

Abstract

Background: Doulas offer support and advice to some women during the childbirth process, however access to doula care is not available to all due to availability and cost. **Methods:** This scoping review synthesizes literature related to the use of doula services and the experiences and outcomes of those who used the services. Eligibility criteria included peer-reviewed studies conducted in the United States and published between 2010 and 2022 that specified use of doulas and assessed maternal experiences and outcomes. Articles were accessed through PubMed, Google Scholar, and PsycInfo.

Results: Nineteen articles met the criteria and were included in the review. Findings across eligible articles included qualitative analyses related to psychosocial aspects of experience and quantitative findings on birth experience, complications, breastfeeding initiation, and emotional health. **Discussion:** Findings suggest having doula support can improve experiences and outcomes. However, further implementation and evaluation is needed as well as greater access to doula services among the childbearing population who are historically marginalized and minoritized.

Key words: Childbirth; Doula; Maternal health; Postpartum period; Pregnancy.

DOULA SERVICES AND BIRTH OUTCOMES: A SCOPING REVIEW

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The well-being of all those who are pregnant and their babies, and especially those historically marginalized and minoritized, is a significant public health issue and a factor in the overall health of the world (Centers for Disease Control and Prevention, 2021). In the United States, non-Hispanic Black pregnant and postpartum women, compared to other races and ethnicities, are at the highest risk of maternal morbidity and mortality (Fink et al., 2023; Fleszar et al., 2023; Hoyert, 2023). This population, along with Hispanic and Native American women, is less likely to have access to prenatal care or experience late engagement due to systemic barriers and racism (Gadson et al., 2017). In communities in which there is lower access to education or supportive social structures, pregnancy complications such as preterm birth and low birthweight are more frequent (Riley et al., 2019). Improving birth outcomes of patients who are historically marginalized or minoritized is a challenge that public health initiatives must continue to address (Riley et al., 2019).

The profession of doulas was established in part to address the need to provide more support to and advocacy for women during the childbirth process (Ahlemeyer & Mahon, 2015). Throughout history, women are often accompanied by a support person during labor and childbirth (Bohren et al., 2019). Globally, a doula is “an individual [who] provides physical, social, and emotional support during pregnancy, labor, birth, and the postnatal period” to those who give birth and their families (Steel et al., 2015, p. 225). Many doulas pursue the profession given a desire to support women from their own racial, ethnic, and cultural community and alleviating disparities in birth outcomes (Hardeman & Kozhimannil, 2016; Kathawa et al., 2022).

Doulas receive their credentials through higher education or vocational training (Steel et al., 2015). There are programs that allow doulas to become specialized in areas such as prenatal care, breastfeeding, mental health, feeding assistance, and safe sleep practices (Thomas et al., 2017). Doula care can involve a variety of services, including support in making informed decisions by developing a relationship based on trust, something which is sometimes lacking in a physician–patient relationship (Marshall et al., 2022; Neel et al., 2019; Wint et al., 2019). Although doulas are not “medical professionals” and do not provide medical intervention, they can listen to fears and expectations and help advocate for the preferences and decisions of all those who are giving birth (Steel et al., 2015). Under ideal conditions, the doula is working with the perinatal care providers to provide a safe and optimal space for their client and providing information such as various birth positions and labor support techniques (Steel et al., 2015). More state policies have been suggested to ensure adequate coverage of doula services by Medicaid, but few are being implemented (Ogunwole et al., 2022). Thus, there is a lack of effective policy solutions for enhancing doula care as one strategy to effectively reduce health disparities (Van Eijk et al., 2022).



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An increasing number of doula programs have been developed (Mottl-Santiago et al., 2020) as well as policies to support access such as reimbursement (Ogunwole et al., 2022); however, an updated assessment of findings on the effect of doula care on birth experiences and outcomes is lacking (Bohren et al., 2017; Steel et al., 2015). The purpose of this analysis is to synthesize literature on findings on doula services and birth experiences and outcomes.

