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The Impact of Doula Support on Birth Roles, Infant and Maternal Health, and Pregnancy



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ABSTRACT

Background: Only 6% of birthing people in the United States use a doula during childbirth. Doulas are certified professionals skilled in providing continuous one-to-one support for the expectant mother by helping them achieve their birthing plan. In addition to regular nursing care, continuous one-to-one emotional support provided by support personnel such as doulas has shown promising outcomes for women in labor. However, the implementation of doulas remains controversial and is attributed to their underutilization. **Purpose:** The purpose of this review was to explore the impact of doula support on birth roles, infant and maternal health, and pregnancy. **Method:** A systematic analysis of this review includes evidence-based literature surrounding the impact of doula support. The patient, intervention, comparison, outcome, and time (PICOT) question guiding this review was: In labor and delivery, what are the effects of doulas on the pregnancy and laboring process vs. those without doula labor support throughout the pregnancy. **Results:** Themes of impactful doula support identified in this study included positive birth experiences, birth team dynamics, infant and maternal outcomes, and sociodemographic obligation. The findings of this study indicate significant evidence that doulas positively impact each of these themes. **Conclusion:** Doulas have an integral role within each of these by providing one-on-one care, continuous support, and possess extensive pregnancy and childbirth awareness that fosters a strong rapport with their clients. Promoting inclusive doula care among pregnant and postpartum women would allow doulas to further embody full-spectrum care to individuals. The benefits of doula use outweigh any potential burdens.

INTRODUCTION

Various supportive personnel is available to women during the pregnancy and birthing process. It can be especially difficult for first-time parents, those of low socioeconomic status, adolescents, geriatric mothers, and minorities to scope out resources for intrapartum and delivery care. A study from the March of Dimes indicated that increased exposure to doula care within underserved communities, can improve a range of health outcomes for mothers and babies, lower healthcare costs, reduce c-sections (cesarean sections), decrease maternal anxiety and depression, and help improve communication between low-income, racially/ethnically diverse pregnant women and their health care providers [1]. In conjunction, the one-on-one support provided by a doula heightens these outcomes for women in labor [2]. Therefore, at-risk individuals need to use highly specialized and inclusive care due to increased risks of complications.

Despite there being nearly 9,000 registered doulas in the United States, there are specifically growing misconceptions and a general lack of knowledge regarding what a doula is and what services they provide [1]. Only 6% of birthing people in the United States use a doula during childbirth [3]. Due to the common knowledge deficits, the benefits of labor companionship may not be recognized by providers, women, or their partners [4]. These deficits affect how high-quality health care services are delivered, patients' perception of care, and the culture of the work environment. The purpose of this review was to explore the impact of doula support on birth roles, infant and maternal health, and pregnancy. A systematic analysis of the evidence-based literature surrounding the impact of doula support is included. The question guiding this review was: In labor and delivery, what are the effects of doulas on the pregnancy and laboring process vs. those without doula labor support throughout the entire pregnancy.

BACKGROUND

A doula is a birthing coach who is hired to support the expecting mother and other supporting persons in emotional, physical, and informational areas (see Figure 1). Additionally, doulas advocate for the patient to make sure other healthcare professionals are following the patient's birth plan if possible. In 1984, the first professional doula organization was founded by a group of midwives and nurses [5]. Before then, a midwife served as a coach and primary healthcare provider. It was then designated that another certified personnel should help assume supportive

responsibilities from midwives. In 1992, the Doulas of North America (DONA) International was created to help certify more doulas to be used throughout the United States. Since then, doulas have become more prevalent and aid in the overall birthing process and strengthen the bond between baby and mom.

