 2008). A study in Minnesota found that Medicaid recipients who received prenatal doula support had lower rates of preterm birth than other Medicaid recipients in the region (4.7 vs. 6.3%) (Kozhimannil et al. 2016). A South African study showed that low-income women in an urban community hospital who received non-medical companionship during labor and birth had decreased rates of depression at 6 weeks postpartum (Wolman et al. 1993).

Despite the benefits of doula support, doula care is underutilized, particularly among low-income women and women of color (Kozhimannil et al. 2014). Barriers include lack of information about services, lack of available services, and cost. A national survey found that women whose delivery was covered by Medicaid were almost 50% less likely to know about doula care than women who were privately insured (DeClerq et al. 2013). Lantz et al. found that most doulas in the United States are White, upper-middle-class women, which has implications for the availability of doula services in other communities (Lantz et al. 2005). Finally, doula support is not routinely covered by health insurance and thus is beyond the means of many low-income women (Kozhimannil et al. 2013).

To address inequities in birth outcomes, Healthy Start Brooklyn (HSB) offers free doula services in Black and Latino neighborhoods that have been historically deprived of resources. Launched in 2010, the By My Side Birth Support Program makes doula care available to women who meet income eligibility requirements for the Women, Infants, and Children nutrition program (WIC). Project strategies and birth outcomes among program clients to date are described below.

Description

The By My Side Birth Support Program (BMS) serves pregnant women living in the neighborhoods of Brownsville, East New York, Bedford-Stuyvesant, and Bushwick—communities with a disproportionately high burden of poor health. Nearly one-third (31.3%) of adults are obese, 35.0% have been told they have high blood pressure, and 15.1% have been told they have diabetes (DOHMH 2014). More than 30% of the population lives below the federal poverty line (U.S. Census Bureau 2014), and the project catchment area includes neighborhoods with the highest levels of community violence in New York City (King et al. 2015). These and other social determinants likely contribute to disparities in pregnancy outcomes, including an infant-mortality rate as much as 76% higher than the NYC average (7.4 deaths per 1000 live births in East New York vs. 4.2 citywide), as well as preterm birth and low birthweight rates that are the highest in the city (14% preterm birth in Brownsville vs. 8.8% citywide, and 11.6% low birthweight in Brownsville vs. 8.8% citywide) (Li et al. 2016).

Healthy Start Brooklyn was launched in 2001 by New York City's Department of Health and Mental Hygiene (DOHMH), with funding from the Health Resources and Services Administration of the U.S. Department of Health and Human Services. The program focused on non-Latina

[1] For the purposes of this publication, "Latino/a" includes persons of Hispanic, Latino, and Spanish origin.

Black women, the group with the highest infant-mortality rate in the program area. One key part of the initiative was a free childbirth-education series, taught by a local doula and Lamaze instructor. Over time, she noticed that many participants reported not having reliable support for their labor and delivery. Some women's partners were unable to take time off during the workday; others needed to rely on their partner or their own mother to care for older children rather than providing labor support. To respond to this need, the instructor began matching her students with volunteer doulas. In 2010, HSB formalized the process with the launch of By My Side, hiring certified doulas as independent subcontractors and paying them a professional rate to support women and their partners during pregnancy, childbirth, and the postpartum period.

BMS combines aspects of private doula practice and community-based programs to provide social support during pregnancy, labor and delivery, and the postnatal period. Private doulas typically provide one to two prenatal home visits, support during labor and delivery, and one postpartum home visit. Community-based doula programs typically provide many more visits throughout pregnancy and may continue services for an entire year postpartum.

BMS doulas conduct three prenatal home visits, covering the traditional doula curriculum (prenatal care, stages of labor, birth preferences, communicating with care providers), as well as screening for depression, food insecurity, intimate partner violence, and medical risk factors, and making referrals to services as needed. Because this case-management function is outside the typical scope of doula work, BMS provides additional training, as well as an extensive resource guide of services in and near the project area. Multiple visits give the doula time to discuss childbirth topics in a relaxed setting, when the woman has time to think about the information, do additional research, and decide what her preferences for labor may be. The relationship that develops during these visits also improves continuity of care during labor, especially for women who have never met any of their obstetrical-care providers before arriving at the hospital.

In addition to support during and immediately after the birth, BMS doulas often provide assistance to pregnant women and their families in navigating the hospital environment during labor, facilitating communication with the medical staff. They make a follow-up visit within 2 days of the birth and another at 2 weeks postpartum. In early 2015 two additional home visits were added, at 2 and 6 months postpartum. During the four postpartum visits, doulas support breastfeeding, assess client and infant risks, and provide counseling on safe-sleep practices, positive parenting, and reproductive life planning. Home visits last 1–2 hours each.

Merging the private and the community-based models of care provided HSB the flexibility to develop a doula program that complemented its existing home-visitation services, a Nurse-Family Partnership program and a Healthy Families America program, both of which provided support from pregnancy through the first few years of a child's life, but not during the birth itself. BMS addresses this gap by providing participants with continuous support during labor and birth, either as the only service that women receive or in addition to other home-visitation services.

BMS currently subcontracts with 12 doulas, four of whom have been with the program since 2010. Staff longevity has contributed to programmatic stability; the experienced doulas provide support to those new to the program, building on lessons learned and sharing their expertise. For example, each new doula who joins the program is paired with an experienced BMS doula, who mentors her in classic doula care, as well as best practices in supporting clients who may be navigating multiple stressors. Two of the newest doulas to join the program are themselves former clients.

Assessment

BMS doulas collect the same client data as other HSB home-visiting programs, including characteristics of program participants, plus labor and delivery data. Between 2010 and 2015, BMS served more than 560 women, and 489 infants were born to program clients; 84.7% of these births were attended by doulas. The average age of these clients at the time of enrollment was 27.1 years (standard deviation of ± 6.2 years). Attrition has been relatively low: 83.2% of the infants' mothers remained in the program through graduation (defined as completing at least two postpartum visits).

Demographic characteristics of births from 2010 to 2015 are summarized in Table 1, along with birth-record data for all infants born in the program area from 2010 to 2014, the most recent data available. Chi-squared tests were used to compare differences, using $p < 0.05$ as the cut-off value for statistical significance. Table 1 highlights important differences between program births and resident births overall, representing both higher and lower social risk factors for BMS participants. A greater proportion of BMS participants are non-Latina Black (84 vs. 59%, $p < 0.001$), have Medicaid or another public insurance (90 vs. 79%, $p < 0.001$), and are enrolled in WIC (82 vs. 74%, $p < 0.001$), compared with overall rates in the program area. At the same time, however, BMS participants have higher levels of education (58% with more than a high school degree vs. 43%, $p < 0.001$), and they were more likely to begin prenatal care in their first trimester of pregnancy (80 vs. 64%, $p < 0.001$). Medical risk factors are not reported here; however, BMS does not exclude anyone based on risk, even those who are having a planned cesarean delivery.

Table 2 provides a comparison of outcomes for BMS births against those of the program area. The

Table 1 Selected characteristics of By My Side program participants compared to residents overall in project area, by live births

	By My Side (N = 489)		Project area* (N = 34,912)		p value**
	2010–2015		2010–2014		
	#	%	#	%	
Race/ethnicity					
Non-Latina Black	410	84	20,740	59	p < 0.001
Non-Latina White, Asian Pacific Islander, Latina, other, unknown	79	16	14,172	41	
Age					
Mean age	27	–	27.7	–	
Insurance					
Medicaid/public insurance	438	90	27,441	79	p < 0.001
Private insurance, no insurance, unknown	51	10	7471	21	
WIC					
Enrolled in WIC	402	82	25,950	74	p < 0.001
Timing of first prenatal care					
First trimester (1–90 days)	390	80	22,107	64	p < 0.001
Late/no/unknown prenatal care	99	20	12,805	37	
Education					
More than high school	285	58	14,894	43	p < 0.001
High school or less	204	42	19,750	57	

*Data from NYC DOHMH Department of Vital Statistics: birth outcomes for zip codes 11207, 11208, 11212, 11216, 11221, and 11233 in 2010–2014

**p values for Chi Square tests calculated with SAS (version 9.4)

Table 2 Birth outcomes for By My Side program participants compared to residents overall in project area, by live births

	By My Side (N = 489)	Project area* (N = 34,912)	p value**
	2010–2015	2010–2014	
	N (%)	N (%)	
Cesarean section	164 (33.5%)	12,894 (36.9%)	p = 0.122
Preterm birth (< 37 weeks)	31 (6.3%)	4319 (12.4%)	p < 0.001
Low birthweight (< 2500 g)	32 (6.5%)	3882 (11.1%)	p = 0.001

*Data from NYC DOHMH Department of Vital Statistics: birth outcomes for zip codes 11207, 11208, 11212, 11216, 11221, and 11233 in 2010–2014

**p value for exact Fishers test (1-sided) at 95% confidence interval (1-tailed) calculated with SAS (version 9.4)

Cesarean-section rate is statistically similar across both groups (33.5 vs. 36.9%, p = 0.122); however, BMS participants have significantly lower rates of preterm birth (6.3 vs. 12.4%, p < 0.001) and low birthweight (6.5 vs. 11.1%, p = 0.001).

In addition to collecting quantitative data, BMS conducts periodic follow-up telephone interviews with former clients, including both graduates and dropouts, using a semi-structured questionnaire. To minimize possible sources of bias, interviews are conducted by someone who does not know the client or the doula. The follow-up interviews reveal high levels of satisfaction with the program: Of 244 clients surveyed between July 2010 and January 2015, 95.9% said they would recommend the program or use it in a future pregnancy, and 94.3% said they were "well-matched" with their doula. Table 3 provides examples of comments by participants about how their doula made a difference during their labor and delivery.

Table 3 BMS program-participant comments on the ways their doula made a difference during labor and delivery

- "She didn't push anything on me. She gave me information, and then I chose what I wanted"
- "When [the hospital staff] would say I needed certain things, she let me know that it was my decision if I wanted it or not, and that I didn't have to do anything I didn't want to. She let me know that I had a voice and a choice"
- "I would've had no one there; it was just me and her. If it wasn't for her, maybe I wouldn't even get through it, because she really helped a lot"
- "She told me step by step what my options were while we were in the delivery room. The doctors and nurses try to force you to do things that you don't have to do, just because it's better for their practice, or their hospital, or their insurance, or whatever the case may be. But it's not always good for you. You do it anyway because you trust the doctor. But I trusted my doula more, and she gave all my options on the table so I could decide what was best for me, you know?"
- "She showed me she believed in me"

Conclusion

Healthy Start Brooklyn's By My Side Birth Support Program appears to be a promising model for providing support to women living in communities with persistent disparities in birth outcomes. Client feedback and relatively low rates of attrition indicate that doula support is highly valued by BMS clients and helps women have a voice in consequential perinatal health decisions. Results from the BMS program are consistent with findings from other studies of the benefits of doula care, particularly for women in historically disadvantaged communities who face a range of financial, informational, and access barriers to these services.

Although it is not possible to determine a causal relationship between program exposure and birth outcomes, because of self-selection and other potential sources of bias, preterm birth and low birthweight are lower among program clients compared to the project area overall. However, rates of cesarean birth are not significantly lower than background rates for the program area, and more research is needed to explore the possible reasons for this finding. In particular, it would be useful to examine how routine hospital practices in the program area, such as confining a woman to bed during labor, may affect doula support and limit the influence a doula can have on mode of delivery. It would also be helpful to assess how and in what circumstances doulas affect hospital practice. More research is also needed on the influence of doula support on birth outcomes among populations experiencing high rates of chronic diseases, such as obesity, hypertension, and diabetes, along with the interlinked challenges of pervasive poverty, community violence, and structural racism.

Doula programs staffed by volunteers and/or funded by grants such as Healthy Start have been established to address inequities in birth support. However, the sustainability of these initiatives over time is unclear, and funding limitations preclude the provision of services to all women who would benefit from them. Recognizing these challenges, a growing body of stakeholders is calling for Medicaid programs and private insurers to cover doula support (Kozhimannil et al. 2013). Two states, Minnesota and Oregon, recently passed legislation to provide Medicaid reimbursement for doulas (Kozhimannil et al. 2014). In New York, HSB co-founded the New York Coalition for Doula Access, a group of doulas, community-based doula administrators, other Healthy Start grantees, health-department staff, and others across the state that is working with medical professionals to address barriers that doulas face in hospitals. The coalition has also begun exploring potential pathways to third-party reimbursement, which would offer a means of making doula care financially viable. This may increase access to doula care in neighborhoods with high poverty, where many pregnant women are not able to pay for these services. However, it would be important for state Medicaid offices to set their rates high enough to provide a living wage for doulas, so as not to perpetuate systems of inequity.

The By My Side Birth Support Program experience shows that low-income Black and Latina women in Brooklyn neighborhoods are currently underserved by doula support and that when enrolled in these services, they benefit from increased emotional, physical, informational, and social support provided during pregnancy, childbirth, and the postpartum period. Providing access to free doula support in communities of color and high-poverty neighborhoods may be one important component of the effort to address persistent inequities in birth outcomes.

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Compliance with Ethical Standards

Ethical Approval This study was approved by the Institutional Review Board of the NYC Department of Health and Mental Hygiene (NYC DOHMH).

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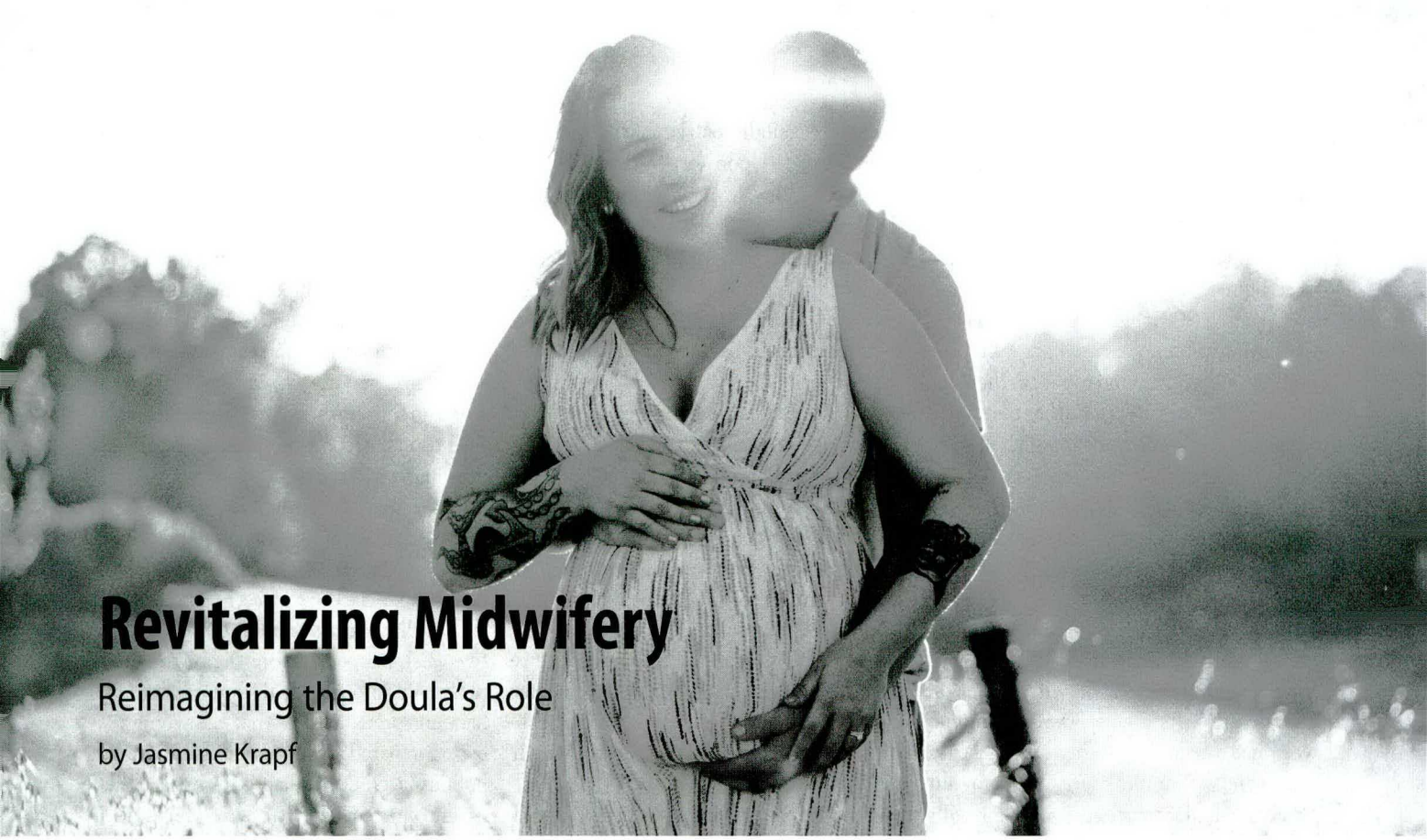

Revitalizing Midwifery

Reimagining the Doula's Role

by Jasmine Krapf

We are all attempting to quench a thirst for deeper understanding: of birth, of systems, of our work. I spend far too much time intellectualizing and not nearly enough time intuiting. For so long, I've silently analyzed my surroundings and my place within them. I observe the comfort of warm bodies hugging one another as sterile tools are wheeled into the room. My role, the role of the doula, weighs heavily on my mind—through a decade of late night calls, the cycling of styrofoam cups of cold coffee, the oscillating moans and whimpers of laborious evenings, the incessant chirping of monitors, of clattering metal tools on trays, the long exhalation of relief as a newcomer takes its first gurgling breath amidst gloved hands, glistening foreheads, and stark fluorescent heavens.

Most quiet nights spent in humming hospital rooms of sleeping mothers are spent imagining labors at home, with families in bed, bellies in bathtubs, and births cradled by gentle hands. Filled with yawns, a nurse emerges to check the monitors surrounding another sleeping mother whose epidural is clearly working. My eyes fall to the book in my lap. I trace the edges with my fingertips, briefly feeling defeated, guilty, mind in quicksand. Knowing it's one of my last labors as a doula, memories of past births begin resurfacing: memories of sweetness, of strength, but also of grief and disillusionment.

The bureaucracy of birth is wrought with trauma and healing. We find ourselves, as doulas, midwives, and advocates, deep in the thicket of institution, navigating and balancing patient and protocol. Hospitals, like most social institutions, function as a disciplinary force for social control. While some may deny this, many of us cannot. Ultimately, we are wholly appreciative for life-saving technologies, yet we still must analyze and critique those same technologies, for they can and do cause irreversible harm.

Obstetric violence is a relatively new term for events that have an extensive and complex history, spanning land, culture, generations, and bodies. Obstetric violence, first defined in Venezuelan legal texts in 2007, is "the appropriation of the body and reproductive processes of women by health personnel, which is expressed as dehumanized treatment, [and/or] an abuse of medication to convert the natural processes into pathological ones, bringing with it loss of autonomy and the ability to decide freely about their bodies and sexuality, negatively impacting the quality of life of women" (Pérez 2010, 201). More simply, obstetric violence is a violation of human rights, and these violations exist at the intersection of violence against women and structural violence.