Methods and Procedures

We conducted a scoping literature review of studies assessing the impact of doula services on maternal experiences and outcomes. Eligibility criteria for articles included studies peer-reviewed original research of any study design; conducted between 2010 and including 2022; specified the use of “doulas”; included pregnant women and others who give birth and assessed their experiences and outcomes; and conducted in the United States.

Procedure

Articles were accessed through PubMed, Google Scholar, and PsycInfo. The Google Scholar search results total was

Doula services have potential in providing support during pregnancy, labor, and birth and are especially helpful for those who are historically marginalized and minoritized and who experience the most adverse birth experiences and outcomes.

capped at 400 articles due to an excess of results (Haddaway et al., 2015). Keywords and phrases that were used to obtain the articles included doula and maternal health or maternal health outcomes. These search terms were based on previous literature reviews that focused on doula care and maternal outcomes (Kilfoyle et al., 2016; Steel et al., 2015). Endnote was used to track all relevant articles and citations throughout the process of writing the literature review.

The initial assessment was conducted by reviewing each article’s abstract to evaluate the relevance of the article, with non-relevant articles being removed. The remaining articles were assessed via full text. The reasons for which full-text articles were excluded were tracked in an Excel spreadsheet. See Figure 1 for the process for determining full-text, eligible articles for the review.

Results

Nineteen articles were included in the review. Table 1 provides an overview of the first author, publication year, and characteristics of the eligible articles. Articles were published from 2010 to 2022 and included a variety of study designs, including 5 qualitative and 14 quantitative studies (Table 1; Supplemental Digital Content at <http://links.lww.com/MCN/A90>). Qualitative findings focused mainly on psychosocial aspects of experience, whereas the quantitative findings covered birth experiences, complications, breastfeeding, and emotional support or health.

Qualitative Findings on Psychosocial Aspects of Experience

Qualitative studies (Collins et al., 2023; Gannon et al., 2022; Gentry et al., 2010; Kozhimannil, Hardeman et al., 2016) allowed for experiential reflection on use of doulas and focused on psychosocial aspects of care. Supportive aspects noted by participants who used doulas included feelings and experiences of heightened trust (Collins et al., 2023; Kozhimannil, Hardeman, et al., 2016); advocacy and

a sense of being seen and heard (Collins et al., 2023; Gannon et al., 2022; Gentry et al., 2010; Kozhimannil, Harde- man, et al., 2016); increased knowledge (Collins et al., 2023; Kozhimannil, Harde- man, et al., 2016); and better support for their emotional response and needs in the birth process (Gannon et al., 2022; Gentry et al., 2010).

Quantitative Findings: Birth Experience, Complications, Breastfeeding Uptake, and Emotional Health

Quantitative studies varied in design. Most were secondary data analysis or program evaluation. Findings of benefit of use of doula services on experiences and outcomes included lower rates of cesarean birth (Falconi et al., 2022; Greiner et al., 2019; Kozhimannil et al., 2014; Paterno et al., 2012; Thurston et al., 2019); less use of labor epidurals (Hans et al., 2018; Paterno et al., 2012; Thurston et al., 2019); higher breastfeeding initiation (Gruber et al., 2013; Kozhi- mannil et al., 2013; Thurston et al., 2019); better mental health or less stress (Falconi et al., 2022; Hans et al., 2013); fewer maternal deaths and other compli- cations (e.g., uterine ruptures, hysterectomies; Greiner et al., 2019); lower rates of intervention during labor and birth (Everson et al., 2018); increased Quality Adjusted Life Years (QALYs; Everson et al., 2018); and feeling satisfied with doula care (Lanning & Klamann, 2019).

Discussion

A lack of support during childbirth is common (Everson et al., 2018; Kozhimannil et al., 2013). Studies in this review suggest use of a doula during various aspects of the child- birth continuum such as prenatal care, labor, birth, and postpartum is associated with improved birth experiences and outcomes, including emotional response or sense of support. Examples of improved birth outcomes include higher rates of spontaneous vaginal births, fewer cesarean births (though findings are mixed), higher rates of breast- feeding initiation, and feeling advocated for and seen. Table 2 summarizes the evidence.