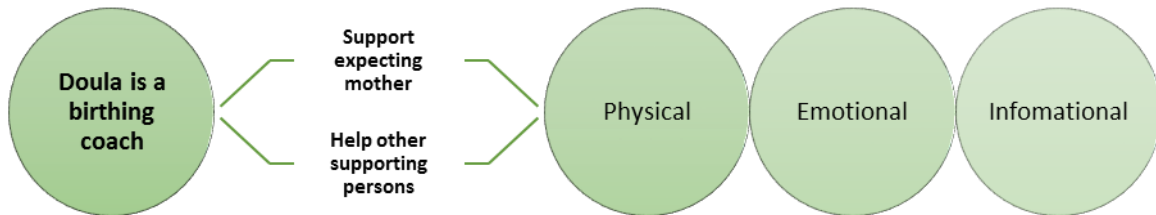


Figure 1. Expected function of a doula.

Healthy People 2030 has numerous goals to reach by 2030. One of these goals involves improving maternal health in America: This plan calls for improving prevention and treatment, prioritizing quality improvement, optimizing prenatal and postpartum health, and improving data and bolstering research to inform future interventions [6]. While the study does not address doulas directly, doulas can play a vital role in the call to action to improve maternal health. They help in education and assisting the support person in what to do and how to help the expecting mom. Not only does this improve the help of the support person but it also helps the mom's overall outcomes. Increasing awareness about doulas could be a vital component in helping improve maternal health by 2030.

METHOD

This review included several databases including PubMed, Medline, Google Scholar, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and EBSCOhost (see Table 1). Keywords used to research the literature included *doula*, *support person*, *birth roles*, and *maternal-infant outcomes*. In searching these databases, several credible sources about doulas were found. To rule out some of the many sources, the abstracts were reviewed for inclusion criteria. This narrowed the list to 15 studies from the years 2014 to 2021. This study gathered the appropriate information from those studies.

Table 1. *Methods for Data Collection*

Searches Databases	Search	Search Strategy and Limiters	Found	Studies	Used	Reasons for Exclusion
PubMed	9/10/2021	<p>Search field: Doula support on health and birth</p> <p>Key terms: Doula, birth outcome, prenatal health, cost-effectiveness analysis, labor care, adolescence, cesarean, Physicians, midwives, and labor nurses, labor support, doula support</p> <p>Limitations: Last 6 years; Linked Full text</p>	40	20	6	Not within 6 years; Study duplicate; Too broad or narrow; Focus on care outside the United States
Medline		<p>Search field: Doula use in pregnancy</p> <p>Key terms: Communication; doulas; childbirth; patient advocacy; labor support; perinatal care</p> <p>Limitations: Last 6 years; English; Linked Full-text; Peer-reviewed journals</p>	17	10	3	Topic too narrow; Focus care outside the United States; Online full-text not available; Not doula specific

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Google Scholar</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">9/1/2021</p>	<p>Search field: Doula support during postpartum services</p> <p>Key terms: Birth, postpartum, community-based, inequities, midwifery, doula services, and pregnancy.</p> <p>Limitations: Last 6 years</p>	<p>315</p>	<p>25</p>	<p>3</p>	<p>Topic too narrow; Focus care outside the United States; Online full-text not available; Not doula specific; Online full-text not available</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Cumulative Index of Nursing and Allied Health Literature (CINAHL)</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">9/6/2021</p>	<p>Search field: Doula use in pregnancy</p> <p>Key terms: Adolescent mothers, doulas, home visits in pregnancy, maternal-child health</p> <p>Limitations: Last 6 years; English; Linked Full-text; Peer-reviewed journals</p>	<p>16</p>	<p>7</p>	<p>2</p>	<p>Topic too narrow; Study duplicate; Focus on insurance; Focus on care outside the United States</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">EBSCOhost</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">9/5/2021</p>	<p>Search Filed: Role of Doulas</p> <p>Key terms: Doulas, Physician-patient relations, Patient-centered care, Health outcome assessment</p> <p>Limitations: Last 6 years; English; Linked Full-text; Peer-reviewed journals</p>	<p>141</p>	<p>42</p>	<p>1</p>	<p>Not doula specific; Topic too narrow or broad; Focus care outside the United States; Study duplicate</p>

Relevant Studies Chosen

The nursing evidence hierarchy was used to determine the strength of confidence of the studies (see Figure 2). Level I studies were considered the strongest confidence comprising meta-analyses, systematic reviews of randomized controlled trials, and current practice guidelines. Comparatively, level VII studies were consistent with the weakest confidence and were purposely excluded from this study. The collected literature comprised 6 studies within level I followed by four studies in level VI, three studies in level IV, and one study in levels II and IV.