At the crux of a shift from fragmentation to holism, from transition to crowning, it is a pressing imperative in reproductive justice work that we recognize that the doula's role exists at the intersection of dissent and the maintenance of the established order. There is no denying that doulas are restricted to a role of subservience within the institution; the doula is forced to assimilate and comply in order. Ask yourself, how can the doula accurately symbolize the birthing body's reassertion of decisional authority while simultaneously being restricted to a role of subservience?

While still maintaining an unwavering reverence for the work and service of doulas, we may begin to describe this phenomenon as a paradox or anomaly. Doulas are forever on the frontlines, working tirelessly in the shadows of bureaucracy, holding space for families and communities, weaving together threads of light and hope for future generations—as are midwives. However, while this romanticization of doula work can be rightfully encouraging and validating—comforting even—it is our right and our duty to critique its capacity to effect real and lasting change.

The insertion of the doula's presence into the hospital is a form of docile protest. It is docile because we must operate within the confines of institutional rules and reg-

Photograph | Vince Fleming

ulations. Doula-supported hospital birth is considerably safer from interventions than unsupported hospital birth, but we cannot ignore the fact that, with positive outcomes being the goal, the vast majority of births need not occur within a medical setting at all (Wagner 2001). From this perspective, I believe it's safe to acknowledge that the doula is both protest and retreat in the same gesture (Foucault 1975). Rather than a full reclamation of autonomy through holistic or humanistic care, hospital doulas are both an impetus to change and a continued expression of oppressive social conditions simply by their continual reinforcement of the normalization of hospital birth.

This piece is clearly an oversimplification of a very complex issue. It is clear that a shift from obstetrics back to midwifery care will take decades. As a now-30-year-old who was once a teenage mother on Medicaid, the awareness of midwifery care being unaffordable and, oftentimes, geographically inaccessible, is not lost on me. In the here and now, doulas serve an undeniably critical role in the improvement of birth outcomes. This we know for certain. Doula work seeks to defend and protect physiologic birth—yet, by failing to directly support midwifery, we reinforce that which we protest: medicalization. The doula cannot be a symbol of radical resistance if the current role involves subservience within the socio-medical hierarchy. Doulas fill a major social gap in care, but the functioning of that role should be temporary, as a shift to midwifery is ultimately the key to sustainability in care.

Obstetric violence is one of the major reasons for the growing grassroots emergence of doulas in the health care system. Women saw a need for social care—a gap in the medical model—and they did not hesitate to rise and step in. Doula work is unregulated and autonomous, and it fills a need that would otherwise remain unaddressed. Doulas not only provide emotional and physical support, but they reduce the risk of medical intervention by encouraging families to question their providers and demand productive communication with hospital staff—of course, this is easier said than done. Although doulas contribute to the reintegration of the social model of care, the service is clearly reformist, not revolutionary.

We have been trained since birth to look outside ourselves for safety, to look to technocracy, a capitalist patriarchal power structure, as savior. Upon deeper inspection, we don't need saving, we need liberation. Doulas frequently and naturally contribute to a dialogue of reducing harm, both with clients and within the broader birth community. However, I believe eradication rather than reduction should be the end goal; that can only happen when we actively inform others about midwifery options.

In her ethnography of doulas, sociologist Bari Meltzer Norman concludes that doulas are largely "apolitical" and "passive," and that "in trying to make quiet waves, doulas ultimately help along the current medicalized system of birth" (Norman 2007, 280). Monica Basile poses an important question in her PhD dissertation, "Reproductive Justice and Childbirth Reform": "[T]o what extent are doulas capable of creating institutional change in order to improve birth experiences and outcomes?" (2012, 9).

If a pregnant woman says that she would prefer to avoid all unnecessary intervention, then why, as doulas, are we omitting information about homebirth? Along with educating families and communities, we must address barriers to care, along with legislative efforts, policy-making, establishment of accessible midwifery education, and expansion of insurance coverage. It is undeniable that the normalization of hospital birth is being perpetuated by doula care—but, in our defense, what options do we have? It's a double-edged sword. Our in-hospital support is undoubtedly proven effective; we provide evidence-based care that lowers the risk of most routine interventions and supports healthier outcomes. But to what extent, really?

What role do doulas play in the reclamation of bodily autonomy? Is the role revolutionary or reformist? Do doulas seek to liberate or perpetuate the limitations of our birthing freedoms? How do doulas participate in and perpetuate gender-based oppression in maternity care? Journalist Jennifer Block said, "By supplementing the hand-holding and informed consent conversations that nurses and doctors should be doing, and by buffering the level of intervention, [doulas] are perpetuating the very system they are in the business of changing" (Block 2007, 160).

It is one thing if a client chooses hospital birth because she desires pain medication and is comforted by technology; it is another to have a client who wishes to avoid medicalization altogether, yet is left unaware of alternative options. To fail to inform an individual that homebirth with a midwife is safe and attainable is to reinforce and normalize the cultural assumption that hospital birth is the best and safest option. At what point is withholding this information considered negligence on our part? At what point does a person's uninformed decision to birth in the hospital become our personal failure as informants?

Like many doulas, I find myself expanding my doula work beyond the prescribed role. Most of our political engagement happens outside the birth space, because it must. With individual cases, much of the informative work happens before the birth. Emotional and informational support generally happens prenatally, so that the woman is better prepared for the various institutional politics faced during labor. Why is it that we encourage clients to create a birth plan, an ideal anti-interventionist vision of their birth, only to sit back and watch silently as they intentionally hire a trained surgeon whose pathologized view of their body will naturally lead to active management? Once they step inside the hospital room, it is no longer up to them what happens to their body—and the fascinating part of this is: it's considered cognitive dissonance.

Doulas use catch-phrases like "informed birth" or "empowered birth," which are merely half-truths since we often fail to mention homebirth as an option. The midwifery and homebirth movements may seem parallel to the doula movement, but "doula care often represents a more accommodating variety of childbirth reform, most often seeking to improve women's birth experiences within the hospital setting, where 99% of births take place" (Basile 2012, 8). This statistic is an interesting one given the knowledge that "70 percent of all birthing women in America, if given adequate prenatal care, could deliver their babies normally and without need of medical intervention at all. Another 20 percent may have complications that require extra prenatal care and some special attention, but these mothers, too, could give birth normally, again, without need for medical interference. This means that at least 90 percent of all birthing mothers can have normal, spontaneous births and have healthy babies" (Arms 1975, 56).

We can now see a shift in culture happening, beginning with the recent discussions sparked by a *NY Times* article, "New York to Expand Doulas to Reduce Childbirth Deaths," published in April 2018. The article describes a plan for a series of initiatives aimed at addressing maternal mortality in New York, where the mortality rate for black mothers is alarmingly high. The plan, according to the author, includes "a pilot program that will expand Medicaid coverage for doulas" (Ferré-Sadurní 2018). The announcement immediately created an uproar in the NYC doula community and beyond. Some celebrated it, while others, including me, expressed deep criticism and skepticism. With the widespread acceptance and push for standardization of doula support in the medical setting, it seems we are choosing to maintain medicalization rather than to revitalize midwifery.

Let us consider where our allegiance truly lies: Is it with institution, or with women? If it is with women, we should inarguably be promoting a shift to midwifery care in home and birth center settings for women with uncomplicated pregnancies. Our focus would be supported and encouraged with an agenda to establish accessible midwifery education in every state, fund midwifery campaigns, and encourage insurance coverage for traditional midwifery care.

According to the Birth Trauma Association, the leading cause for birth trauma is the type of delivery. The factors include labor induction, feelings of loss of control, high levels of medical intervention, cesarean section, impersonal treatment, being ignored or neglected, conflict with hospital staff, lack of information and/or explanation of procedures, lack of privacy and dignity, iatrogenic harm to baby, and poor postpartum care (Birth Trauma Association 2004). While a few of these factors are caused by technological intervention, many are undoubtedly due to lack of social support. With this in mind, the solution seems simple: support midwifery.

I stir from my daydream when the nurse exclaims, "It's time to push!" Still wiping the sleep from her eyes, the quiet mother rolls toward me, reaching for her cup of ice chips. I stand and spoon-feed her as the nurse adjusts the stirrups on the bed. The room smells of bergamot and mint tea, thanks to my open doula bag. I take a few long gulps of cold coffee from a styrofoam cup. Golden orange hues peek around the edges of closed curtains, evidence of a new day dawning as she takes a deep breath and starts to push.

This last birth as a doula was marked by trauma and overwhelming defeatism. The mother's sobs filled the room. She shook, gripping my hands, repeating her fear of cesarean over and over. The obstetrician stood over her, her words insensitive and sharp, "It's not your fault you were born with this body."

A flash of internal rage overwhelmed my thoughts. *How dare she? How dare this doctor, a fellow woman, tell this mother her body is broken?* Internalized misogyny runs deep. The institution's denial of nourish-

ment in addition to the continuous drip of Pitocin was to blame. Her body is not broken, the system in which she is caught is broken. Denied sustenance in labor for 24 hours, only to be told it was her fault.

I quieted my rage and softened as I turned to the mother. As her doula, I was there to soothe her, comfort her, remind her of her strength. Her sobs slowed into deep sighs as I removed the wet cloth from her forehead and told her she is so strong. I watched as she was wheeled off to the OR, silently affirming I can no longer bear witness to these obstetric abuses.

When looking toward our own stories as doulas, births we've attended, abuses we've witnessed, it is easy to see the conventional doula's role is indeed a form of pathological protest—a metaphorical band-aid (emotional support) for a systemic infection (obstetric violence and the medicalization of birth). This is no easy task since, as I have acknowledged before, each doula has a vision of what her work means—whether political or apolitical. Even an apolitical doula can be labeled an activist simply for existing in the medical space and offering emotional support that would otherwise be absent without her presence. That being said, my work as a doula is intentionally and unapologetically politicized, and even though I would love to see a radical shift in the doula's role, I admire doulas who—even without an intent to dismantle the system—simply choose to hold space for women in their most vulnerable states. It makes a difference in the lives of so many.

For the doulas whose work is intentionally political, Basile shares: "Doulas working in the reproductive justice model are shaping new directions in the priorities of birth workers and forging connections between birth workers and activists for causes such as LGBT rights, abortion rights, prisoners' rights, and economic and racial justice" (2012, 5). Basile also discusses the emergence of the doula movement as part of the broader women's health movement: "Many of the goals of doula care run parallel to feminist principles: expanding the range of reproductive choices for women, centralizing embodied knowledge, and promoting self-help and solidarity among mothers" (8).

What can a doula do?

Doulas can easily support midwifery by dispelling myths about homebirth and by sharing information about the safety and benefits of midwifery care. If a client says she wants to avoid medicalization, it is the perfect time to discuss options. Most pregnant women are unaware of evidence-based practices involving the safety of birthing at home.

Many times clients aren't aware of local midwives or birth centers in their state. Doulas can carry an up-to-date list of midwifery-related resources for discussion during prenatal meetings while a client is still deciding on a care provider. Having these conversations with clients is key to providing optimal support.

Networking with other doulas, midwives, and birth centers is an important part of the work. Not only does it provide the best options for pregnant clients, but it aids in the revitalization of midwifery. It is also important to mention that even if a client decides on midwifery support, the support of a doula at home is still just as beneficial as it is in the hospital—not to mention that it can relieve the midwife of some of her duties so that she may be more attentive to clinical aspects, like assessing labor progress or catching the baby.

Each individual and her collective life experience is unique and, as doulas, we always support informed decision-making, whether that includes an elective surgical delivery at the hands of a skilled obstetrician, or a freebirth in which the act of resistance is full rejection of all assistance other than the birther's own instinctive hands. Neither is wrong or right, as long as basic dignity and respect are practiced and intact. This is what reproductive justice is all about: total liberation and autonomy. In Jessica González-Rojas' and Kierra Johnson's words:

> To be clear, reproductive justice is not a label—it's a mission. It describes our collective vision: a world where all people have the social, political, and economic power and resources to make healthy decisions about gender, bodies, sexuality, reproduction, and families for themselves and their communities. And it provides an inclusive, intersectional framework for bringing that dream into being. Reproductive justice is visionary, it's complex, it doesn't fit neatly on a bumper sticker, and it has a lot to teach us about how to be successful in a changed and changing world (2013).

In closing, let us be reminded of the primacy of practice over belief. It is simply not enough for us, as doulas, to believe in the safety and normalcy of physiologic birth; we must also learn the principles of feminist praxis and remain constant in our advocacy. It is simply not enough for us to be well-intentioned; we must also embody our knowledge. Our actions must be in alignment with our visions. We must resist docility. We must socialize birth by de-medicalizing it. We must assist midwives in the revitalization of midwifery, for these actions are paramount to creating a future and culture of health equity and optimal care.

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What Do Doulas Really Do?

by Penny Simkin

A doula is a person "experienced in childbirth who provides continuous physical, emotional, and informational support to the mother before, during, or just after childbirth" (Klaus, Kennell, and Klaus 1993).

Introduction

In the 1980s and early 1990s several seminal events occurred that affected me deeply: the publication of John Kennell's and Marshall and Phyllis Klaus's first papers and books showing the positive impact on birth outcomes when women receive continuous labor support by a kind encouraging lay person (Sosa et al. 1980; Klaus et al. 1986); the publication of Michel Odent's book *Birth Reborn*, which eloquently described the instinctual and labor-promoting behavior of laboring women when they feel free, safe, and undisturbed (1984); and a qualitative study that I conducted, which showed that women remember their first childbirths vividly, accurately, and poignantly for at least 15 to 20 years (Simkin 1991 and Simkin 1992). The long-term satisfaction of these women was associated much more with how they recalled being treated by their caregivers than with whether their births were easy, difficult, or complicated.

These events, combined with my own early experience as a childbirth educator attending the labors of some of my students, helped me see how different women are during labor than how they are in daily life. The more I witnessed this, the more curious I became. Having now attended hundreds of births as a doula, I have thought a lot about the unique role of doulas compared to others who attend births. I want to share those thoughts in this paper.

Research on Doulas' Impact on Birth Outcomes

As doulas have increased in numbers, they have drawn the attention of researchers around the world, who have compared birth outcomes when women had continuous labor support in any form (nurse, midwife, partner, family, friends, doula) or no support (Bohren et al. 2017).

My question is: What is it about the doula that improves outcomes more than any other person who provides labor support? The opening sentence of this paper, which defines the birth doula very simply, leaves us with the question, "How and why does a doula make such a difference?" To find out, let's explore the role of the doula in more detail.

The Changing State of Mind of the Laboring Woman and the Role of the Doula

Women in labor are in a fluid state of consciousness, which shifts as they respond to the changing sensations and demands of labor. For example, at various times they may exhibit any of the following states of mind: alert, thoughtful, sociable, upset, angry, frightened, calm, withdrawn, quiet, active, vocal, dependent, overwhelmed, tense, peaceful, instinctive, or more.

In early labor, they are likely to behave in their "usual ways"—being conversational, being social, asking and answering questions, making decisions, using humor, etc. They are engaging their neocortex—the thinking/reasoning part of the brain—which is the site of most higher brain functioning. As labor advances and intensifies, they begin to recognize that they have no control over the labor, their affect changes, and they may express self-doubt, fatigue, fear, or dread. This change in mood indicates that older, more "primitive" parts of the brain—the limbic system and brain stem—are activated. These parts govern instinct, mood, basic emotions (such as fear, pleasure, anger), drives related to self-preservation (such as hunger, sex, care of offspring), and basic physiology (such as blood pressure, pulse, sleep/wake states, breathing), and more. If the laboring woman feels safe and

Research Findings on Continuous Labor Support by Doulas and Others

The most recent Cochrane Review of 26 randomized controlled trials of continuous support in labor (compared to no labor support) reported that when women had continuous support of any kind—from loved ones, midwives, or other hospital staff or doulas—they were less likely to:

- "have an epidural or other regional analgesia to manage pain.
- use any type of pain medication (including narcotics).
- give birth by c-section.*
- give birth with vacuum extraction or forceps.
- give birth to a baby with a low Apgar score at five minutes after birth.
- be dissatisfied with or negatively rate their childbirth experience"* (Bohren et al. 2017).

*Only when a doula provided the support were the asterisked outcomes improved.

Support from a loved one or hospital staff did not affect these outcomes, but when women had a trained doula, they were:

- 39% less likely to have a cesarean.
- 35% less likely to report their childbirth experience negatively.
- 15% more likely to have a spontaneous vaginal birth (no forceps or vacuum extraction) (Childbirth Connection 2017).

supported, she stops trying to control the labor and lets her body take over. If she feels alone, criticized, endangered, frightened, or threatened, she goes into "fight or flight" mode, and produces catecholamines (stress hormones—epinephrine and others) that interfere with maternal and fetal well-being and labor progress (Buckley 2015).

In active labor, women are vulnerable and less engaged with those around them, focus inward, use few words, and behave instinctually. They may rock, vocalize with moans or repeated phrases ("I can do it, I can do it"), count, or tap—in a rhythm. With good support and little disturbance, they find their own best way to get through the contractions. I call this their unplanned "spontaneous ritual." They are in an altered state (sometimes referred to as "the zone," "la la land," "labor land"). Ina May Gaskin says the woman lets her "monkey do it," (Gaskin 2003, 253) referring to the parts of the brain—the limbic system and brain stem—that govern feelings of well-being and guide instinctual behavior, including the birth process. When in labor, women deal with intense emotions, along with physical sensations of pain and extreme effort. Sometimes the doula or a confident partner is an essential part of the ritual, using a soothing tone of voice and murmuring or vocalizing along with her, or silently rocking with her or holding or stroking her. These actions allow release of oxytocin, which enhances contractions along with feelings of well-being. (If there is a disturbance, or a person comes in or asks questions, the laboring mother may snap out of the ritual temporarily, and then resume it after the interruption has passed.)

If, however, the laboring woman feels "unsafe"—from being ignored, criticized, distracted, or treated disrespectfully—or if problems develop for mother or baby—she may be too frightened or distressed to release control. This can lead to "fight or flight" mode, which causes release of high levels of stress hormones (epinephrine, norepinephrine, and others) that may interfere with oxytocin production, labor progress, and fetal well-being (Buckley 2015).

It seems to me that a major part of our role as doulas is to facilitate the laboring woman's instinctive ability to labor and to help her feel safe to let go. If we doulas are to help, we must "speak to her condition"; in other words, recognize and match her state of mind. Rather than using words, explanations, and detailed discussions, doulas are likely to sit quietly close by; entrain ourselves to the birthing person—mirroring or modeling rhythmic movements, rocking and swaying; make eye contact; touch; or vocalize in a calm soothing voice. I call this "being in the woman's rhythm." We communicate at an instinctual level and, because we are there continuously and have no clinical role, we focus mainly on the emotional state and physical comfort of the birthing woman and can recognize and respond to changes in progress and mood better than if we go in and out of the room. As needed, of course, we also assist with positions, movements, comfort measures, and strategies to improve labor progress.

How Do Doulas Complement the Role of the Partner?

Doulas are often asked why they are needed if the laboring woman has a loving partner who plans to be involved. The two roles are very different. Both contribute in different ways. The partner knows the laboring woman better than anyone who is at the birth—her hopes, fears, worries, history, values, dreams. Also, the partner loves her more. Depending on the partners' personal qualities, they may find the birth invigorating and exciting or frightening and exhausting. They may feel competent and helpful, or not. The doula has training and experience from attending many births. Doulas learn the role that the couple want the partner to play and what may be needed. Partners may or may not want to play an active role. The doula may guide, feed, and relieve the partner when a break is needed; reassure, educate, assist, remind, and show the partner ways to help; and, sometimes, replace the partner. Of course, laboring women often benefit from more than one person for touch, eye contact, and physical support.