At least one study found that Black women and women of lower socioeconomic status do not have the same access to doula care as White women (Kozhimannil et al., 2014). Women who seek and obtain doula services privately, typically highly educated women, have independently identified their own desires for their labor and birth experience (Hen- ley, 2020). Conversely, those who might benefit the most from doula services often find it inaccessible. For example, Kozhimannil et al. (2014) found that women who wanted but did not obtain doula services were characteristically

Black, had a low income, and either publicly or underin- sured. Recent findings of a prospective secondary analysis of Medicaid pregnancy-related coverage in Texas showed that expanding such coverage would be cost-beneficial and im- prove health equity (Nehme et al., 2023).

Community agencies have noticed this gap, leading to the development and implementation of doula programs that offer their services to marginalized populations (Ever- son et al., 2018; Israel, 2020; Kozhimannil et al., 2013). One of the most important aspects of a community-based doula program is that the doulas represent those they serve, racially, ethnically, or culturally (Gentry et al., 2010; Hans et al., 2018; Kozhimannil et al., 2013; Marshall et al., 2022) allowing doulas to provide culturally competent care and build trust with their clients (Collins et al., 2023; Gentry et al., 2010). Black women especially may mistrust the health care system due to previous negative experi- ences including disrespect and racism (Society for Mater- nal-Fetal Medicine et al., 2022; Taylor et al., 2020). Black doulas can understand one's fears and work to engage with the health care system, therefore reducing their stress