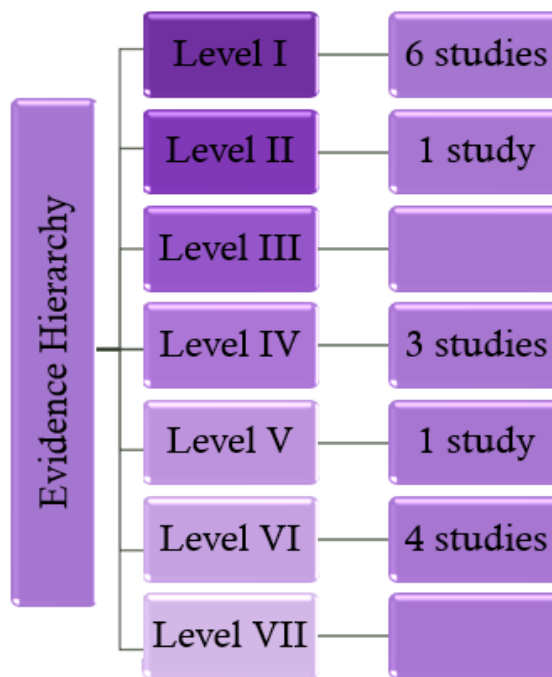


Figure 2. Level of evidence hierarchy for the impact of doulas

REVIEW OF THE LITERATURE

Throughout the compiling of this systematic review, the literature gathered had similar themes. The themes were related to the varying impact and perceptions of doula support on birth roles, infant and maternal health, and pregnancy. The common themes included how doulas build a positive birth experience, improve infant and maternal outcomes, aid in various sociodemographic settings, and how they add to the dynamics of the birth team.

Positive Birth Experience

Pregnant and laboring women had a positive experience when doulas established a trustworthy rapport and instilled confidence. However, many women who want a companion may not have had one, especially in areas where there were lower resources. A woman's desire for a healthy and happy birth while using a skilled companion was centered on outcomes for themselves and their babies. Support provided by doulas and companions paved the way for them to have a positive birth experience, as the support facilitated them to feel safe, strong, confident, and secure [4]. In addition to these feelings, men also felt positive about their role in the birthing process with the doula's ability to guide them. They believed that they would be better able to support their partner during future births [4]. When doulas were not used, it was common for men to feel as though their presence during the birthing process was not essential, only acknowledged. Subsequently, men felt they were left to rely on cues from women and the healthcare provider on when and how to provide support and were afraid that they would step out of turn.

As listed in Figure 3, doulas can better guide couples and support persons with suggestions and demonstrations. Moreover, doulas can be an added support from the birth to postpartum transition. This transition is especially challenging for new parents and more positivity and improved bonding were reported among parents who used doulas for the first time. Doulas are invited to a very intimate and unique time in a couple's life. Throughout the pregnancy, birthing, and postpartum process, doulas can build a rapport and become trusted individuals in the client's life. A typical postpartum check-up is scheduled a little over six weeks out from birth. A doula's presence in the hospital and home during the first several weeks allows families the ability to adjust and become acclimated to the changes that occur, even before she has her first postpartum visit [4,7].

Doulas help accompany laboring women to the hospital to provide comfort measures and emotional support and to offer postpartum help around breastfeeding and bonding [7]. This helps provide a framework for postpartum care sooner so that complications can be caught and treated appropriately or prevented. This period is also very sensitive amongst adolescents. Adolescents in other studies experienced favorable results from doula use, including helpful support during

pregnancy, positive birth experiences, and healthy interactions between mothers and their infants and family members [8]. The positive impacts and valuable support this makes on adolescents can improve these mothers' experiences and outcomes such as finishing school, setting wise goals for the future, and raising healthy children. However, even individuals with more support or more established persons can benefit from doulas by having an experienced individual guide them through their journey.