How Do Doulas Complement the Role of the Midwife or Nurse?

The clinical role of care provider prioritizes the goals of survival and good health with no lasting harm. It includes continuing observation of mother, baby, and labor progress; and, if a problem arises, the care provider employs measures to correct the problem and minimize the undesired effects of the solution. The emotional state of the mother is another priority, but of lower importance.

Mental alertness, broad knowledge, and clear, quick thinking are important qualities of the care provider, who functions at the highest level of the central nervous system—the neocortex. This is the part of the brain where thoughts, evaluation, interpretations, and judgment take place. The communication style of the caregiver often does not fit that of the laboring woman, who may be functioning at the level of the limbic system—where feelings like stress, fear, well-being, and dependency predominate over reason and judgment—or her brainstem may be activated, where instincts for survival ("fight or flight") dictate behavior.

The dilemma is that two people—caregiver and client—are trying to communicate at different levels. For example, the caregiver may ask questions during contractions or discuss facts, care strategies, decisions, "science," risks, or benefits in the same tone and words that would be used in a prenatal visit in the office when the woman is composed, thoughtful, and engaged. In labor she may respond with, "Do whatever you have to do," or "I just want it to be over!" (I often wonder if it is possible to carry on a rational, calm conversation and make truly informed decisions when in the throes of active labor! This is a topic for another time!)

The doula offers a unique form of labor support that is distinctly different from care by midwives, nurses, or birth assistants. Although there is some crossover, doulas and clinical personnel complement each other; they do not duplicate what they offer the laboring woman and partner.

The biggest differences between doulas and midwives or nurses are these: First, doulas have no clinical role in care—procedures, decisions, or advice. Clinical care providers constantly monitor maternal and fetal well-being, contraction pattern, and labor progress, as well as maternal emotions and behavior. Their main goals are survival of mother and baby without any health problems. Doulas do not have clinical responsibilities or the skills or edu-

cation to perform a clinical role, which leads to the second big difference in the contributions of doulas and clinical care providers.

Because doulas are likely to be with the woman *continuously* (except for bathroom breaks) from early in labor until an hour or two after the birth, they can track the dynamics in the room, observe the behavior and emotional states of the birthing woman and supporters, and adapt their care accordingly. They know when to be upbeat or reassuring, when to model patience and confidence, and when to guide and educate the woman or her partner. When the parents are discouraged, demoralized, or exhausted, doulas empathize, change the circumstances, become more directive, or help the parents adjust to a change in care plan, if needed. The doula's role is challenging to describe, because the role is adapted to the birthing individual and the situation, moment by moment.

Doulas have the luxury of focusing on "matching the mood" of the laboring woman and can communicate with her in a variety of nonverbal ways, as her moods and her labor change. At the same time the doula is aware of the larger picture—environment, interactions among those in attendance, labor progress, and how all these may be affecting the laboring woman. Thus, the doula can truly be with her as she progresses through the shifts in emotions and physical sensations that occur during labor, birth, and afterward.

Conclusion: Possible Explanation for How Doulas Improve Birth Outcomes

In conclusion, the answer to the question, "What do doulas really do?" is complicated. You've read my long answer (this whole article!). My short answer is that doulas do whatever it takes for as long as it takes to see the family through a safe and satisfying birth, as defined by that family.

We do know this. When doulas are present during labor:

- Oxytocin flows and causes effective contractions, more spontaneous births, and a parent who is ready (eager) to nurture and nourish the infant—who is alert, curious, and lovable.
- Stress hormones are reduced, thus reducing maternal and fetal distress and slow labor.
- Their non-clinical role fosters and facilitates the physiologic process and improves birth outcomes.

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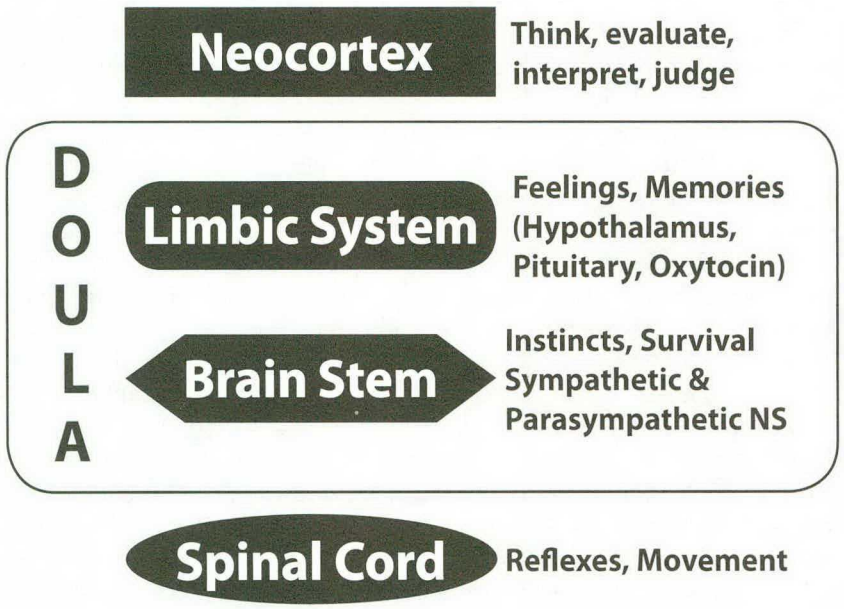
Parts of the brain and their basic functions. The doula's continuous support, by addressing basic subconscious human reactions (limbic system and brain stem), may be a key element to explain how and why doulas improve birth outcomes. When one feels safe and cared for, physiological functions are facilitated.



Doulas and Midwives

Transforming the Landscape, Together

by Courtney L. Everson and Melissa Cheyney

Despite spending $111 billion annually on maternity care, the United States is plagued by poor maternal and infant health outcomes, ranking thirty-third on the 2015 Mother's Index—a global measure that evaluates the well-being of mothers and children by nation (Save the Children 2015). High rates of unnecessary interventions in childbirth combine with access to care issues and obstetric violence (Perez D'Gregorio 2010) to produce birth experiences all too often marked by disempowerment, disrespect and even victimization (Althabe and Belizán 2006; Martin et al. 2017; Machizawa and Hayashi 2012). Midwifery and doula models of care have been proposed as potential solutions to our nation's maternity care crisis through their emphasis on normal, physiologic birth and women's autonomy in decision-making, including how, where and with whom they give birth. Yet, despite sharing many of the same tenets and core beliefs about childbirth, doulas and midwives have not always organized in solidarity.

In a chapter we contributed to *Doulas and Intimate Labour: Boundaries, Bodies, and Birth*, entitled "Between Two Worlds: Doula Care, Liminality, and the Power of Mandorla Spaces," we—as medical anthropologists and a practicing birth doula (Everson) and homebirth midwife (Cheyney)—argue that disconnects between midwives and doulas are tied to the differential spaces the two professions occupy relative to the obstetric hierarchy (Everson and Cheyney 2015). While homebirth midwifery remains highly controversial, doulas are both part of the obstetric community—through their work largely in hospitals—but not fully embraced by the medical field. In that chapter, we examine how doulas occupy a liminal, or intermediate, space within the US maternity care landscape—a space between the two worlds of midwifery/home and medical/hospital. The intermediate space is called the mandorla (or almond-shaped center) and it is created by overlapping midwifery/home and obstetric/hospital parent spheres (see Figure 1).

Despite the tensions present in the mandorla, this intermediate space that doulas hold also has the power to fuel re-negotiation and resistance in US childbirth reform or—in the words of Johnson and Davis-Floyd—"inside the overlap [the mandorla], separate domains are united and merged into innovative structures, within which effective solutions can emerge" (Davis-Floyd and Johnson 2006, 472).

This new, dedicated section on doulas in *Midwifery Today* aims to explore exactly that—effective solutions to transform the maternity care landscape and advance choice, access and health equity. Effective—and, we argue, transformative—solutions to the US perinatal health crisis will not be found in care models that work in isolation. Birth does not occur in a vacuum, but against a backdrop of social, political and cultural pressures as well as needs. As such, targeted social support is integral to birth. In the chapter "Between Two Worlds," we outline five themes that constitute doula models of care and position doulas as support specialists: 1) specialization in the psychosocial needs of childbearing women; 2) support of physiologic birth; 3) provision of individualized, evidence-based support; 4) facilitation of communication and relationship; and 5) continuous companionship. Such support can and does occur across any site of delivery (home, birth center, hospital), with any clinical provider type (midwife, obstetrician) and during any birth choice. In providing a complementary support role across place of delivery and models of care, the mandorla space that doulas occupy integrates elements of each parent sphere (see Figure 1).

Similar to the physical and psychosocial threshold that laboring women cross as they transition from their pregnant identities to their mothering identities during birth, the work of the doula can create an opening in the otherwise medically dominated maternity landscape. Through this opening, both childbearing families and the maternity system at large can explore new messages, norms and care options. Rather than face the disempowering messages and behaviors all too common in medical care, could families learn from doulas about the empowerment, confidence and autonomy possible in birth? Could these new messages help birthing women better understand their options in childbirth? Could the benefits of physiologic birth in reducing interventions and achieving healthy outcomes for moms and babies be further achieved? Could this critical opening help to advance midwife-led care and community birth for more families? We argue a resounding yes on all counts.

In a landscape plagued by health inequities and disrespect in childbirth, we contend that resistance to dehumanizing care and the negotiation of childbirth reform must occur across models of care and sites of delivery. Rather than focusing on issues such as home versus hospital or midwife versus physician—in which doulas and families hover between two worlds, unsure of where their contribution and acceptance lies—we argue that both doulas and midwives can work together to relocate choice and power back to women.

We envision an agenda for the doula section of *Midwifery Today* that uses the power of the mandorla space to help midwives and doulas work together to transform the landscape and bring about systems-wide change. Specifically, we urge contributing authors to explore: 1) How can doulas help create social change at institutional and individual levels?; 2) What role do doulas play in perinatal health equity and the provision of culturally specific birthing care?; 3) How can more families access the documented benefits of doula care?; and 4) What strategies are available to doulas and midwives for working together in client-centered

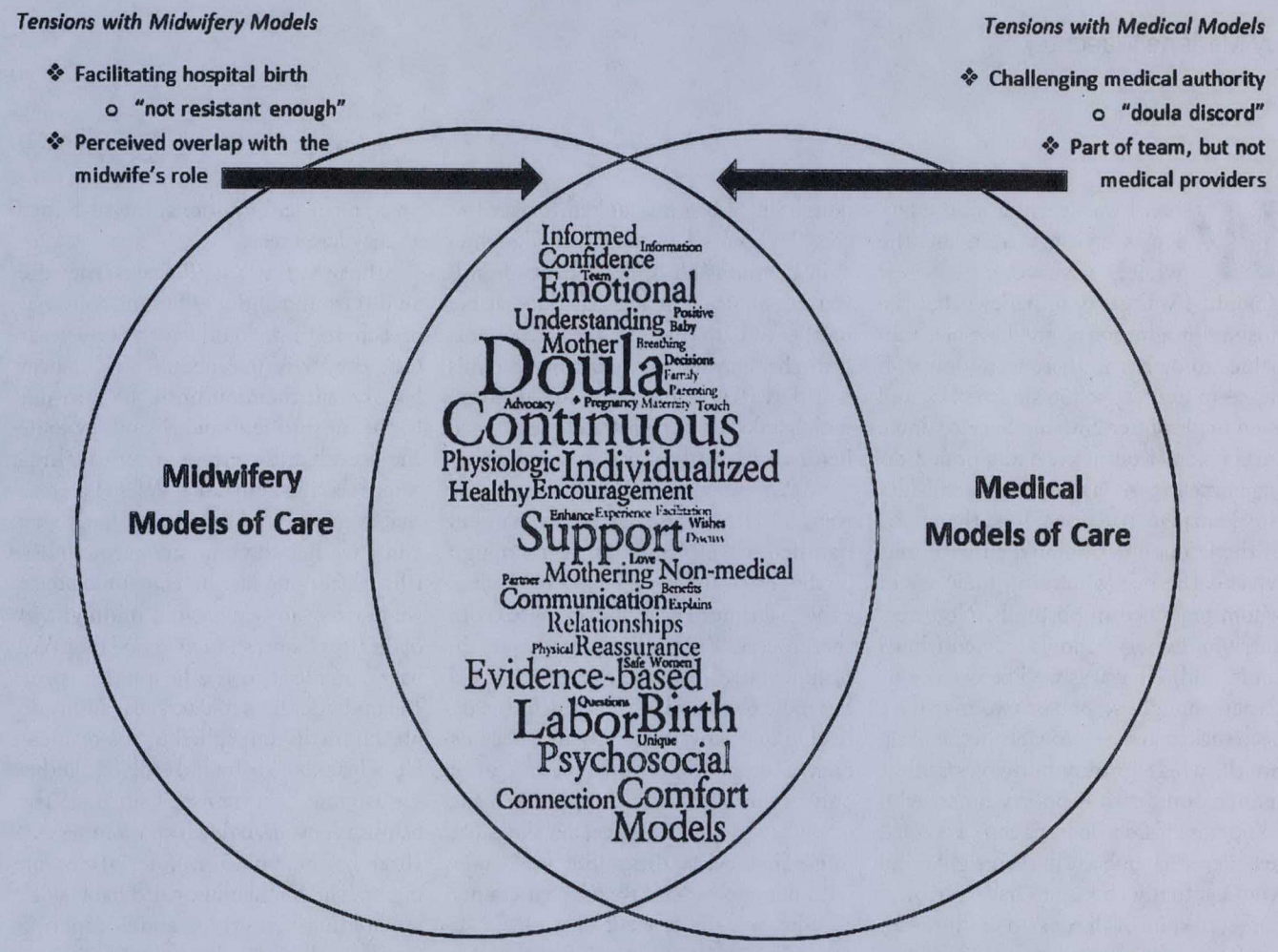


Figure 1. Birthing models of care and the mandorla space (reproduced from Everson and Cheyney, 2015)

care models? Collectively, these questions and more will help midwives, doulas and childbearing families reap the benefits of collaborative care and find common ground to initiate needed reform in childbirth. As the saying goes, a rising tide lifts all boats.

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BEARING THE BURDEN OF CARE: EMOTIONAL BURNOUT AMONG MATERNITY SUPPORT WORKERS

Miriam Naiman-Sessions, Megan M. Henley and Louise Marie Roth

ABSTRACT

This research examines effects on emotional burnout among "maternity support workers" (MSWs) that support women in labor (labor and delivery (L&D) nurses and doulas). The emotional intensity of maternity support work is likely to contribute to emotional distress, compassion fatigue, and burnout.

This study uses data from the Maternity Support Survey (MSS) to analyze emotional burnout among 807 L&D nurses and 1,226 doulas in the United States and Canada. Multivariate OLS regression models examine the effects of work–family conflict, overwork, emotional intelligence, witnessing unethical mistreatment of women in labor, and practice characteristics on emotional burnout among these MSWs. We measure emotional burnout using the Professional Quality of Life (PROQOL) Emotional Burnout subscale.

Work–family conflict, feelings of overwork, witnessing a higher frequency of unethical mistreatment, and working in a hospital with a larger percentage of cesarean deliveries are associated with higher levels of burnout among MSWs. Higher emotional intelligence is associated with lower levels of burnout, and the availability of hospital wellness programs is associated with less burnout among L&D nurses.

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While the MSS obtained a large number of responses, its recruitment methods produced a nonrandom sample and made it impossible to calculate a response rate. As a result, responses may not be generalizable to all L&D nurses and doulas in the United States and Canada.

This research reveals that MSWs attitudes about medical procedures such as cesarean sections and induction are tied to their experiences of emotional burnout. It also demonstrates a link between witnessing mistreatment of laboring women and burnout, so that traumatic incidents have negative emotional consequences for MSWs. The findings have implications for secondary trauma and compassion fatigue, and for the quality of maternity care.

Keywords: Emotional burnout; compassion fatigue; maternity support; secondary trauma

INTRODUCTION

Helping occupations are a growing field of workers that nurture the physical, emotional, and social well-being of others. Within this field, helping professionals face significant emotional, physical, and spiritual demands as they confront human suffering and meet the needs of society's most vulnerable members. Workers in helping occupations provide care and compassion in a society that often devalues it. As a result, these workers face elevated risks of emotional burnout and compassion fatigue, presenting important problems for the retention of care workers and for quality of care.

In the field of helping occupations, we define workers that support women in labor as "maternity support workers" (MSWs). MSWs offer women information, emotional, and/or physical support, and advocacy during pregnancy, childbirth, and postpartum (Morton & Clift, 2014; Roth et al., 2014). MSWs are present for life-changing events, and the intensity of maternity support work is likely to contribute to high levels of emotional burnout and compassion fatigue. Within maternity support work, labor and delivery (L&D) nurses provide support, monitor labor progress, and administer medications, while doulas provide continuous support to laboring women but do not provide medical services or advice. L&D nurses and doulas have different organizational positions and relation to medical procedures, which may influence their attitudes toward birth and consequently their susceptibility to emotional burnout. However, existing research has not considered contributors to burnout in a maternity care setting. How do MSWs manage the emotional intensity of their work? What influences the level of emotional burnout among MSWs? Also, given their different positions within the medical establishment, how do the factors that influence burnout differ for these two groups of MSWs?

Many MSWs do this work because they have a desire to care for others or strong beliefs about the importance of birth in women's and families' lives (Eley, Eley, Bertello, & Rogers-Clark, 2012; Morton & Clift, 2014). Those beliefs may be based on their own life experiences, their experiences supporting women with traumatic birth experiences, and/or their views of common medical practices in hospital birth. This study contributes to the literature on emotional burnout among care workers by analyzing the effects of experience-based attitudes toward birth, views of common obstetric practices, and frequency of witnessing unethical mistreatment. We use data from the Maternity Support Survey (MSS) to analyze emotional burnout among L&D nurses and doulas in the United States and Canada. The MSS contains data on the characteristics and attitudes of L&D nurses, childbirth educators, and doulas, although this analysis focuses on L&D nurses and doulas who physically support pregnant women during labor and birth. It includes measures of experiential knowledge, attitudes toward common medical practices, and the frequency of witnessing traumatic events, all of which may influence burnout for MSWs.

MSWs

Research shows that labor support is associated with improved birth outcomes, less reliance on pain medication, shorter labor, fewer cesarean sections and assisted vaginal deliveries using vacuum or forceps, greater satisfaction with the birth experience, and lower rates of postpartum depression (Deitrick & Draves, 2008; Flamm, Berwick, & Kabcenell, 1998; Hodnett, Gates, Hoymeyr, & Sakala, 2013; Klaus, Kennell & Klaus [1993] 2012; Kozhimannil et al., 2016; Mander, 2001; Manning-Orenstein, 1998; McGrath & Kennell, 2008; Simkin, 1991). However, research has yet to examine how the emotional labor that MSWs perform influences the emotional well-being of the workers themselves (Ekström, Guttke, Lenz, & Wahn, 2011; Liva, Hall, Klein, & Wong, 2012; Monari, Di Mario, Facchinetti, & Basevi, 2008; Morton & Clift, 2014; Reime et al., 2004; Sandelowski, 1984).