FIGURE 1. PRISMA FLOW DIAGRAM OF ARTICLE SELECTION FOR THE REVIEW

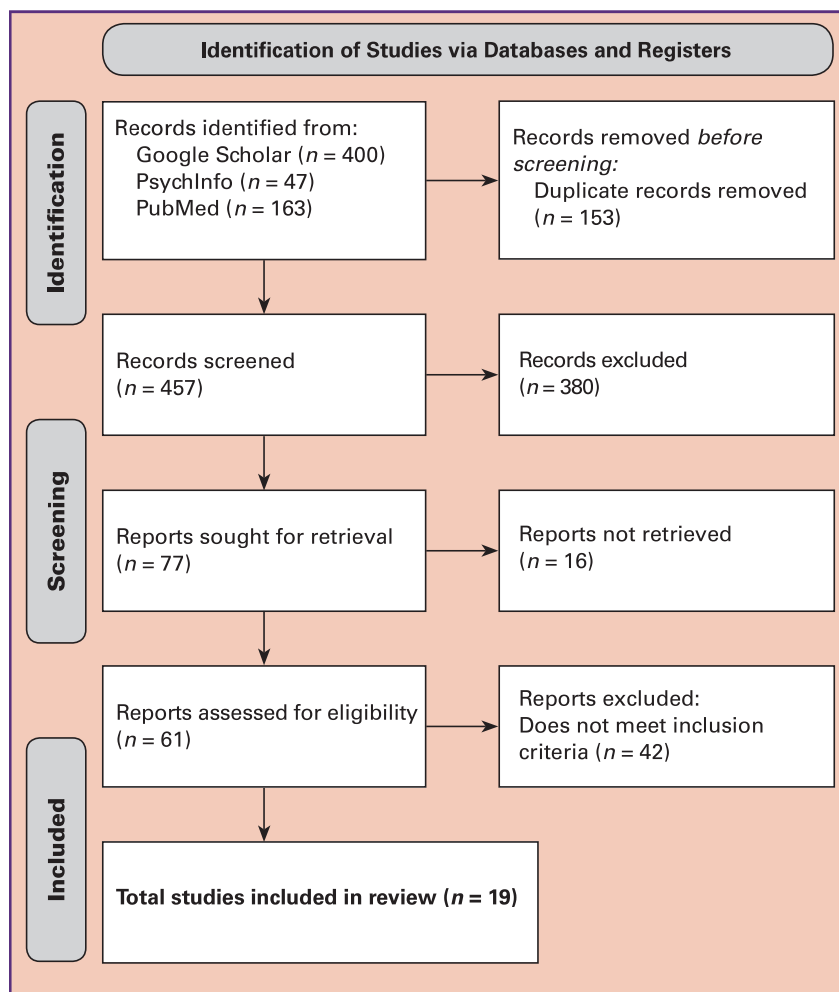


TABLE 2. SUMMARY OF EVIDENCE

Outcomes of Doula Use	Findings (First Author, Year)
Quantitative	
Lower rate of cesarean birth	<ul style="list-style-type: none"> • Women who used doulas during pregnancy had lower odds of cesarean birth (OR: 0.47, 95% CI: 0.29–0.79; Falconi et al., 2022). • Estimated that support of a professional doula would lead to 71,984 less cesarean births for second pregnancies in a theoretical cohort of 1.6 million women (Greiner et al., 2019). • Doula support was associated with a ~60% reduction in odds of cesarean birth compared to women without doula support (Kozhimannil et al., 2014). • An increase in the number of doula interventions was associated with a decreased odds of cesarean birth (AOR 0.90, 95% CI, 0.85–0.95; Paterno et al., 2012). • Women receiving Medicaid services were 1.8 times more likely to give birth by cesarean than those with doula support (OR: 1.8, 95% CI: 1.1–2.9; Thurston et al., 2019).
Less use of epidural during labor and birth	<ul style="list-style-type: none"> • An increase in the number of doula interventions was associated with decreased odds of epidural use (AOR: 0.92, 95% CI, 0.86–0.98; Paterna, 2012). • Births with doula support were associated with lower rates of epidural use (OR 3.0, 95% CI 2.1–4.4; Thurston et al., 2019). • Women who participated in a doula-home-visiting intervention were less likely to use epidural or other pain medication during labor (OR: 0.47, 95% CI: 0.25–0.88; Hans et al., 2018).
Breastfeeding initiation	<ul style="list-style-type: none"> • Doula support was associated with a 10-fold increase in breastfeeding initiation (Thurston et al., 2019). • Women with doula support were significantly more likely to initiate breastfeeding (Gruber et al., 2013).
Better mental health or less stress	<ul style="list-style-type: none"> • Women who used doulas during pregnancy had lower odds of a postpartum anxiety or postpartum depression diagnosis (OR: 0.43, 95% CI: 0.22–0.92; Falconi et al., 2022). • Mothers who received doula support reported less parental stress than the control group (Hans et al., 2013).
Fewer maternal deaths and other complications	<ul style="list-style-type: none"> • A decrease of 30 maternal deaths with professional doula support as compared to women without doula support based on a theoretical cohort of women was noted (Greiner et al., 2019).
Lower rate of intervention	<ul style="list-style-type: none"> • Adolescent mothers who received doula services and their babies had lower rates of interventions compared with national statistics (Everson et al., 2018).
Qualitative	
Heightened trust	<ul style="list-style-type: none"> • Prenatal support professionals attending prenatal medical appointments increased women’s trust in their medical providers and care (Collins et al., 2023). • Doulas create an environment of trust, connectedness, and personal security that enhances clinical encounters (Kozhimannil, Hardeman et al., 2016).
Advocacy and a sense of being seen and heard	<ul style="list-style-type: none"> • Perinatal support professionals and doulas preparing women before their prenatal appointments, including prepping and asking questions of their medical care providers, increases their feelings of being heard by their medical providers (Collins et al., 2023; Gannon et al., 2022; Kozhimannil, Hardeman et al., 2016). • Doulas support and enhance women’s health literacy and health care engagement (Gannon et al., 2022). • Doulas assisting adolescent mothers expanded their advocacy services outside of solely being health care advocates due to the specific needs of this population (Gentry et al., 2010).
Increased knowledge	<ul style="list-style-type: none"> • Perinatal support professionals bridge the gap between medical providers and women by rephrasing medical terminology into plain language (Collins et al., 2023). • Doulas empower women with the knowledge of the physiological processes that occur during pregnancy, as well as connect women to appropriate educational resources (Kozhimannil, Hardeman, et al. 2016).
Better support for their emotional response and needs during the pregnancy, labor, and birth process	<ul style="list-style-type: none"> • Doulas prioritize the women’s recovery and provide emotional support for women recovering from substance use disorders (Gannon et al., 2022). • Adolescent mothers perceived doulas as taking on socially supportive roles, like those of family and friends. Doulas actively listened to adolescents with self-reported depression (Gentry et al., 2010).