The support also provided a human dimension of care, based on an individual woman's unique needs, which provided comfort and mitigated distress for the woman. Women described both having a positive birth experience because of the presence of a companion [4]. The doula's ability to connect and grow a positive relationship fosters decreased anxiety related to birth, entering the postpartum period, and an overall sense of well-being. The human dimension of care allows the individual to realize they are not alone in this process, they have someone they can trust who's been through it before, and someone who is not just present at the time of birth, but before and after. Greater bonding and receptivity regarding birth correlates with fewer complications. Doulas accomplish this when giving informational support by providing information about childbirth, bridging communication gaps between health workers and women, and facilitating non-pharmacological pain relief [4]. The doula's service to strengthen maternal-infant bonding and create positive interactions might lead to an increase in positive birth experiences for women and their support persons and result in improved outcomes.

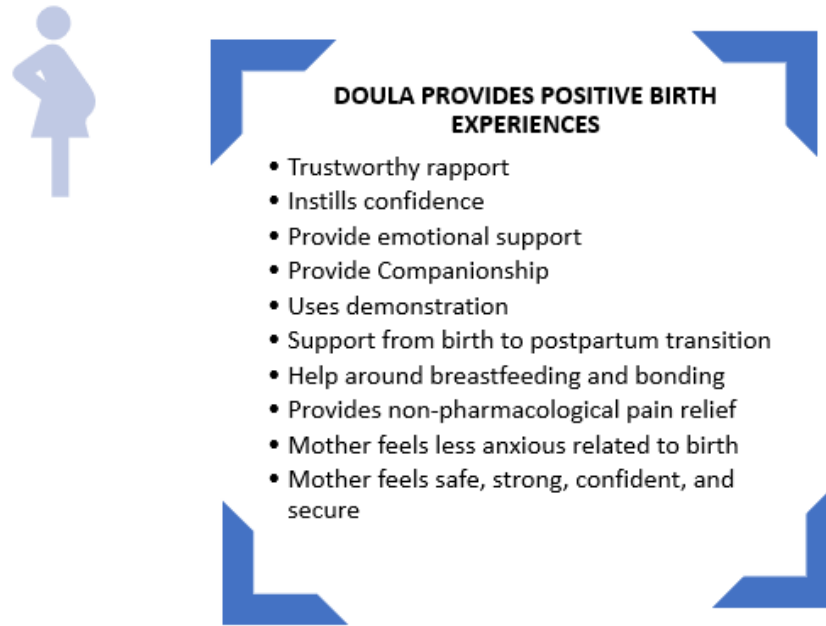


Figure 3. Doulas can provide positive birth experiences in numerous ways.

Maternal and Infant Outcomes

As illustrated in Figure 4, doula care has been associated with fewer overall complications and fewer medical interventions throughout pregnancy, birth, and the postpartum period. These complications may include antepartum and postpartum depression, increased use of Pitocin and analgesia during labor, maternal/infant deaths, increased cesarean section rates, uterine rupture, low-birth-weight newborns, vacuum, or forceps assisted births, low APGAR scores, longer labors, increased or routine hysterectomies and decreased quality of life [9-13]. The foundation of doula care is based on continuous support that is typically provided entirely through the pregnancy process, labor, and typically up to three months postpartum. This continuum of care allows, not only for a positive mentor relationship to be established but also for these complications to be prevented.

This study determined women with continuous support were more likely to have spontaneous vaginal births and shorter labors and less likely to have negative birth experiences, labor pain medication, epidural/spinal analgesia, instrumental vaginal births, cesarean births, and low 5-minute Apgar scores [10]. The continuous labor support enables women to have access to these important advantages and doesn't result in any major complications or drawbacks, aside from

expense. These findings seem to be an integral part of care practice for those individuals who wish to improve the quality, outcomes, and experience of maternity care. Many studies that have determined lower risks of cesarean birth and shorter labors are correlated to doula use [3,9-13]. Increasing awareness of doula care and access to support can substantially improve maternal and infant outcomes.