MSWs have limited influence in the medical model of hospital birth, where obstetricians have authority over other workers (Simonds, Rothman, & Norman, 2007). Over 99% of births in the United States and Canada occur in hospitals and hospital births involve high rates of medical procedures, including continuous electronic fetal monitoring (CEFM), the use of intravenous medication (Pitocin) to stimulate labor, and cesarean delivery. Changes in the healthcare system, like shorter hospital stays, an increased reliance on technology, and decreased staff ratios, have also led to a dehumanization of the birth process in hospital settings (Goldberg, 2002). L&D nurses increasingly monitor multiple laboring women from a nursing station outside the L&D room and have limited opportunities to support women one-on-one (Payant, Davies,

Graham, Peterson, & Clinch, 2008). This creates a conflict between values that emphasize birth as an important life experience and the realities of hospital birth. Hospital practices may also have different effects on burnout for L&D nurses and doulas because nurses are integrated into the hospital system and their job involves implementing medical protocols. In contrast, doulas often enter maternity support work because they are committed to a midwifery model of care and a woman's right to make informed choices about her healthcare (Morton & Clift, 2014). As a result, these two maternity support roles are likely to hold different views of common hospital procedures, which may influence their levels of emotional burnout and compassion fatigue.

EMOTIONAL BURNOUT AND MATERNITY SUPPORT WORK

Emotion work refers to individuals' efforts to manage their own and others' feelings and emotional expressions (Hochschild, 1979). Emotion management can involve the suppression and evocation of emotion through cognitive, bodily, or expressive processes, like deliberate changes in thoughts, control of physical symptoms, or changes in gestures (Hochschild, 1979). The term emotional labor applies when this work is commodified and performed in service and caring occupations (Cancian & Oliker, 2000; Hochschild, 1983). These occupations are often susceptible to emotional burnout and compassion fatigue.

Emotional burnout is a state of physical and emotional depletion that results from excessive job and/or personal demands and continuous stress (Lee & Ashforth, 1990; Maslach, 2003; Maslach & Jackson, 1981). Burnout often occurs gradually, as a long-term result of working in draining situations. Emotional burnout can be hard to treat because of the way it builds over time (Pines & Aronson, 1988). Compassion fatigue is a related condition that occurs due to a "state of tension and preoccupation with the cumulative impact of caring" (Figley, 1983: l0). Those who work in care occupations, like nursing, are susceptible to compassion fatigue because caring and empathy are core values of these type of work (Figley, 1983; Melvin, 2012). Compassion fatigue can lead to feelings of isolation, fear, and anxiety, which can have serious consequences for care workers and their patients (Figley, 2002; Larsen, Stamm, & Davis, 2002). It can also occur after isolated incidences of trauma and in this respect is similar to secondary traumatic stress, which occurs when care workers experience sudden incidences of extreme distress, leading to feelings of fear, anxiety, and isolation that can have lasting effects on them (Beck & Gable, 2012; Figley, 1995, 2002; Killian, 2008).

Emotional burnout and compassion fatigue can encourage absenteeism and turnover among care workers and can lead to the loss of one's capacity to care

for others (Figley, 2002; Maslach, 2003). As a result, care workers may give impersonal care as they attempt to distance themselves from their patients (Beckstead, 2002; Maslach, 2003; Miller, Stiff, & Ellis, 1988; Smith & Kleinman, 1989). Previous research has found that care workers who receive support from colleagues, report a satisfying work–life balance, and have higher levels of education are best equipped to combat emotional burnout and compassion fatigue (Beck & Gable, 2012; Perry, Toffner, Merrick, & Dalton, 2011; Townsend & Campbell, 2009). However, some influences on burnout are structural: deep-seated workplace policies and organizational culture frequently contribute to burnout, and this is especially difficult to treat (Pines & Aronson, 1988). Organizations can also underestimate the negative impact of emotional burnout and compassion fatigue on their workers and the care that they provide.

Many studies of emotional burnout focus on nurses as a prime example of care work and previous research has found that nurses have high rates of emotional burnout (Beckstead, 2002; Melvin, 2012; Miller et al., 1988; Pines & Aronson, 1988). Young nurses burn out faster and are less likely to engage in techniques to manage their emotions than more experienced nurses, who may develop strategies over time that shield them from burnout (Beckstead, 2002; Erickson & Grove, 2007; Smith, 1992). However, existing studies do not focus specifically on maternity support work, where L&D nurses traditionally performed the tasks that involve the most emotional labor – making women feel cared about and appearing calm and confident (Corbett & Callister, 2000). Now, L&D nurses spend only about 10% of their time providing direct support to laboring women and maternity care involves increasing use of technology (Davis-Floyd, 2003; McNiven, Hodnett, & O'Brien-Pallas, 1992). This is partly due to staffing and organizational constraints in the nursing profession, but it is aggravated by the fact that emotional labor is not highly valued (Davies & Hodnett, 2002; Huynh, Alderson, & Thompson, 2008). Hence, while the general public and new nursing students often perceive nursing as a profession that fills a care deficit left by physicians, L&D nurses face contradictory expectations as a traditional caring occupation that is undergoing processes of depersonalization. Over time, this can contribute to emotional overextension and exhaustion (Maslach, 2003).

The counterpoint to this maternity support role is doulas, whose specific mandate is to fill the care deficit and counteract depersonalization in the medical model of birth by providing one-on-one continuous support during labor. Research on the effectiveness of doula support has shown that doula-assisted births have fewer medical interventions, greater maternal satisfaction, and better infant outcomes (Hodnett et al., 2013; Kennell, Klaus, McGrath, Robertson, & Hinkley, 1991; Kozhimannil et al., 2016; Langer, Campero, Garcia, & Reynoso, 1998). Doulas are in a unique position because they support laboring women both within and outside the hospital setting. However, because doulas typically occupy no formal position within the medical

establishment, they must walk a fine line between challenging the medicalized birth model and accommodating it (Henley, 2015). Surveys suggest that doulas' biggest challenge in hospital settings is the lack of respect they receive from other healthcare professionals (Lantz, Low, Kane, Varkey, & Watson, 2005). Coupled with an emphasis on emotional aspects of the birth experience, this can contribute to burnout among doulas, whose culture emphasizes caring and commitment (DONA International, 2014). Thus, tensions with the medical model of birth may undermine the emotional needs of these MSWs.

BURNOUT: MITIGATING AND AGGRAVATING FACTORS

In this chapter, we focus on individual and organizational circumstances that affect the likelihood of emotional burnout and compassion fatigue among these MSWs, including work–family conflict; feeling overworked; emotional intelligence; positive and negative personal birth experiences; views on epidural analgesia, induction, and cesarean delivery; frequency of witnessing unethical mistreatment; percentage of births that MSWs attend that involve cesarean delivery; and presence of a hospital wellness program. This study makes unique contributions to the empirical literature by considering the effects of views of common medical procedures and witnessing mistreatment as factors that influence emotional resilience or susceptibility to burnout.

Work–Family Conflict

Family relations can serve an important role in one's mental, emotional, and physical well-being and family support can buffer emotional resilience (Carr & Springer, 2010). This is one reason that marriage can decrease vulnerability to burnout, although work and family commitments also pose emotional and time demands that can lead to work–family conflict (Killian, 2008; Peeters, Montgomery, Bakker, & Schaufeli, 2005). Work–family conflict increases the likelihood of emotional burnout, and the significant demands of care work can increase work–family conflict (Hochschild, 1979, 1983; Killian, 2008).

Overwork

Another important influence on emotional burnout is work overload. Long hours and excessive job demands can increase compassion fatigue in care occupations (Shirom, Nirel, & Vinokur, 2010). Among MSWs, nurses are in high demand, work long shifts, and face pressures to provide personalized care to multiple patients at a time while balancing patient care with other tasks (Beckstead, 2002; Maslach, 2003; Shirom et al., 2010). This can be overwhelming,

leaving L&D nurses depleted and unable to give as much as they would like. In contrast, doulas do not work long regular shifts, but they often attend long labors and can become overloaded if they attend more than one or two births per month. Perceptions of overwork among MSWs can aggravate problems of compassion fatigue and contribute to emotional burnout.

Emotional Intelligence

Previous research has found that emotional intelligence (EI) can serve as a protective factor against burnout (Mikolajczak, Menil, & Luminet, 2007). Nurses view EI, especially in the form of the ability to recognize and regulate emotions in oneself and others, as an important personal skill (Graham, Logan, Davies, & Nimrod, 2004; Huynh et al., 2008). Those considered "good" nurses by their peers can regulate their emotions, hiding their reactions and cultivating professional distance and detachment when necessary (Lawler, 2006). Doula training programs teach doulas how to regulate their own emotions and help others manage feelings of panic and anxiety. Thus, emotional regulation is an important skill for MSWs to master. MSWs with high EI may also have better protection against burnout (Mikolajczak et al., 2007).

Positive and Negative Birth Experiences

While previous research on emotional burnout among care workers has highlighted the importance of work–family conflict, overwork, and EI, it has paid less attention to the effects of personal experiences and beliefs on workers' emotional reactions to their work. For both L&D nurses and doulas, personal experiences can inspire empathy and compassion, and many MSWs (especially doulas) enter their field because they had positive experiences with their own births and they want to help others to have similar experiences (Henley, 2016). On the other hand, nurses and doulas who have had negative experiences with their own births may enter maternity support as a way to prevent other women from having a similar experience (Henley, 2016). This creates an emotional risk, because caring for women who have adverse events or suffer mistreatment may trigger secondary traumatic stress for MSWs who have had a negative personal birth experience, putting them at risk for depressive and post-traumatic stress symptoms that negatively influence their capacity to care for others (Olde, van der Hart, Kleber, & van Son, 2006; Zaers, Waschke, & Ehlert, 2008). Thus, while positive experiences may play an important role in the decision to enter care work, negative experiences may influence the ability to provide effective care (Henley, 2016; Roth et al., 2014). In this chapter, we look specifically at how both positive and negative birth experiences affect burnout among L&D nurses and doulas.

Views of Common Medical Procedures

Previous research on emotional burnout has largely ignored the possibility that workers may hold negative views of common organizational practices in their work environment, and that this could increase their likelihood of burnout. For example, many MSWs (especially doulas but also some L&D nurses) have negative views of obstetrical procedures like induction, epidural analgesia, and cesarean section and advocate for low-intervention approaches to childbirth. However, most MSWs support labor in hospital environments where L&D is medically managed, most labors involve CEFM and epidural analgesia, and induction is common. Moreover, L&D nurses must implement medical protocols as part of a hospital team, regardless of their own views. Consequently, they may find it easier to effectively care for women in labor when they hold positive views of obstetric interventions. In contrast, doulas do not engage in medical procedures, but they do witness them. When hospital practices contradict their views and their clients' birth plans, it can be emotionally deflating. Thus, we expect MSWs with more negative views of medical procedures to have higher levels of burnout.

Unethical Mistreatment

Mistreatment is unfortunately common in obstetric practice and there has been growing recognition of the high frequency with which women experience unethical mistreatment and emotional trauma while giving birth (Anonymous, 2015; Laine, Taichman, & laCombe, 2015; Roth, Henley, Seacrist, Torres, & Morton, 2016; Schiller, 2015). Mistreatment can come in various forms, including providers making demeaning remarks, ignoring women's requests, and engaging in procedures against the woman's wishes. MSWs witness these experiences, which may produce secondary trauma and compassion fatigue (Roth et al., 2016). Thus, traumatic incidents can have negative emotional consequences for both patients and the support people who care for them. The more frequently care workers observe this type of mistreatment, the more one expects them to experience emotional burnout.

Cesarean Sections

The medical model of birth involves a "cascade of interventions," in which each successive intervention incrementally increases the probability of a cesarean delivery. In 2011, 32.8% of births in the United States and 27.0% of births in Canada involved cesarean delivery, which is associated with substantial increases in maternal mortality and morbidity (CIHI, 2012; Liu et al., 2007;

Martin, Hamilton, Ventura, Osterman, & Mathews, 2013). Quality initiatives aim to reduce the primary cesarean rate, and birth advocates view technology and surgery as a significant contributor to worsening maternal outcomes (Morris, 2013). Most MSWs have negative attitudes toward cesarean deliveries, viewing them as an overused procedure with negative consequences for women's physical and emotional well-being. However, MSWs support many laboring women who have cesarean deliveries. Given their negative views of cesareans, one expects MSWs who attend a larger percentage of cesarean deliveries to suffer from more emotional burnout.

Hospital Wellness Programs

Finally, a crucial component in a study of emotional burnout involves organizational policies and programs that contribute to burnout susceptibility (Pines & Aronson, 1988). For example, the availability of a Hospital Wellness Program may reduce emotional burnout among L&D nurses who have access to wellness services. Programs focused on reducing stress and emotional burnout can include discussions of risk factors specific to care providers, development of personalized wellness plans, instruction in relaxation techniques, development of a supportive peer environment, and/or normalizing the experience of work-related emotional burnout (Medland, Howard-Ruben, & Whitaker, 2004; Zadeh, Gamba, Hudson, & Wiener, 2012). Prior research suggests that programs addressing psychosocial wellness can reduce emotional burnout and increase retention (Kravits, McAllister-Black, Grant, & Kirk, 2010; Medland et al., 2004; Zadeh et al., 2012). (We analyze this for nurses only, because doulas often work in various locations and are not organizational employees.)

Hypotheses

Based on the literature review and theoretical framework, we tested eight hypotheses about L&D nurses' and doulas' experiences with emotional burnout. First, MSWs who experience more work/family conflict will have higher levels of emotional burnout (H_1). Second, MSWs who perceive themselves to be overloaded will have higher levels of emotional burnout (H_2). Third, MSWs with greater emotional regulation will have lower levels of emotional burnout (H_3). Fourth, MSWs whose positive birth experiences influenced their birth views will have lower levels of emotional burnout (H_{4A}), while those whose negative birth experiences shaped their birth views will have higher levels of emotional burnout (H_{4B}). Fifth, MSWs with more negative views of obstetrical procedures will have higher levels of emotional burnout (H_5). MSWs who

witness unethical mistreatment more frequently will also have higher levels of emotional burnout (H_6), and MSWs who attend a higher proportion of cesarean deliveries will have higher levels of burnout (H_7). Finally, nurses with access to a hospital-based wellness program will experience lower levels of burnout (H_8).

DATA AND METHODS

Data for this study come from the MSS, a cross-sectional online survey of L&D nurses, doulas, and childbirth educators in the United States and Canada. For this analysis, we excluded respondents who worked exclusively as childbirth educators, because they were unlikely to provide active labor support. The survey recruited participants between November 2012 and March 2013 through each occupation's professional associations. The organizations for nurses were the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) and the Canadian Nurses Association (CNA). The doula organizations were DONA International, Health Connect One, toLABOR (formerly ALACE), CAPPA Canada, and Doula C.A.R.E. (Canada). The professional organizations emailed their current members a recruitment letter via email with a link to the survey, followed by up to two reminders. The research team also publicized the survey to other MSWs via social media (Facebook, Twitter, and maternity blogs) and email networks. The survey collected no personal identifiers, and the Institutional Review Board at the primary investigator's University determined the study to be exempt.

The survey contained questions about demographic characteristics, training and credentials in the maternity support field, sources of information/knowledge about birth, financial rewards of maternity support work, childbirth and breastfeeding experience, attitudes toward common labor practices and breastfeeding, attitudes toward other maternity support roles, work experiences including witnessing mistreatment, work satisfaction and burnout, hospital characteristics, understandings of informed consent, experiences with and knowledge of quality improvement initiatives, and questions specific to each maternity support role. A total of 3,325 respondents started the survey and 2,781 completed it, for a completion rate of 83.6%. Because of the recruitment methods, we cannot ascertain how many potential respondents were in the sampling frame and consequently cannot calculate an accurate response rate. After we excluded cases with missing values on relevant variables, 1,996 respondents remained (807 L&D nurses and 1,226 doulas). Some respondents held multiple maternity support roles, so the number of nurses plus the number of doulas totals more than 1,996.

Dependent Variable

The dependent variable for this analysis is the Professional Quality of Life (PROQOL) Emotional Burnout subscale. The Emotional Burnout subscale consists of 10 questions with responses on a Likert scale (1 = never to 5 = very often). Table 1 presents the PROQOL emotional burnout subscale items with their means and standard deviations. The internal consistency reliability of the emotional burnout subscale was strong for the whole sample ($\alpha = 0.76$) and within roles (nurses $\alpha = 0.79$, doulas $\alpha = 0.72$). Prior studies using this tool report a similar internal consistency reliability ($\alpha = 0.75$) (Stamm, 2010).

Independent Variables

Demographic characteristics included age, race, household income, level of education, and marital status. Over 99.5% of respondents identified as female. Regions included Canada and the Northeastern, Midwestern, Southern, and Western Census regions in the United States (West = reference). We tried to include both age and years in nursing in the models for nurses, but could not because of multicollinearity. To maintain consistency across nurse and doula models, we used age in both models and excluded years in nursing.

Table 1. Descriptive Statistics for Professional Quality of Life (PROQOL) Emotional Burnout Subscale Items.

	All Mean (SD)	Nurses Mean (SD)	Doulas Mean (SD)
I am happy[a]	4.40 (0.64)	4.30 (0.68)	4.46*** (0.61)
I feel connected to others[a]	4.39 (0.66)	4.26 (0.68)	4.49*** (0.63)
I am not as productive at work because I am losing sleep over traumatic experiences of a woman I cared for	1.74 (0.73)	1.78 (0.71)	1.72** (0.74)
I feel trapped by my job in maternity care	1.56 (0.88)	1.82 (1.00)	1.40*** (0.74)
I have beliefs that sustain me[a]	4.41 (0.79)	4.31 (0.83)	4.48*** (0.76)
I am the person I always wanted to be[a]	4.05 (0.75)	3.98 (0.76)	4.11** (0.75)
I feel worn out because of my work in maternity care	2.52 (1.03)	2.77 (1.09)	2.35*** (0.96)
I am a very caring person[a]	4.61 (0.57)	4.57 (0.59)	4.64* (0.54)
I feel "bogged down" by the system	3.10 (1.12)	3.38 (1.14)	2.93*** (1.08)
I feel overwhelmed because my workload seems endless	2.47 (1.12)	2.90 (1.10)	2.18*** (1.03)
N	**1,996**	**807**	**1,226**

T-test for difference between L&D nurses and doulas: † $p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.
[a]Item is reverse coded in subscale.

Independent variables that are relevant for burnout include measures of work–family conflict, work overload, and emotional intelligence. To measure work–family conflict, the survey asked respondents to rate their agreement with the following: "I have trouble balancing the time demands of my maternity work with my family responsibilities and other obligations." To measure work overload, the survey asked L&D nurses if they work "fewer," "as many," or "more" hours than they would prefer in an average month, and it asked doulas if they have "fewer," "as many," or "more" clients than they would prefer in an average month. We coded responses that indicated that they had more clients or worked more hours than they would prefer as having work overload. We created a subscale for emotional regulation using the EI scale from the measurement tool that Schutte and colleagues developed (Schutte et al., 1998). The internal consistency reliability of the emotional regulation subscale was strong for the whole sample ($\alpha = 0.84$) and within roles (nurses $\alpha = 0.82$, doulas $\alpha = 0.85$) (Table A1 presents descriptive statistics for the individual EI measures).