CLINICAL IMPLICATIONS

- Findings suggest that doula services have potential in supporting all those who give birth, especially those of marginalized groups who experience the most adverse birth experiences and outcomes.
- Doula services are not medical services; doulas work in partnership with nursing and medical services to increase emotional, physical, and social support.
- Hospital and insurance administrators should continue to ensure access to high-quality maternity service for those most vulnerable for adverse birth outcomes.
- Nurses can consider the elements of doula services that are perceived to be supportive and patient-centered care and replicate or provide doula service access in a collaborative manner.

about interactions with health care workers and enhancing their trust (Collins et al., 2023). Doula services are not always covered by health insurance and, thus, it is difficult to pay for services (Hans et al., 2018; Kozhimannil et al., 2014; Thomas et al., 2017). Community-based programs, which typically offer free doula services to populations that experience a lack of access to resources offer a viable option (Thomas et al., 2017). The “By My Side” Birth Support Program, a doula program serving women in New York City’s undersupported or underresourced neighborhoods, provided free services for those who met the Special Supplemental Nutrition Program for Women, Infants and Children income eligibility and saw improvements in maternal outcomes (Thomas et al., 2017).

Multiple studies suggest benefits in psychosocial aspects of birth, including being advocated for and supported (Gannon et al., 2022; Kozhimannil, Vogelsang, et al., 2016; Thomas et al., 2017; Thurston et al., 2019). Doula services are non-medical and typically provided in lay terms (Gannon et al., 2022). This non-medical education provides an opportunity to enhance maternal health literacy. Educating individuals about what services are available, supporting and preparing for prenatal appointments, and communicating clearly in a culturally competent manner increase maternal health literacy (Gannon et al., 2022; Thurston et al., 2019). With an increase in health literacy, there is greater ability to access health services and assess the quality of health services (Kozhimannil, Vogelsang, et al., 2016). Under ideal conditions, the doula should be working with the perinatal care providers as part of the health care team to provide needed information and support (Steel et al., 2015).

Clinical Nursing Implications

Having a support system in place, especially a professional such as a doula, has been shown to improve maternal experiences and outcomes. There are mixed findings about clinical outcomes such as cesarean birth. More research is needed with larger samples on the relationship between

doulas and cesarean birth and other clinical outcomes; however, preliminary data are promising. When women have the proper support, their feelings of safety and their confidence in making medical decisions may be enhanced. Nurses can work with and advocate for doula inclusion as part of the childbirth process to provide additional support.

Limitations

Articles in the review were published between 2010 and 2022 about research conducted in the United States which has important relevance for practice in the United States but cannot be generalized to global experiences.

Conclusion

Our review included articles with varied study designs and analyses, including qualitative and quantitative. The qualitative studies allowed for understanding lived experience of women who used doulas and focused on psychosocial aspects such as knowledge and being advocated for and listened to during the birth process. Quantitative analyses demonstrated mixed findings on cesarean birth, but overall positive outcomes of reduced use labor epidurals, fewer complications, greater breastfeeding initiation, and greater supportive care. Continuing to increase access to services such as doulas for those most in need is vital, as is the need to rigorously evaluate outcomes. ✚

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The authors declare no conflicts of interest.

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