Additional independent variables include attitudinal measures about birth and obstetric practices. The MSS asked respondents the primary source of their views about childbirth, and we include dichotomous measures for whether a positive or negative experience with their own birth was an important source of their attitudes (1 = yes). The survey measured attitudes toward obstetric practices with 5-point Likert scales from 1 (strongly disagree) to 5 (strongly agree). We constructed standardized scales with ranges of 0–10, ranked from extremely negative to extremely positive, for attitudes toward epidural analgesia, induction, and cesarean delivery (see Table A2). The scale for attitudes toward epidural analgesia had moderate to strong internal reliability. The scales for attitudes toward induction and cesarean delivery had weaker internal reliability but we retained these scales because a Cronbach's alpha near 0.7 is common for attitudinal scales and we expected attitudes about standard obstetric practices to influence MSWs' experience of emotional burnout in a birth culture where these interventions are common (Kline, 2000; Liva et al., 2012). Witnessing unethical mistreatment may also be related to secondary trauma and emotional burnout, and the survey asked MSWs how often they witnessed several forms of unethical mistreatment using a 4-point scale from 1 (never) to 4 (often). These measures included the frequency with which nurses and doulas witnessed care providers make racially derogatory remarks, use extra procedures due to race or ethnicity, use sexually degrading language, engage in procedures without consent, or engage in procedures explicitly against a woman's wishes. We also included measures of the practice environment in which MSWs support labor. We asked all survey respondents, "About what percentage of the births that you attend result in cesarean section?" This was a continuous variable ranging from 0% to 95%. Finally, we asked L&D nurses if the hospital they worked at had a wellness program that was available to them.

Methods

We treat emotional burnout as a continuous measure and we used Ordinary Least Squares (OLS) multiple regression analysis with robust standard errors to analyze this variable. OLS regression is a generalized linear modeling technique that models the linear effects of predictor variables on an interval-level response variable, like the emotional burnout subscale. While our models exhibited very strong conformity with OLS assumptions, robust standard errors adjust for a collection of minor concerns about failure to meet OLS assumptions. (Plots of the unadjusted residuals demonstrated that the models conformed very well to OLS assumptions of uncorrelated and normally distributed error terms and simple standard errors were essentially the same.) The models examine the linear relationship between independent variables (predictors) and emotional burnout.

We conducted separate analyses for nurses and doulas. For each group, the first model examines the relationship between emotional burnout and demographic characteristics; the second adds measures of work/family conflict, overload, and emotional regulation; the third model includes attitudinal measures specific to maternity care; and the final model includes ethical violations and features of the practice environment, including the availability of hospital wellness programs for nurses. Although the total sample included 1,569 doulas and 1,012 nurses, we excluded 85 nurses who did not work primarily at one hospital, and 120 nurses and 343 doulas with missing values on one or more variables. (The variable with the most missing values was the dependent variable, so multiple imputation of missing values was inappropriate.) The analyses include 807 nurses and 1,226 doulas. Using a power analysis for multiple regression, we determined the minimum sample sizes to estimate a medium effect size with an alpha of 0.05 using 24 predictor variables (nurse model) or 23 predictor variables (doula model), to be 306 and 301, respectively. The sample sizes for the models are significantly larger than these minimum sizes, and have >99% power to reject the null hypothesis if a relationship is present.

RESULTS

Table 2 presents the descriptive statistics and metrics for all variables in the models. *T*-tests reveal that L&D nurses and doulas are significantly different on most measures. Nurses have higher average household incomes, are much more likely to feel overworked, and have more positive views of induction, epidural analgesia, and cesarean delivery (although both groups tend to have negative views of cesarean delivery). Nurses also report attending a significantly higher percentage of cesarean deliveries than doulas. Doulas' views about birth are shaped by their own birth experiences much more frequently than nurses'

Table 2. Descriptive Statistics for Nurses and Doulas in the Maternity Support Survey.

Variable	Metric	All % or Mean (SD)	Nurses % or Mean (SD)	Doulas % or Mean (SD)
Dependent variable				
Emotional burnout	10 = low, to 50 = high	19.53 (4.89)	21.24 (5.21)	18.39*** (4.32)
Independent variables				
Age	In years	43.71 (11.93)	47.80 (10.84)	41.23*** (11.97)
White	1 = Yes	94.1%	94.7%	93.6%
HH income	1 = <$20k to 7 = $150k +	4.68 (1.60)	5.42 (1.18)	4.20*** (1.65)
Education	1 = HS or less to 5 = Doctorate	2.87 (0.82)	3.02 (0.73)	2.77*** (0.85)
Married	1 = Yes	70.8%	71.3%	70.8%
Region				
Northeast	1 = Yes	16.5%	17.7%	15.8%†
Midwest	1 = Yes	21.0%	23.2%	19.9%†
South	1 = Yes	21.0%	24.9%	18.9%**
West (reference)	1 = Yes	25.9%	22.6%	27.7%**
Canada	1 = Yes	11.8%	7.9%	14.1%***
Work/family conflict	1 = Strongly disagree, to 5 = Strongly agree	2.79 (1.10)	2.74 (1.07)	2.81† (1.11)
Overwork (more than desired)	(1 = Yes)	12.0%	25.7%	3.2%***
EI (emotional regulation)	10 = Low, to 50 = High	41.75 (4.11)	40.84 (3.97)	42.38*** (4.11)
Views shaped by positive birth	1 = Yes	39.8%	35.2%	42.3%**
Views shaped by negative birth	1 = Yes	8.5%	5.5%	10.4%***
Positive about epidurals	Scale 0–10	3.65 (2.29)	5.42 (2.00)	2.48*** (1.45)
Positive about induction	Scale 0–10	2.49 (1.81)	3.64 (1.73)	1.72*** (1.31)
Positive about cesareans	Scale 0–10	1.94 (1.28)	2.54 (1.35)	1.55*** (1.02)
Unethical Mistreatment				

Racist remarks	1 = Never, to 4 = Often	1.44 (0.72)	1.52 (0.76)	1.39*** (0.69)
Extra procedures due to race	1 = Never, to 4 = Often	1.50 (0.84)	1.32 (0.69)	1.63*** (0.92)
Sexist remarks	1 = Never, to 4 = Often	1.38 (0.66)	1.28 (0.57)	1.46*** (0.72)
Procedures without informed consent	1 = Never, to 4 = Often	2.82 (0.95)	2.85 (0.98)	2.81 (0.92)
Procedures against explicit wishes	1 = Never, to 4 = Often	1.75 (0.80)	1.60 (0.74)	1.86*** (0.82)
Births by C-section	% of births	16.32 (13.24)	23.30 (12.82)	11.90*** (11.51)
Hospital wellness program	1 = Yes	—	87.2%	—
N		**1,996**	**807**	**1,226**

† $p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

views. Because L&D nurses and doulas offer different types of support and have substantially different education and training for their maternity support roles, we analyze them separately. (Results of models that aggregate both groups of MSWs are available from the first author and have substantially similar results.)

Table 3 presents the results of OLS regression models for emotional burnout among L&D nurses. Model 1 is a base model with only demographic variables, which explain 3.3% of the variation in burnout among nurses. In this model, age, education, and marital status are significantly and negatively associated with emotional burnout, which is consistent with prior research. The relationship between age and burnout may be a selection effect, in which workers who are less resilient to burnout may leave the profession early (Brewer & Shapard, 2004). Marital status has been shown to be a protective factor for burnout, as well as other mental health outcomes (Carr & Springer, 2010; Killian, 2008).

Model 2 adds measures of work/family conflict, perceived overwork, and emotional intelligence, and this model explains 39% of the variance in burnout among nurses. Accordingly, work−family conflict and overwork are positively associated with burnout ($p < 0.001$), supporting H_1 (more work−family conflict is associated with more emotional burnout) and H_2 (working more hours than one wants to is associated with higher levels of burnout). Supporting H_3, emotional intelligence is a protective factor, so that nurses with higher levels of emotional regulation had lower levels of burnout. Marital status remained significant in Model 2, but age is no longer significant once other measures are included.

Model 3 adds attitudinal measures, and explains 41% of the variance in nurse burnout. In this model, more positive views of labor induction are associated with lower levels of burnout (contradicting H_5) while more positive views of cesarean delivery are associated with higher levels of burnout among nurses (supporting H_5). Birth views that were shaped by personal birth experiences were not associated with burnout among nurses, failing to support H_{4A} and H_{4B}.

The full model (Model 4) includes frequency of witnessing unethical mistreatment, percent of births by cesarean, and the availability of a hospital-based wellness program, and explains 43% of the variance in burnout. This model reveals that witnessing sexist remarks and violations of informed consent is associated with higher levels of burnout among nurses, offering support to H_6. In particular, the unethical mistreatment effects indicate that L&D nurses who witness more frequent violations of informed consent experience more emotional burnout. Accordingly, a lack of informed consent may not only harm laboring women, but also the support workers caring for them. However, witnessing forms of unethical mistreatment based on race (racist remarks and the use of extra procedures due to a woman's race or ethnicity) had no significant effects.

Table 3. OLS Regression Models Predicting Emotional Burnout Among L&D Nurses.

	Model 1	Model 2	Model 3	Model 4
Age	−0.04* (0.02)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
White	0.85 (0.81)	0.52 (0.63)	0.42 (0.64)	0.20 (0.64)
HH income	0.07 (0.16)	0.04 (0.13)	0.08 (0.13)	0.00 (0.13)
Education	−0.53* (0.24)	−0.26 (0.19)	−0.24 (0.19)	−0.39* (0.20)
Married	−1.60** (0.46)	−1.27** (0.37)	−1.27** (0.38)	−1.00** (0.36)
Northeast	−0.44 (0.56)	−0.35 (0.42)	−0.40 (0.42)	−0.51 (0.42)
Midwest	−0.71 (0.52)	−0.77† (0.42)	−0.82† (0.43)	−0.76† (0.42)
South	0.18 (0.53)	0.03 (0.41)	−0.12 (0.42)	−0.34 (0.40)
Canada	−0.47 (0.75)	−0.02 (0.65)	0.27 (0.64)	0.52 (0.64)
Work/family conflict		1.63*** (0.15)	1.62*** (0.15)	1.55*** (0.15)
Overwork		1.64*** (0.34)	1.53*** (0.34)	1.51*** (0.33)
EI (emotional regulation)		−0.52*** (0.04)	−0.51*** (0.04)	−0.51*** (0.04)
Views shaped by positive birth			−0.40 (0.31)	−0.29 (0.30)
Views shaped by negative birth			0.76 (0.56)	0.47 (0.53)
Positive view of epidurals			0.12 (0.09)	0.14 (0.09)
Positive view of induction			−0.28** (0.11)	−0.11 (0.11)
Positive view of cesareans			0.27* (0.13)	0.25† (0.13)
Racist remarks				0.08 (0.22)
Extra procedures due to race				−0.09 (0.23)
Sexist remarks				0.50† (0.29)
Procedures without informed consent				0.38* (0.18)
Procedures against explicit wishes				0.46† (0.24)
% C-sections				0.03* (0.01)
Hospital wellness program				−0.94* (0.42)
Constant	24.76*** (1.54)	38.99*** (1.93)	38.34*** (2.05)	36.03*** (2.13)
N	807	807	807	807
Adjusted R^2	0.03	0.39	0.40	0.43

† $p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Supporting H_7, Model 4 also reveals that nurses who attend a high percentage of cesarean deliveries have higher average levels of burnout ($p < 0.001$), so that every 1% rise in cesarean deliveries was associated with an average increase of 0.3 points on the burnout scale. There was also a significant and

negative association with hospital wellness programs, indicating that nurses who worked at a hospital that has a wellness program had lower levels of burnout (supporting H_8).

Table 4 presents the results of parallel models for emotional burnout among doulas, and illustrates both similarities with and differences from L&D nurses.

Table 4. OLS Regression Models Predicting Emotional Burnout Among Doulas.

	Model 5	Model 6	Model 7	Model 8
Age	−0.03** (0.01)	−0.01 (0.01)	−0.01 (0.01)	−0.01† (0.01)
White	−0.60 (0.59)	−0.73 (0.51)	−0.69 (0.51)	−0.63 (0.50)
HH income	0.00 (0.08)	−0.07 (0.07)	−0.08 (0.07)	−0.10 (0.07)
Education	0.37* (0.15)	0.08 (0.13)	0.08 (0.13)	0.03 (0.13)
Married	−0.62† (0.34)	−0.84** (0.28)	−0.82** (0.28)	−0.48† (0.28)
Northeast	0.39 (0.36)	0.40 (0.32)	0.37 (0.32)	0.00 (0.31)
Midwest	0.20 (0.34)	0.21 (0.30)	0.24 (0.29)	0.15 (0.28)
South	0.20 (0.37)	0.39 (0.31)	0.38 (0.31)	0.10 (0.30)
Canada	0.66 (0.45)	0.16 (0.38)	0.24 (0.37)	0.21 (0.36)
Work/family conflict		1.42*** (0.10)	1.43*** (0.10)	1.32*** (0.10)
Overwork		1.79† (0.91)	1.73† (0.91)	1.63† (0.86)
EI (emotional regulation)		−0.36*** (0.03)	−0.35*** (0.03)	−0.35*** (0.03)
Views shaped by positive birth			−0.41† (0.21)	−0.21 (0.21)
Views shaped by negative birth			0.94** (0.35)	0.97** (0.34)
Positive view of epidurals			0.13† (0.07)	0.16* (0.07)
Positive view of induction			−0.10 (0.09)	−0.01 (0.09)
Positive view of cesareans			0.16 (0.11)	0.18† (0.10)
Racist remarks				0.36† (0.20)
Extra procedures due to race				−0.01 (0.15)
Sexist remarks				0.50** (0.15)
Procedures without informed consent				0.46** (0.14)
Procedures against explicit wishes				0.32* (0.16)
% C-sections				0.03** (0.01)
Constant	19.45*** (0.85)	31.00*** (1.55)	30.20*** (1.62)	27.28*** (1.62)
N	1,226	1,226	1,226	1,226
Adjusted R^2	0.02	0.31	0.32	0.37

† $p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Model 5 explains 2% of the variance in doula burnout and reveals that age and marriage are both negatively associated with doula burnout, so that younger and unmarried doulas suffer from less burnout than older and married doulas. In contrast, education is associated with greater burnout for doulas. However, the effects of age and education disappear in Model 6, which adds measures of work–family conflict, work overload, and emotional intelligence, and explains 31% of the variance in doula burnout. This model is consistent with Model 2 for nurses in Table 3, with marital status and EI being associated with lower levels of burnout, while work/family conflict and work overload are associated with higher burnout. The magnitude of the effect of EI is weaker for doulas than for nurses, even though doulas had higher average EI scores and their training focuses on developing EI.

Results of Model 7 in Table 4 differs from Model 3 for nurses. While attitudes toward birth based on personal experience had no effect on burnout among nurses, they had the expected effects on doulas (H_{4A} and H_{4B}) and views based on negative birth experiences had particularly strong effects for doulas. In contrast, attitudes toward obstetric procedures had little effect for doulas, possibly because doulas held quite consistently negative views of these practices. However, relatively more positive views of epidural analgesia were associated with slightly higher average levels of burnout, contradicting H_5. In the full model, which explains 37% of the variance, greater frequency of witnessing unethical mistreatment in the form of racist and/or sexist remarks and lack of informed consent are associated with higher levels of burnout among doulas, as is attending a higher percentage of cesarean deliveries (supporting H_6 and H_7).

DISCUSSION

Emotional burnout and compassion fatigue are serious problems in caring occupations because they may encourage workers to distance themselves from their work and their patients. This study examines emotional burnout among two types of MSWs who support mothers during L&D. MSWs are particularly likely to suffer from emotional burnout because emotional experience, regulation of emotion, and emotional labor are important aspects of maternity support work (Kirkham, 1999). While L&D nurses and doulas lack authority in the medical model of birth, they have significant contact with laboring women and are likely to connect with the people they serve (Corbett & Callister, 2000; Davis-Floyd, 2001, 2004; Jordan, 1993; Mann & Cowburn, 2005; Wear, 2006). MSWs' training and the work that they do with mothers and infants encourages continuous emotional engagement. The combination of lack of authority with high emotional engagement makes MSWs vulnerable to negative emotional experiences (Kemper, 1991).

To summarize, nurses reported higher average levels of burnout than doulas. Work/family conflict and work overload were sources of burnout for both groups of MSWs, while emotional regulation was a form of emotional intelligence that protected both groups from burnout. More frequently witnessing incidences of mistreatment clearly contributed to higher levels of burnout for both groups of MSWs, suggesting that mistreatment not only harms laboring women but also the workers who support them. MSWs also experienced more burnout when they attended a higher percentage of deliveries via cesarean section. This suggests that working in hospitals where cesarean deliveries are more common increases emotional stress among MSWs.

There were also some differences between nurses and doulas in the effects of experiential knowledge and attitudes toward common obstetric practices. Doulas whose own birth experiences shaped their attitudes experienced less burnout if they had positive birth experiences and more burnout if they had negative birth experiences. However, experience as a basis for views about birth had no effect on nurses' levels of burnout. The findings also reveal a relationship between attitudes toward medical procedures and emotional burnout, although this relationship is more complicated that the original hypothesis suggested it would be. For nurses, more negative views of labor induction are associated with higher levels of burnout, as we hypothesized (H_5). However, more positive attitudes toward cesarean deliveries are associated with higher levels of burnout, in contradiction to H_5. A similar effect occurs for doulas, although this effect only approaches statistical significance ($p < 0.1$). For doulas, more positive views of epidural analgesia are associated with higher levels of burnout, in contradiction to H_5. In thinking about how to make sense of findings that contradicted our hypothesis, we must consider that the causal relationship may also be reversed: MSWs may develop more positive views of obstetric procedures, especially those that reduce demands for one-on-one care, as a coping strategy to reduce burnout. Thus, the more that MSWs become emotionally burned out, the more they may accept the organizational benefits of medical technologies (or become resigned to them). In other words, MSWs who are more burned out may experience a sense of depersonalization with clients and patients, leading to less negative views of cesarean sections.

We also found that L&D nurses who worked at a hospital that had a wellness program reported lower levels of burnout, suggesting that hospital programs that aim to reduce workers' emotional stress can effectively reduce burnout. Thus, care workers in organizations that offer programs to help them to manage stress have lower average rates of burnout, providing evidence for the benefits of these programs. These findings have important healthcare policy implications because emotional burnout is relatively common in caring occupations and it can contribute to high turnover and lower quality of care. MSWs with individual or organizational coping mechanisms and supports in place are more protected from burnout.

Limitations and Future Research

The MSS is the first cross-national survey to examine the under-studied roles and views of MSWs in the United States and Canada. The survey obtained a large number of responses, but a limitation of the data is that the recruitment methods resulted in a nonrandom sample and made it impossible to calculate a response rate because the population-size denominator is unknown. Most MSS respondents were members of professional organizations that assisted with the study, but many MSWs are not members of these specific organizations. As a result, the data may not be generalizable to all L&D nurses and doulas in the United States and Canada.

CONCLUSION

Emotional burnout and compassion fatigue are ongoing challenges in healthcare. Support workers face serious demands that produce negative outcomes for themselves and their patients. Without proper attention to the emotional demands placed on those who provide support, the healthcare field will be unable to provide sufficient care to those who need it. The results from the MSS highlight factors that influence emotional burnout among MSWs, including work–family conflict, overwork, emotional intelligence, and the frequency of unethical mistreatment of laboring women. Our data illustrate that MSWs' attitudes about controversial medical procedures like cesarean sections and induction are tied to their experiences of emotional burnout. Both nurses and doulas with more positive views of cesarean delivery were more burned out, but negative views of other procedures like induction are associated with greater emotional burnout among L&D nurses. It is possible that increased use of medical technologies in obstetric practices have led to "emotional deskilling" (Bone, 2008).

The findings also establish a link between witnessing mistreatment of laboring women and burnout, revealing that traumatic incidents can have negative emotional consequences for both patients and the workers who care for them. Campaigns such as ImprovingBirth.org's #breakthesilence aim to inform more people about mistreatment in maternity care, revealing that ethical violations and mistreatment are quite common (Roth et al., 2014, 2016). With greater awareness of this problem, patients and care workers hope to reduce the incidence of trauma and accordingly, emotional burnout, which can result from repeated exposure to mistreatment.

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APPENDIX

Table A1. Descriptive Statistics for Emotional Intelligence and Emotional Regulation Subscale.

	All Mean (SD)	Nurses Mean (SD)	Doulas Mean (SD)
When I am faced with obstacles, I remember times I faced similar obstacles and overcame them	4.12 (0.61)	4.10 (0.59)	4.13 (0.63)
Other people find it easy to confide in me	4.35 (0.63)	4.18 (0.65)	4.46*** (0.59)
I know why my emotions change	4.07 (0.66)	3.96 (0.65)	4.14*** (0.65)
When I experience a positive emotion, I know how to make it last	3.90 (0.73)	3.81 (0.71)	3.98*** (0.73)
I seek out activities that make me happy	4.24 (0.63)	4.15 (0.64)	4.31*** (0.62)
I present myself in a way that makes a good impression on others	4.27 (0.58)	4.17 (0.56)	4.34*** (0.59)
I have control over my emotions	3.91 (0.69)	3.86 (0.69)	3.94* (0.69)
I motivate myself by imagining a good outcome to tasks I take on	4.01 (0.74)	3.92 (0.77)	4.07*** (0.72)
I compliment others when they have done something well	4.50 (0.53)	4.42 (0.54)	4.56*** (0.52)
I help other people feel better when they are down	4.39 (0.56)	4.28 (0.55)	4.46*** (0.56)
A	**0.84**	**0.82**	**0.85**
N	**1,996**	**807**	**1,226**

$***p < 0.001$.

Table A2. Attitude Scales.

Scale	Subscale Items (1 = Strongly Disagree, to 5 = Strongly Agree)	α
Epidural analgesia	Epidurals should be routinely offered to all women in labor	0.80
	Epidurals conserve maternal energy for the second stage of labor	
	Epidurals interfere with the normal progress of labor (reverse coded)	
	Epidurals increase the risk of cesarean delivery (reverse coded)	
Induction	Induction is safe as part of a standardized protocol	0.67
	Induction increases the need for epidural analgesia (reverse coded)	
	Inductions increase the cesarean rate (reverse coded)	
Cesarean Delivery	Cesareans prevent urinary incontinence	0.71
	Cesareans are safer for babies than vaginal births	
	Vaginal birth often compromises a woman's sexual functioning after birth	
	Cesareans are as safe for women as vaginal births	
	Women should be able to choose CS, even in absence of medical indication	
	For a woman with a previous CS, scheduled repeat CS is the best for her health	
	For a woman with a previous CS, scheduled repeat CS reduces litigation risk	
	A woman who is a good candidate for VBAC should be able to attempt it if she desires	

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Review

Trained or professional doulas in the support and care of pregnant and birthing women: a critical integrative review

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What is known about this topic

- There may be a benefit to having continuous support from a layperson during labour and birth.
- Doula care has been developing as a professional occupation.
- Diverse courses for individuals wishing to train as a doula are available.

What this paper adds

- Trained or professional doula care is associated with a physical and emotional benefit for women.
- Complex interprofessional dynamics exist between professional doulas and midwives.
- There are substantial gaps in current empirical knowledge regarding the practice and outcomes of trained or professional doulas.

Abstract

The professionalisation of doula care and research interest in this area of maternity care/support have both grown internationally in recent years highlighting important broader issues around the access, continuity and delivery of maternity care services. However, no work to date has provided a critical appraisal of the international literature on this topic. In response, this paper presents the first critical review of international empirical literature examining professional doula care for pregnant and birthing women. A database search of AMED, CINAHL, Maternity and Infant Care, and MEDLINE using the search term, "doula" was undertaken. A total of 48 papers published between 1980 and March 2013 involving trained or professional doulas were extracted. Four descriptive categories were identified from the review: 'workforce and professional issues in doula care'; 'trained or professional doula's role and skill'; 'physical outcomes of trained or professional doula care'; and 'social outcomes of trained or professional doula care'. Of the studies evaluating outcomes of doula care, there were a number with design and methodology weaknesses. The review highlights a number of gaps in the research literature including a lack of research examining doula workforce issues; focus upon the experience and perspective of significant stakeholders such as expectant fathers with regard to trained or professional doula care; clinical trials measuring both subjective experiences and physical outcomes of trained or professional doula support; synergy between the design of clinical trials research examining trained or professional doula care and the clinical reality of professional doula practice. It is imperative that key aspects of trained doula care be subject to further rigorous, empirical investigation to help establish an evidence base to guide policy and practice relating to this area of support and care for pregnant and birthing women.

Keywords: doula, interprofessional, labour support, postnatal support, pregnancy support, professional, systematic review

Introduction

Doula care – defined for the purpose of this review as the care an individual provides of physical, social and emotional support during pregnancy, labour, birth and the postnatal period – has recently been identified as being potentially beneficial to women during labour and birth (Rosen 2004). The doula's role is to provide such support to a birthing woman and her family (Stockton 2011). A doula supports the mother

to make an informed choice, listens to expectant couple's fears and expectations, and develops a trust-based relationship, which facilitates a supportive dynamic during labour and birth. Doulas are not qualified to give advice regarding obstetric interventions or maternity care options. At the request of the couple, a doula can, however, advocate for the couple's decisions and preferences during labour and birth. They also help to protect the birth space from unwanted interruptions while aiming to complement the midwife or obstetrician in their clinical role. This respectful assistance of the maternity care provider does not extend to undertaking clinical responsibilities for the birthing woman. A doula may be trained in complementary and alternative medicine and as such may use these to provide additional intrapartum support (Stockton 2011). A doula may also apply her understanding of the pelvis and its function during labour to assist the woman to achieve optimal birth positioning through all intrapartum stages (Simkin 2011).

Past and current doula care: professionalisation of an ancient practice

Historically, women have assisted women who are giving birth and this assistance usually involved continuous physical and emotional support (Oakley 1984, Odent 2009). A change in the cultural norms influencing the individuals providing birth support has seen increased attendance and involvement of fathers in place of the traditional place of women (Odent 2009). Current research suggests that this results in a sense of isolation and psychological stress for both parents (Genesoni & Tallandini 2009). It is in response to this outcome that interest in continuous support during labour from an experienced labour companion has grown in the last 30 years (Marshall *et al.* 2002). These labour companions have come to be known by the Greek word for a woman caregiver – *doula* (Marshall *et al.* 2002).

Recent years have witnessed the emerging professionalisation of doulas in a number of countries. Many women providing doula care do so as an occupation involving paid work, which is knowledge-based and achieved following higher education and/or vocational training. In addition, modern doulas offer primarily a middle-class service. Through all of these traits, contemporary doulas can define their occupation as a *profession* (Evetts 1999). At the very least, some argue that those undertaking expert doula training may be better described as 'paraprofessionals' due to their role in assisting health professionals such as doctors (Hans & Korfmacher 2002). Whether as professionals or paraprofessionals, the term 'lay-person' – traditionally used to describe doulas – may not be reflective of contemporary doula care.

In line with this professionalisation, there is also an increasing availability of training available for individuals wishing to offer professional doula services (Childbirth International 2010). With these factors in mind, and for the purposes of this review, a doula can be defined as an individual who has undergone training and established a fee-for-service agreement with a woman to provide doula care during the antenatal, intrapartum and/or postnatal periods, and this distinguishes her from individuals providing untrained, informal or non-specific continuous labour support.

Professional doula practice in the international maternity care setting

Professional associations representing doulas have been established in the United Kingdom (Doula UK Ltd n.d.), Switzerland (The Swiss Association of Doulas 2011) and North America [both United States (US) and Canada] (DONA International 2005), although this trend does not extend to countries such as Australia or Sweden where no organised body offers certification beyond training. Across these settings, models of maternity care vary substantially between highly medicalised and obstetrician-led care through to prioritisation of midwifery-led continuity of care and many variations between. Likewise, models of doula care vary substantially across different locations and include hospital-based, community-based and volunteer doula programmes (Morton & Basile 2013). Statutory registration of doulas does not exist at a federal level in any country, although there are recent developments in Minnesota, US (2013), which do require statutory registration for those providing doula care (Minnesota House of Representatives 2013). Beyond this isolated case, there is no known requirement that an individual offering professional doula services has to undertake any training. As such, for the purposes of this review, the term 'professional doula' will refer to individuals offering a fee-for-service contract arrangement to women and the term 'trained doula' will refer to individuals who have undergone explicit training. This differentiation will avoid assumptions regarding the level of training of professional doulas if it is not explicitly stated.

Women's motivations for engaging a professional doula

It has been suggested that the professionalisation of doula services has occurred in response to deficits in

available maternity care (Dahlen *et al.* 2011). Proponents of this view have linked this trend with women seeking continuity of care from a known person throughout their pregnancy and birth and finding access to this care model limited through their conventional maternity health professionals (Dahlen *et al.* 2011). It is perhaps for this reason that commentators have recommended that women should have unrestricted access to continuous emotional and physical support from a doula (Leslie & Storton 2007). This recommendation is also validated from an economic perspective through a US analysis, which indicates that continuous labour support may yield a cost saving of between $424.14 and $530.89 per birth as a result of reduced caesarean section delivery (Chapple *et al.* 2013).

While the value and benefit of doula care have often been posited and have been seen to encompass both social and physical support in labour (DONA International 2005, Australian Doula College 2007, Doula UK Ltd n.d.), a comprehensive understanding of trained or professional doula care remains lacking. Previous reviews of doula care have been defined by their restricted research methodology focus (Scott *et al.* 1999a,b, Bowers 2002, Rosen 2004) and have examined only specific outcomes in isolation such as social experiences or women's physiological birth outcomes. A systematic review previously undertaken examined the value of continuous labour support provided by any professional caregiver or layperson (Hodnett *et al.* 2012) rather than focusing specifically on those individuals who operate as professional doulas or have undergone formal 'trained doulas'. The education providers offering training for professional doulas suggest that in undertaking training, doulas are able to deliver a higher standard of care and a better birth experience for women (DONA International 2005, Australian Doula College 2007, Doula UK Ltd n.d.). Given the rising availability of professional doula services for pregnant and birthing women, there is a need to examine formally trained and professional doulas as a discrete health provider group.

The rise of doula support services and the consideration of the trained and professional doula's role and contribution (both current and potential) to the care of pregnant women highlight broader issues usually examined within health services research such as access, continuity and delivery of maternity care services. However, no work to date has provided a critical review and appraisal of the international literature on this topic. In response, this paper presents the first critical review of recent international empirical literature examining trained and professional doula care for pregnant and birthing women.

Aim

The aim of this review was to critically appraise recent empirical research regarding all aspects of trained and professional doula care. This included practice patterns and workforce issues alongside the outcomes associated with providing trained and professional doula support services to women during pregnancy, labour, birth and postnatal care.

Design

The review followed a critical, integrative review design (Adams *et al.* 2011). This design allowed for a critical appraisal of available literature and an associated categorical analysis of the identified empirical research. The appraisal and analysis was based upon a critical framework developed and reported previously (Adams *et al.* 2012).

Search methods

A database search was conducted to identify peer-reviewed papers that focused on trained doulas. The database search included PubMed, AMED (Allied and Complementary Medicine Database), CINAHL, Maternity and Infant Care and MEDLINE, as the most authoritative databases encompassing maternal health, medicine and allied health/complementary medicine scholarship. The search was conducted in March 2013 using the search term "doula" and without date restrictions. Manual searching of the reference lists of identified papers was also conducted to verify that no relevant papers had been overlooked. Papers were included without date restrictions if they reported original research and were written in English. Papers were excluded if they reported findings from untrained labour support.

Each paper was screened by the lead author according to its compliance with the inclusion and exclusion criteria. This involved a hierarchical procedure whereby the located papers were initially screened based on title, followed by abstract. Where the abstract or title did not provide sufficient information to determine whether a paper met the review criteria, the full manuscript was accessed and examined prior to determining inclusion or exclusion. Papers were discarded at each stage of the process where they were determined not to comply with the defined criteria.

Search outcome

The search results (n = 1186) were imported into EndNote (Thomson Reuters 2008) referencing and bibliography management software. A total of 1013 were excluded based upon their title due to not reporting original research (n = 991) or being written in a language other than English (n = 22). An additional 18 papers were excluded after reviewing their abstract as not original research papers or reporting the findings involving untrained labour support, with 3 more papers excluded for the same reasons after reviewing the full text. A final 104 papers were discarded as duplicates. After exclusion, a total of 48 papers met the inclusion criteria and were selected for review. The process undertaken for this review is shown in Figure 1. An overview of all papers included in the review including preliminary categorical analysis is outlined in Table 1.

Critical appraisal and analysis

The critical appraisal of study quality for research examining clinical outcomes was conducted by applying a quality scoring system, modified from a system, which was previously developed by Adams *et al.* (2012) (see Table 2). This system was designed to systematically compare and evaluate the studies reviewed and allow for appraisal across three dimensions: methodology; reporting of participants' characteristics; and reporting of doula care. Methodology was appraised according to the use of a representative sampling strategy, adequate sample size, a response or participation rate of >75% and low recall bias (defined as prospective data collection or retrospective data collection within the previous 12 months) (Adams *et al.* 2012). This evaluation of sampling was also modified for the purposes of this review to further strengthen the rigour of the critical framework. Quantitative papers were appraised according to a determination of sample size based upon a power analysis of >80%. Where the power analysis was not reported, a sample of >385 was accepted based upon standard precision analysis principles to account for possible sampling error (Chow *et al.* 2008). The inclusion of power analysis or sampling error calculations provides an estimate for the parameters of the population and the calculation of adequate sample size as it relates to the measured outcomes (Creswell & Plano Clark 2011). Qualitative papers were appraised according to their reporting of thematic saturation, which acknowledges the purpose of qualitative research to provide in-depth information about phenomena rather than to generalise from a sample (Creswell & Plano Clark 2011). Appraisal of sample size for qualitative studies was based upon a minimum sample of 15 participants where thematic saturation was not reported. Critical evaluation of characteristics and profiles of the study participants was based on the inclusion of details of parity, age, ethnicity and socioeconomic status. Finally, the studies were assessed for the quality of reporting of doula care, which encompassed the inclusion of the researcher's definition of the training/professionalisation of doulas, explicit description of the psychosocial outcomes evaluated and clear delineation of the medical/obstetric outcomes examined. These three components were selected for inclusion in the critical framework in line with the aim of this review. The description of the level of training or professionalisation of doulas involved in any identified study was included in the framework due to the specific focus on this subset of doula care within the review. Both psychosocial and medical/obstetric outcomes were included due to the dual nature of doula care in providing social and emotional support with the intention of improving physiological and psychological outcomes of birth for mother and baby (Marshall *et al.* 2002). Each component of the three dimensions was awarded 1 point if the paper achieved the minimum defined requirement and cumulative scores for each paper were calculated with a maximum potential score of 11. Scores for the studies were assigned independently by two authors. The results were then compared and differences resolved by discussion.

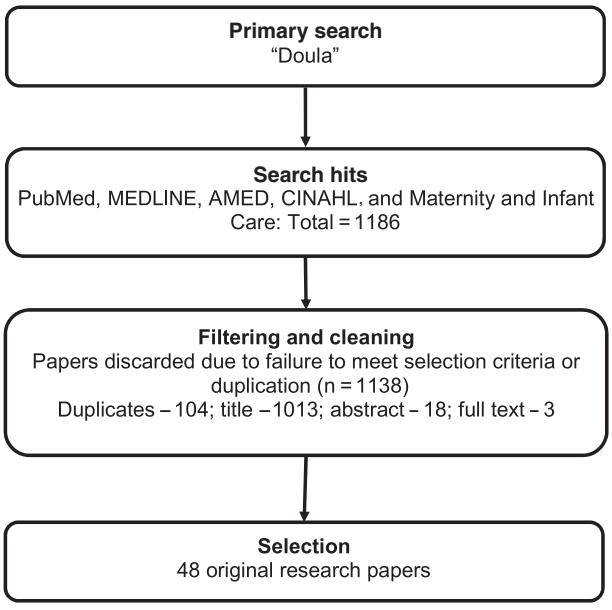

Figure 1 The literature search and selection process.

Table 1 Research-based literature on trained or professional doula care

Author (year)	Country	Method	Target population	Sample	Theme*			
					I	II	III	IV
Dundek (2006)	Somalia	Cohort (retrospective)	Women	*n* = 348	X		X	
Gruber *et al.* (2013)	United States	Cohort (retrospective)	Women	*n* = 225			X	X
Harris *et al.* (2012)	Canada	Cohort (retrospective)	Women	*n* = 1238			X	
Kozhimannil *et al.* (2013)	United States	Cohort (retrospective)	Women	*n* = 279,008			X	
Mottl-Santiago *et al.* (2008)	United States	Cohort (retrospective)	Women	*n* = 11,471			X	
Newton *et al.* (2009)	United States	Cohort (retrospective)	Women	*n* = 349			X	
Nommsen-Rivers *et al.* (2009)	United States	Cohort (prospective)	Women	*n* = 141			X	
Paterno *et al.* (2012)	United States	Cohort (retrospective)	Women	*n* = 648		X	X	
van Zandt *et al.* (2005)	United States	Cohort (retrospective)	Women	*n* = 89			X	
Eftekhary *et al.* (2010)	Canada	Cross-sectional survey	Professional doulas	*n* = 212	X			
Goedkoop (2009)	United Kingdom	Cross-sectional survey	Professional doulas	*n* = 140			X	
Klein *et al.* (2009)	Canada	Cross-sectional survey	Maternity care practitioners	Family physicians: *n* = 897 Obstetricians: *n* = 549 Nurses: *n* = 545 Midwives: *n* = 400 Doulas: *n* = 192	X			
Lantz *et al.* (2005)	United States	Cross-sectional survey	Professional doulas	*n* = 626 (certified 471/student 155)	X			
Liva *et al.* (2012)	Canada	Cross-sectional survey	Nurses	*n* = 545	X			
Steel *et al.* (2012)	Australia	Cross-sectional survey	Women	*n* = 1835	X	X		
Steel *et al.* (2013)	Australia	Cross-sectional survey	Women	*n* = 160			X	X
Bertsch *et al.* (1990)	United States	Mixed-methodology (observation and cross-sectional survey)	Doulas, fathers and women	Observation: Births: *n* = 14		X		
Deitrick and Draves (2008)	United States	Mixed methodology (cross-sectional survey × 2 and interviews)	Doulas, nurses and women	*Survey:* Women: *n* = 142 Doula: *n* = 104 *Interviews:* Women: *n* = 18 Doulas: *n* = 9 Nurses: *n* = 10	X	X		
Campbell-Voytal *et al.* (2011)	United States	Ethnographic study (observation and interviews)	Professional doulas and women	Doulas: *n* = 4 Women: *n* = 13	X	X		
Gentry *et al.* (2010)	United States	Ethnographic study (observation and interviews)	Women	*n* = 30		X		
Hunter (2012)	United States	Ethnographic study (observation and interviews)	Professional doulas and women	Doulas: *n* = 9 Women: *n* = 9		X		
McComish and Visger (2009)	United States	Ethnographic study (observation)	Women	*n* = 13		X		
Stevens *et al.* (2011)	Australia	Focus groups	Professional doulas and midwives	Doulas: *n* = 6 Midwives: *n* = 11	X			
Akhavan and Edge (2012)	Sweden	Interviews (semi-structured)	Women	*n* = 10	X			X

Table 1 (continued)

Author (year)	Country	Method	Target population	Sample	Theme*			
					I	II	III	IV
Akhavan and Lundgren (2011)	Sweden	Interviews (semi-structured)	Midwives	*n* = 10	X			
Barron *et al.* (1988)	United States	Interviews (structured)	Women	*n* = 41			X	
Berg and Terstad (2006)	Sweden	Interviews (semi-structured)	Women	*n* = 11		X		
Breedlove (2005)	United States	Interviews (semi-structured)	Women	*n* = 24		X		X
Campbell *et al.* (2007)	United States	Interviews (structured)	Women	*n* = 494			X	X
Campero *et al.* (1998)	Mexico	Interviews (semi-structured)	Women	*n* = 16		X		X
Gilliland (2010)	United States	Interviews (semi-structured)	Doulas and women	Doulas: *n* = 30 Women: *n* = 10		X		
Koumouitzes-Douvia and Carr (2006)	United States	Interviews (semi-structured)	Women	*n* = 12		X		
Lagendyk and Thurston (2005)	Canada	Interviews (semi-structured)	Doula programme stakeholders	*n* = 16	X			
Lundgren (2008)	Sweden	Interviews (semi-structured)	Women	*n* = 9		X		
Manning-Orenstein (1998)	United States	Interviews (semi-structured)	Women	*n* = 35				X
Schroeder and Bell (2005)	United States	Interviews (semi-structured)	Women	*n* = 18	X	X		
Smid *et al.* (2010)	Mexico	Interviews (semi-structured)	Traditional midwives and hospital staff	Trad. midwives: *n* = 65 Hospital staff: *n* = 24	X			
Torres (2013)	United States	Interviews (semi-structured)	Doulas and lactation consultants	Doulas: *n* = 16 Lactation consultants: *n* = 18	X			
Campbell *et al.* (2006)	United States	Randomised-controlled trial	Women	*n* = 586			X	
Gordon *et al.* (1999)	United States	Randomised-controlled trial	Women	*n* = 314		X	X	
Kennell *et al.* (1991)	United States	Randomised-controlled trial	Women	*n* = 412			X	
Klaus *et al.* (1986)	Guatemala	Randomised-controlled trial	Women	*n* = 465			X	
Langer *et al.* (1998)	Mexico	Randomised-controlled trial	Women	*n* = 724			X	
McGrath and Kennell (2008)	United States	Randomised-controlled trial	Women	*n* = 420			X	
McGrath *et al.* (1999)	United States	Randomised-controlled trial	Women	*n* = 531			X	
Papagni and Buckner (2006)	United States	Survey (semi-structured)	Women	*n* = 9	X			
Sosa *et al.* (1980)	Gautemala	Randomised-controlled trial (Quasi)	Women	*n* = 40			X	
Trueba *et al.* (2000)	Mexico	Randomised-controlled trial	Women	*n* = 100			X	

*Themes identified for research related to professional doulas. Theme I: Workforce and professional issues; Theme II: Doula's role and skill; Theme III: Medical outcomes of doula care; Theme IV: Social outcomes of doula care.

Table 2 Description of quality scoring system for the health outcomes research associated with trained or professional doula care

Dimensions of quality assessment	Points awarded*
Methodology	
A. Representative sampling strategy	1
B1. Sample size >385 (quantitative) *or* determined statistical power of >80%	1
B2. Sample size >15 (qualitative) *or* reported thematic saturation	
C. Response/participation rate >75%	1
D. Low recall bias (prospective data collection or retrospective data collection within past 12 months)	1
Reporting of participants' characteristics	
E. Parity	1
F. Age	1
G. Ethnicity	1
H. Indicator of socioeconomic status (e.g. income, education)	1
Reporting of doula care	
I. Definition of training/professionalisation of doulas	1
J. Psychosocial outcomes reported	1
K. Medical/obstetric outcomes reported	1

*Maximum score: 11 points.

The quality score of each relevant individual study is reported in Table 3. A study receiving a quality score of >8 was determined to be of acceptable quality as it reflects significant representation across at least two of the domains and some attention to all three areas of interest. The quality assessment method was not applied to the research evaluating non-clinical outcomes as it was determined by the authors that there was insufficient consistency in purpose and objectives within the remaining research to effectively appraise these using a structured system.

Critical analysis of the identified studies was also conducted through categorical analysis, which allowed similar research to be grouped where appropriate, and for both clinical and non-clinical studies to be evaluated. All identified papers were read and reread and key objectives were identified within each paper. These objectives were then grouped within similar descriptive categories to allow contrast and comparison of findings within and across studies. Categories were identified independently by two authors with any discrepancies resolved through discussion.

Results

The review papers identified empirical trained doula research from various countries published between 1980 and 2013. However, 33 of the 48 papers reported findings from either the US or Canada, with the remaining from the United Kingdom, Somalia, Guatemala, Mexico, Australia and Sweden. Thirty-one of the 48 papers included in the review reported on clinical outcomes of trained doula care. These clinical studies were appraised according to a quality scoring system, which identified a number of methodological issues such as small sample sizes, non-representative sample methods and low or unreported response/participation rates with less than half of these papers (12 of 31) receiving a score of 8 or more (out of a possible total of 11).

There has been an increasing interest in doula care research over more recent years with 28 of the total studies examining doula care being published between 2007 and 2013. Although the focus of the research is still primarily on women's experiences and clinical (obstetric or psychosocial) outcomes of trained doula care, more recent studies have also examined professional doula perspectives and their place in maternity care provision. The findings across all research can be grouped into four overarching descriptive categories: workforce and professional issues; trained doula's role and skills; medical outcomes of trained doula care; and social outcomes of trained doula care. Each of these categories is outlined in turn below.

Workforce and professional issues in doula care

The development of the professionalisation of doula care provides significant scope within the field of health services research to examine the workforce characteristics, dynamics and practice of professional doulas. The study designs within this category are quite mixed, with some researchers utilising quantitative methods such as cross-sectional survey (Lantz *et al.* 2005, Klein *et al.* 2009, Eftekhary *et al.* 2010, Liva *et al.* 2012, Steel *et al.* 2012) or cohort study (Dundek 2006) design and others drawing upon qualitative approaches such as semi-structured interviews (Lagendyk & Thurston 2005, Schroeder & Bell 2005, Smid *et al.* 2010, Akhavan & Lundgren 2011, Akhavan & Edge 2012, Torres 2013), focus groups (Stevens *et al.* 2011) and ethnographic observation (Campbell-Voytal *et al.* 2011). One additional research group applied a mixed methodology research design, which included two cross-sectional surveys of women and doulas, and semi-structured interviews with women, doulas and nurses (Deitrick & Draves 2008).

Doula workforce research to date has been limited to the North American setting (Lantz *et al.* 2005, Eftekhary *et al.* 2010). Results from this work in the

Table 3 Quality score of studies on outcomes of professional doula care*

Author (year)	Dimensions of quality assessment			Total score
	Methodology	Reporting of participants' characteristics	Reporting of doula care	
Langer *et al.* (1998)	4 [A, B1, C, D]	3 [E, F, H]	3 [I, J, K]	10
McGrath and Kennell (2008)	4 [A, B1, C, D]	4 [E, F, G, H]	2 [I, K]	10
Gordon *et al.* (1999)	2 [A, D]	4 [E, F, G, H]	3 [I, J, K]	9
McGrath *et al.* (1999)	4 [A, B1, C, D]	4 [E, F, G, H]	1 [K]	9
Newton *et al.* (2009)	4 [A, B1, C, D]	4 [E, F, G, H]	1 [K]	9
Paterno *et al.* (2012)	4 [A, B1, C, D]	3 [F, G, H]	2 [I, K]	9
Akhavan and Edge (2012)	3 [A, C, D]	4 [E, F, G, H}	2 [I, J]	9
Breedlove (2005)	2 [B2, D]	4 [E, F, G, H]	2 [I, J]	8
Campbell *et al.* (2006)	3 [B1, C, D]	3 [E, F, G]	2 [I, K]	8
Campbell *et al.* (2007)	3 [B1, C, D]	3 [E, F, G]	2 [I, J]	8
Mottl-Santiago *et al.* (2008)	4 [A, B1, C, D]	3 [E, F, G]	1 [K]	8
Kozhimannil *et al.* (2013)	4 [A, B1, C, D]	2 [F, G]	2 [I, K]	8
Harris *et al.* (2012)	4 [A, B1, C, D]	2 [E, F]	1 [K]	7
Steel *et al.* (2013)	2 [C, D]	2 [E, G]	3 [I, J, K]	7
Kennell *et al.* (1991)	4 [A, B1, C, D]	1 [E]	1 [K]	6
van Zandt *et al.* (2005)	1 [D]	3 [E, F, H]	2 [I, K]	6
Nommsen-Rivers *et al.* (2009)	1 [D]	4 [E, F, G, H]	1 [K]	6
Gruber *et al.* (2013)	2 [D]	2 [F, G]	2 [I, K]	6
Klaus *et al.* (1986)	4 [A, B1, C, D]	0	1 [K]	5
Campero *et al.* (1998)	2 [B2, D]	1 [E]	2 [I, J]	5
Manning-Orenstein (1998)	1 [D]	3 [E, F, G, H]	1 [J]	5
Trueba *et al.* (2000)	2 [A, D]	1 [E]	2 [I, K]	5
Berg and Terstad (2006)	1 [D]	3 [E, F, G]	1 [J]	5
Dundek (2006)	1 [A, D]	2 [E, G]	2 [I, K]	5
Sosa *et al.* (1980)	1 [D]	0	2 [J, K]	3
Goedkoop (2009)	0	1 [E]	2 [I, K]	3
Barron *et al.* (1988)	1 [D]	?	?	?

*Akhavan and Edge (2012), Akhavan and Lundgren (2011), Berg and Terstad (2006), Bertsch *et al.* (1990), Campbell-Voytal *et al.* (2011), Deitrick and Draves (2008), Eftekhary *et al.* (2010), Gentry *et al.* (2010), Gilliland (2010), Hunter (2012), Klein *et al.* (2009), Koumouitzes-Douvia and Carr (2006), Lagendyk and Thurston (2005), Lantz *et al.* (2005), Liva *et al.* (2012), Lundgren (2008), Papagni and Buckner (2006), Schroeder and Bell (2005) Smid *et al.* (2010), Steel *et al.* (2012), Stevens *et al.* (2011) and Torres (2013) do not evaluate the outcomes of trained doula care and as such the criteria for 'clinical evaluation' do not apply to these studies and they were not assessed via the quality reporting system.

US and Canada provide some preliminary demographic data, suggesting that professional doulas tend to be aged between 30 and 40 years, married and have previously given birth, and have post-secondary qualifications (Lantz *et al.* 2005, Eftekhary *et al.* 2010). This literature review reports that the majority of professional doulas occupy solo practice and attend between 4 and 11 births per year. This may take place in a woman's home and/or a hospital setting, and provides antenatal, intrapartum and postnatal (up to 28 days) support. The sample sizes for these studies are adequate; however, given the limited localities where these workforce audits have been undertaken, the international generalisability of these studies remains limited.

Beyond this basic descriptive information, doula workforce research has also identified a number of professional issues. Professional doulas feel that while they aim to either prevent negative experiences for women (Campbell-Voytal *et al.* 2011) or provide a positive experience for the mother through supporting, empathising and empowering women and their families (Papagni & Buckner 2006, Akhavan & Lundgren 2011, Stevens *et al.* 2011), they nevertheless face a number of significant challenges to providing this care. On a personal level, professional doulas relate that they find it difficult to manage the demands of their practice with their own family and work life with reference to sleep deprivation, being on call and organising childcare when required to attend births (Lantz *et al.* 2005, Campbell-Voytal *et al.* 2011). Many also find the income generated through their doula work insufficient for subsistence, with the average gross income from doula work listed as US$3645 per annum, although some professional doulas also hold other concurrent employment. Despite this, profes-

sional doulas report finding their work rewarding on a personal or emotional level (Eftekhary *et al.* 2010), and the majority expect to still be providing professional doula care in 5 years (Lantz *et al.* 2005).

Interprofessional dynamics with other health practitioners is also an apparent challenge for professional doulas. Qualitative studies from the US and Mexico report that professional doulas perceive themselves as receiving poor acceptance or support from others offering medical maternity care (Smid *et al.* 2010, Campbell-Voytal *et al.* 2011). Further to this, a large workforce survey in Canada found that doulas perceived that they were being excluded from attending births by hospital or administrative regulations more so than by the actions of other health professionals (Eftekhary *et al.* 2010). The negative attitudes of hospital staff towards doulas have also been explored in another US qualitative study identifying women receiving doula care in the hospital environment as describing significant resentment and animosity from nurses towards their doula (Papagni & Buckner 2006).

The views held by midwives towards doulas, as reported by the literature, are somewhat conflicting. A qualitative study by Stevens *et al.* (2011) identified Australian midwives as perceiving that doulas diminish the midwives' relationship with birthing women and often overstep professional practice boundaries. However, a cross-sectional survey of Australian women found that women were more likely to use a doula for their pregnancy or birth if they were consulting with a midwife (Steel *et al.* 2012). Potential interprofessional tensions have been reported to be observed by women who received trained doula support (Hunter 2012, Steel *et al.* 2013); however, women also suggested that the level of training their personal doula received may, through the doula's interactions with midwives and obstetricians, effect change in the perception of the maternity care provider towards the value of doula care more generally (Steel *et al.* 2013).

Conversely, midwives in a Swedish study (Akhavan & Lundgren 2011) have described doulas as an asset to their practice. The Swedish midwives explained that due to doula support for immigrant women, the midwives were able to be more effective in their role. These Swedish midwives also argued that doulas provide security and confidence for birthing women, offering continuity of care if this is not available through a midwife. A similar finding has been described in a US study (Schroeder & Bell 2005) examining a doula care programme for incarcerated women in which the maternity health professionals and correctional officers reported a high level of satisfaction with the programme. Both the Swedish midwives and the US correctional facility staff were reflecting more specifically on doulas that provide support to targeted populations within a structured programme. However, in the Australian studies, midwives and women were reporting on experiences associated with doulas in a general population with highly variable levels of training. In this light, an important and contrasting study from Canada, which reported on general attitudes towards labour and birth, identified a less positive attitude towards doulas being held by obstetricians and more acceptance towards doulas being held by midwives (Klein *et al.* 2009). These discrepancies may be linked to a midwife's view that doulas need to be confident and cooperative and as such be able to give advice without making decisions on the woman's behalf (Akhavan & Lundgren 2011), and that this may not always be a skill doulas bring to the birth suite. However, due to the differing study settings in which this topic has been examined, a cross-comparison of findings needs to be undertaken with caution.

Current research examining interprofessional relations between midwives and professional doulas remains limited due to the small number of studies and the small number of participants in each study. Furthermore, only the Australian and Swedish studies were specifically examining the role of the doula, while the objective of the US and Canadian study was much broader and, as such, this element was only given minimal attention by the researchers. The midwives in the Swedish study were reporting on their experience of specific doulas providing care within a discrete programme. In contrast, the midwives in the Australian study were discussing professional experiences of working with a range of doulas within diverse clinical settings. The inconsistencies in the available research objectives and the maternity care context associated with current studies prevent conclusive insights being drawn regarding the interprofessional dynamics between midwives and trained doulas providing care to the same woman.

Trained or professional doula's role and skill

The role of trained doulas and the skills they provide to women throughout pregnancy, labour, birth and postnatal care have received some research attention, the findings of which are summarised in Figure 2. Primarily, the study design evaluating this aspect of doula care has been qualitative with most involving semi-structured interviews with women receiving care from a trained doula (Campero *et al.* 1998, Breedlove 2005, Schroeder & Bell 2005, Berg & Terstad 2006, Koumouitzes-Douvia & Carr 2006, Lund-

gren 2008, Gilliland 2010). Semi-structured interviews are a useful research method to capture the richness of participants' experiences and perceptions of a topic. They also encourage disclosure of personal and private experiences by the participant to the reviewer, which may not be achieved through other methods such as focus groups. In the context of labour and birth, this method allows women to describe their understanding of the birth event and the care they received in their own words (Creswell & Plano Clark 2011). This work has been supplemented with ethnographic observation studies of doula care (McComish & Visger 2009, Gentry *et al.* 2010, Campbell-Voytal *et al.* 2011, Hunter 2012). Quantitative research methods have also been used either as an aspect of a randomised-controlled trial (RCT), designed to examine the role and skills of a doula (Gordon *et al.* 1999), a cohort study (Paterno *et al.* 2012) or a cross-sectional survey (Steel *et al.* 2012), or as part of a mixed-methodology study design (Bertsch *et al.* 1990, Deitrick & Draves 2008). The four main domains of a professional doula's role and skill (as outlined in Figure 1) as outlined in the available research are emotional support, empowerment, physical support and information provision.

Information sharing and mediation have been identified as common roles undertaken by trained doulas (Campero *et al.* 1998, Berg & Terstad 2006, Deitrick & Draves 2008, Lundgren 2008, McComish & Visger 2009, Gentry *et al.* 2010, Paterno *et al.* 2012). The type of information shared by trained doulas has been identified as diverse and it encompasses the doula's practical experience and knowledge about childbirth, pain management techniques and the birth setting (both for hospital and home births). Women draw on this knowledge in preparation for birth and during the birth itself (McComish & Visger 2009, Gentry *et al.* 2010, Gilliland 2010), as well as in the postnatal period (McComish & Visger 2009, Gentry *et al.* 2010). Research suggests that trained doulas also take on a mediation role on behalf of the women in birth (more so than the antenatal and postnatal period), and this manifests in a number of ways including translation of technical medical information between the medical staff and the women (Lundgren 2008, Gentry *et al.* 2010, Paterno *et al.* 2012) and, more commonly, ensuring that women feel that their perspective has been heard by those providing medical care (Koumouitzes-Douvia & Carr 2006, McComish & Visger 2009, Gentry *et al.* 2010, Gilliland 2010, Hunter 2012, Steel *et al.* 2012).

Trained doulas have also been described as using strategies to provide emotional support to women and their families during pregnancy and intrapartum (Gilliland 2010, Hunter 2012, Paterno *et al.* 2012). A dominant feature of these strategies is the affirmation of women and their birth choices in a non-judgemental manner (Berg & Terstad 2006, Koumouitzes-Douvia & Carr 2006, Lundgren 2008, McComish & Visger 2009, Gentry *et al.* 2010, Gilliland 2010, Hunter 2012, Paterno *et al.* 2012). Trained doulas were also found to encourage women to have confidence in themselves and the birthing process as well as in assisting women to feel secure in often unfamiliar birth environments (Campero *et al.* 1998, Breedlove 2005, Lundgren 2008, Gentry *et al.* 2010). This sense of security was often linked to the woman's perception of value in receiving 'continuity of care' (Breedlove 2005, Berg & Terstad 2006, Lundgren 2008, McComish & Visger 2009, Gilliland 2010, Akhavan & Lundgren 2011), although the definition of this term varied significantly across studies and women who did not receive continuity of doula support expressed dissatisfaction with this arrangement (Deitrick & Draves 2008).

Beyond their primary roles, research shows that trained doulas are often praised by women for lending support to partners and families (Bertsch *et al.* 1990, Berg & Terstad 2006, Koumouitzes-Douvia & Carr 2006, McComish & Visger 2009, Akhavan & Lundgren 2011, Campbell-Voytal *et al.* 2011, Paterno *et al.* 2012). Despite this, no research to date has evaluated doula care from the perspective of other significant support persons such as expectant fathers or close family members.

Physical outcomes of trained or professional doula care

A review of the literature on trained doula care for women and their families highlights that medical outcomes are the primary focus of both cohort studies (van Zandt *et al.* 2005, Dundek 2006, Mottl-Santiago *et al.* 2008, Newton *et al.* 2009, Nommsen-Rivers *et al.* 2009, Harris *et al.* 2012, Paterno *et al.* 2012, Gruber *et al.* 2013, Kozhimannil *et al.* 2013) and RCT designs (Sosa *et al.* 1980, Klaus *et al.* 1986, Kennell *et al.* 1991, Langer *et al.* 1998, McGrath *et al.* 1999, Trueba *et al.* 2000, Campbell *et al.* 2006, 2007, McGrath & Kennell 2008), while also being examined through cross-sectional surveys (Goedkoop 2009, Steel *et al.* 2013) and structured interviews (Barron *et al.* 1988). Research studies of varied design (observational and RCT) and participant size (between 40 and 600) indicate that the duration of labour may be shortened through trained doula care (Sosa *et al.* 1980, Klaus *et al.* 1986, Kennell *et al.* 1991, Trueba *et al.* 2000, Campbell *et al.* 2006, Nommsen-Rivers *et al.* 2009). This outcome was not, however, replicated in the findings from a large

RCT based in Mexico (Langer *et al.* 1998). Those conducting the Mexican study emphasised the policy limitations of the hospital where the intervention was undertaken as restricting the ability for trained doulas to encourage women's ability to change positions throughout labour – an approach which has been associated with lower rates of assisted deliveries and episiotomies, but a non-significant reduction in second-stage labour duration (Gupta *et al.* 2012) – and other aspects of intrapartum doula care, which may explain this discrepancy.

The research suggesting reduced intervention during birth as a result of trained doula support remains inconsistent. Nevertheless, the trend of empirical data, as reported in studies included in this review currently suggests reduced rates of instrumental delivery (Kennell *et al.* 1991, Langer *et al.* 1998, McGrath *et al.* 1999, Goedkoop 2009, Nommsen-Rivers *et al.* 2009), caesarean section (Klaus *et al.* 1986, Kennell *et al.* 1991, Dundek 2006, Goedkoop 2009, Harris *et al.* 2012, Paterno *et al.* 2012, Kozhimannil *et al.* 2013), epidural (Kennell *et al.* 1991, Gordon *et al.* 1999, McGrath *et al.* 1999, Trueba *et al.* 2000, van Zandt *et al.* 2005, Campbell *et al.* 2006, Goedkoop 2009, Newton *et al.* 2009, Paterno *et al.* 2012) and augmentation (Klaus *et al.* 1986, McGrath *et al.* 1999, Trueba *et al.* 2000, Goedkoop 2009).

Doula-supported women may also have better postnatal maternal–infant interactions (Sosa *et al.* 1980) and women who receive trained doula care during birth and/or postpartum are more likely to initiate or maintain breastfeeding for longer periods with fewer complications than standard care control groups (Klaus *et al.* 1986, Barron *et al.* 1988, Langer *et al.* 1998, Campbell *et al.* 2007, Mottl-Santiago *et al.* 2008, Newton *et al.* 2009, Nommsen-Rivers *et al.* 2009, Harris *et al.* 2012, Gruber *et al.* 2013). These benefits appear less likely to occur if the trained doula does not have a relationship with the woman during the antenatal period but simply provides intrapartum support (Gordon *et al.* 1999).

Another interesting trend relating to these clinical trials is the research design approach, which often includes doulas being allocated to the care of women as the women present to hospital in labour without prior meeting, and only via providing intrapartum and immediate postpartum support (Sosa *et al.* 1980, Kennell *et al.* 1991, Langer *et al.* 1998, Gordon *et al.* 1999, McGrath *et al.* 1999, Trueba *et al.* 2000, van Zandt *et al.* 2005, McGrath & Kennell 2008, Nommsen-Rivers *et al.* 2009). This is a feature that does not necessarily correlate with the practice reality of the majority of professional doulas (Lantz *et al.* 2005, Eftekhary *et al.* 2010) and which introduces a note of caution when interpreting the results from these empirical investigations. In particular, the transferability of the findings of clinical research is limited when doula care interventions do not reflect the practice reality of professional doulas. Similarly, all clinical research regarding trained doula care has taken place in a hospital environment rather than in the home or the community – both common settings for practice for many professional doulas according to the workforce surveys undertaken (Lantz *et al.* 2005, Eftekhary *et al.* 2010).

There is substantial variation in the quality of research examined within this category. Of the 22 papers reporting physical outcomes of trained doula care, 10 were assigned a score of 8 or more through quality assessment. Within the lower scoring papers, there were substantial deficiencies in the reporting of participant characteristics (such as age, ethnicity, socioeconomic status and parity). There were also methodological flaws with much of the research, particularly relating to type 1 bias due to the chosen sampling strategy, small sample sizes limiting statistical power and low (or unreported) response or participation rates. These weaknesses limit the conclusions which can be drawn from the studies in this category.

Social outcomes of trained or professional doula care

Despite the focus of trained doula care being on social and emotional support (DONA International 2005, Australian Doula College 2007, The Swiss Association of Doulas 2011, Doula UK Ltd n.d.), relatively little research to date (5 of 48 papers) has examined the outcomes of trained doula care in these terms. However, from the emerging empirical data available, it appears that doula care promotes a positive experience of pregnancy, birth and mothering for women (Campero *et al.* 1998, Manning-Orenstein 1998, Breedlove 2005, Campbell *et al.* 2007). All of these studies have been conducted using semi-structured interviews as the research method.

Women receiving trained doula support approach birth with positivity in both their view of themselves and their expectations of their birth experience (Campero *et al.* 1998, Manning-Orenstein 1998, Campbell *et al.* 2007). Most recently, this has been reported in a study in which primiparous women were interviewed over the phone 6–8 weeks postpartum after receiving doula support from a friend or family relative who had undertaken preliminary doula training. When compared with women receiving standard care, the intervention group was found to be more likely to report positive prenatal expectations about childbirth,

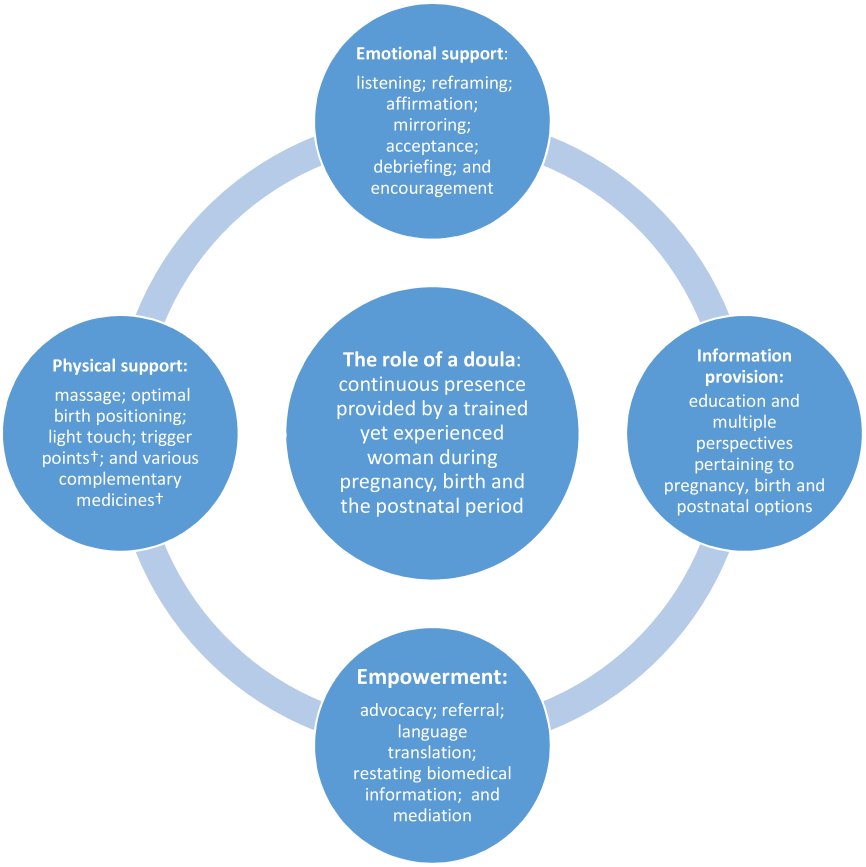

Figure 2 The role of a trained/professional doula during pregnancy, labour and the postnatal period for women, their partners and their families as described in current research. †There are limitations or restrictions on the use of these practices by doulas affiliated to some organisations (e.g. DONA International, CAPPA International) in North America.

positive perceptions of their infants and positive support from others (Campbell *et al.* 2007).

This positive attitude was also extended to the women's sense of self-worth and achievement following doula-supported birth (Manning-Orenstein 1998, Campbell *et al.* 2007). It has been proposed that this may be due to the women's perception that they had a more active role in their labour resulting in the birth being a more positive life experience (Campero *et al.* 1998, Breedlove 2005).

In addition to the low number of studies reporting findings related to the social outcomes of doula care, assessment of the quality of these papers highlights some methodological flaws. Primarily, this is not only associated with poor reporting of thematic saturation or low sample sizes but also extends to insufficient description of participant characteristics.

Alongside the direct social benefits to trained doula care, there is emerging evidence of the economic advantage for society and the health system more broadly. Recently, a US economic analysis of potential cost savings afforded through reduced caesarean section delivery rates associated with professional birth doula care was undertaken (Kozhimannil *et al.* 2013). This analysis drew on three possible scenarios, all of which included reimbursement for professional doulas of $100–$300 to achieve a 22.3%, 31.6% or 40.8% reduction in caesarean rates. The overall trend of the analysis suggests that reimbursement of professional birth doulas results in a substantial cost saving (up to $10.6 million dollars per state), but this is not achieved if higher reimbursements ($300/birth) are coupled with lower reductions in caesarean rates (22.3%).

Discussion

In recent years, there has been a shift in the provision of doula care in the maternity setting and in the context of a changing maternity care landscape. These changes include a stronger policy focus on normal birth by regulatory bodies in the United Kingdom (Maternity Care Working Party 2007), Australia (Kinnear 2010) and Canada (Society of Obstetricians and Gynaecologists of Canada 2008). The policies and position statements

developed in these countries have been underpinned by a women-centred care focus and an acknowledgement of the holistic needs of birthing women. In some circumstances, these policies have also led to the development of frameworks that encourage multidisciplinary team-based maternity care to maximise women's birth outcomes and experience (Australian Health Ministers' Advisory Council 2008, APS Group Scotland 2011). In this context, research examining trained doula care, an under-researched component of contemporary maternity care, has been gaining momentum in recent years with 28 of the 48 papers included in this review published in the previous 5 years. Despite this trend, the work conducted in this area is inconsistent and generally of poor methodological design. Lack of consistency in describing patient characteristics such as parity, ethnicity, age and socioeconomic status – all of which features can affect women's experience of maternity care (Kingston *et al.* 2012) and their pregnancy and birth outcomes (Blumenshine *et al.* 2010) – is one such methodological flaw. In addition, low sample sizes and non-representative sampling strategies were identified in many papers included in this review. As such, this critical review has identified a number of important research gaps in the investigation of professional doula care.

Research gaps and areas for future research

A major area which has so far failed to attract sufficient attention is doula workforce auditing. The surveys undertaken in North America (Lantz *et al.* 2005, Eftekhary *et al.* 2010) provide an introductory understanding of the doula workforce limited to these specific countries, but more research on this topic is needed. This includes an understanding of the size and demographics of the doula workforce as well as the practices and professional issues facing doulas. Such data are required to inform future clinical research intervention and design to allow examination of the effects of doula care as is commonly practised. It will also help ensure an improved understanding of the quality of knowledge and training of individuals providing professional doula services and thereby potentially address interprofessional communication and interaction issues between professional doulas and conventional maternity care providers for the benefit of birthing women. In some regards, this is of particular importance in countries which promote professionalisation of the doula workforce through association membership. However, such an approach is also necessary in other countries where professional doulas operate without practice standards being set by regulatory bodies.

An audit of available doula education will similarly assist in gaining an understanding of the philosophies and principles of doula practice and an audit of hospital administrative policies regarding doula care would provide greater insights into the professional issues and struggles faced by doulas supporting women during hospital births. In addition to these research needs, it is imperative that future enquiry also examine the experience of doulas supporting women beyond the hospital environment (i.e. home or community setting).

The perspective of other maternity health professionals regarding trained doula care is also notable in its scarcity. While preliminary work has been undertaken from the perspective of midwives, no research has examined the views and experiences of obstetricians providing care to women with the support of a trained doula. Given the dominant role that obstetricians play in maternity care in many countries, this is an important area which requires closer attention. Likewise, a comparative examination of the experiences of both midwives and obstetricians towards doulas with various levels of training is an important contribution of professional education to the reported interprofessional dynamics (Schroeder & Bell 2005, Akhavan & Lundgren 2011, Stevens *et al.* 2011).

Despite the assertion by women studied that their partner and families also benefit from doula care, exploration of the experience of these significant stakeholders is another area that requires research attention. While a number of studies have suggested that a key benefit of trained doula care is the support given to the woman's partner, research from the perspective of expectant fathers is necessary before this suggestion can be accepted as the case for both women *and* their partners.

In terms of clinical research, the evaluation of professional doula support has not followed a consistent approach that is able to systematically capture the subjective experiences or the objective outcomes of birth support by a trained doula. While some larger studies have been undertaken (Sosa *et al.* 1980, Klaus *et al.* 1986, Langer *et al.* 1998, van Zandt *et al.* 2005, McGrath & Kennell 2008), only one study (reported in two papers) (Campbell *et al.* 2006, 2007) has applied a mixed-methodology design and, in doing so, has attempted to measure both medical outcomes and women's experiences of care. A mixed-methodology approach within the research field needs to be encouraged and adopted to fully capture all valuable data related to doula support. Given that the scope of doula care includes social and emotional support alongside physical support, it is important that any evaluation of doula care uses a design that describes

the social and emotional outcomes for women and their families. Including this element in any future study does not imply that, given the physical component of support offered through doula care, medical outcomes should be excluded. Rather, it means that quantitative and objective medical measurements, such as maternal and neonatal outcomes and rates of intervention, should be collected and analysed with equal importance to qualitative data to provide a global understanding of the outcomes of professional doula care.

Another final element that must be considered in future outcomes-based studies on this topic is to ensure that the doula interventions employed as part of these studies reflect the practice reality of professional doula care. A number of studies have either assigned doulas to women presenting at hospital in labour, without a prior relationship or alternatively given introductory training in labour support to female relatives or friends and required they provide doula-like care. No study has examined the outcomes of women receiving doula support in the home or community setting. This is not representative of the practice of professional doulas and may not be providing the most accurate evaluation of the value of doula support for birthing women.

Implications for education and practice

This review has identified a number of evidence gaps regarding the role of professional doulas in contemporary maternity care. These research insufficiencies may limit the ability for governing bodies and authorities to develop clear position statements regarding professional doulas; however, the trend of evidence does indicate that women may benefit from the care of a professional doula, and that interprofessional tensions between conventional maternity care providers and doulas may be overcome through adequate doula training. In addition, hospital policies which provide guidelines supporting inclusive approaches to intrapartum doula care in conjunction with minimum standards of doula education may place some responsibility for addressing interprofessional tensions on all members of the women's maternity care team. The characteristics and content needed in both doula training and hospital policies to adequately address this issue require further examination.

Strengths and limitations of this review

The research examining doula care is steadily growing, and although there are a number of studies related to trained doulas providing care to pregnant and birthing women, the heterogeneity in study methodology and design limits the ability to compare findings across studies. The under-reporting and diversity in definition, duration and quality of doula training present a challenge, as does the variety of outcomes included in clinical studies to determine the effects of professional doula care. These limitations are highlighted in this research area due to the dual focus of doula care on both physical and emotional benefits. Alongside these limitations, the ability to comprehensively appraise all work in this field is affected due to inconsistency in the purpose and objectives of the other non-clinical research. This has also led to a need to conflate research with differing study designs within categories to ascertain the current trends and outcomes of work within this topic. In addition, this review is limited by generic weaknesses associated with literatures reviews more broadly such as the potential for omission of relevant research through unintended gaps in the literature search process. Errors in the translation of data from the primary literature to the summary statements in the review are also possible. These limitations have been ameliorated through the systematic process used for this review.

The development of an evidence base for doula support services is vital if a clear understanding of the role, value and contribution of doulas to women's experience and outcomes of birth is to be objectively assessed. This review provides a current overview and key insights regarding professional or trained doulas and the care they provide for birthing women, their families and the health professionals and administrators who support them. It also provides direction for future research into doula care and thereby promotes a broader evidence base on the topic. Of primary importance is the need for future clinical research to include a mix of both qualitative and quantitative research methods to capture all dimensions of women's health which may be affected by trained or professional doula support during birth.

Conclusion

This review identifies a number of significant gaps in professional doula care research: doula workforce, education surveys and auditing; the perspectives of other key stakeholders including partners, families and maternity health professionals; and clinically relevant mixed-methodology research exploring the social, emotional and medical outcomes of receiving doula support during the antenatal, intrapartum and postnatal period. It is imperative that key aspects of professional doula practice be subject to further rigor-

ous, empirical investigation to help establish an evidence base to guide policy and practice relating to this area of support and care for pregnant and birthing women.

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