There is less need for medical interventions associated with doula use including decreased utilization of oxytocic agents (i.e., Pitocin) commonly used for labor induction and postpartum hemorrhage, analgesics during labor, vacuum, and/or forceps during births. Continuous one-to-one support for mothers enhanced positive feelings about birth, shorter labor, fewer cesarean sections, and less need for anesthesia or analgesia [9]. The research that supports doulas having better birth outcomes, smoother labor, and improved pregnancy experiences highlights the impact of the care that they provide. Doulas accomplish this by providing that deliberate and continuous support, reducing stress and anxiety, being expertise trained as a childbirth professional, and becoming knowledgeable about their clients. Moreover, these positive effects are greater among women who are socially disadvantaged, low-income, unmarried, adolescent, and first-time mothers [7-9, 11, 14].

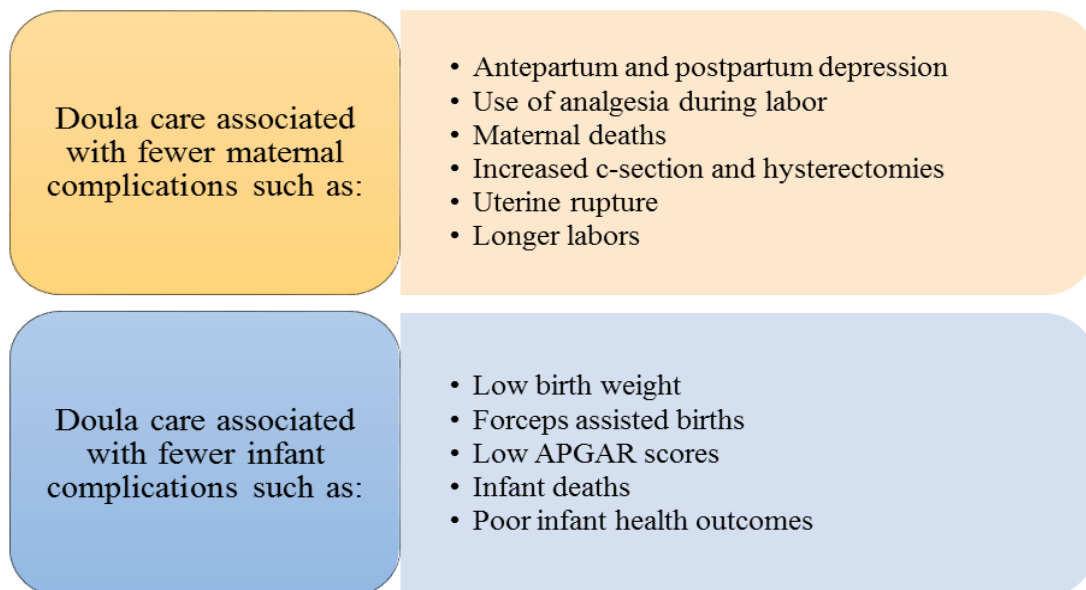


Figure 4. Doula care is associated with fewer maternal and infant complications.

The effects of doulas on the postpartum period have shown decreased depression rates, which are also seen during pregnancy, decreased infant and maternal deaths from complications, and fewer routine hysterectomies leading to an increased quality of life. Postpartum doula services are correlated with greater breastfeeding initiation and duration, less postpartum depression, improved maternal responsiveness and competence, and increased continuity of care for the new family [9]. Early interventions and aid can be an integral part of establishing early family dynamics and pave the way to better meet their child's needs. The maternal and infant outcomes concerning hiring a doula demonstrated that they were cost-effective and cost-saving when reimbursement for this care is \$884 or less [13]. Although hiring a doula is worthwhile when costs are considered it is important to note that many cannot afford this added expense on top of all other costly pregnancy and baby essentials.

The efficacy of doula care, especially for at-risk populations, combined with positive results reported, makes a strong case for the implementation of doulas as a cost-effective strategy for improving maternal and infant health outcomes and decreasing inequities among childbearing adolescents [14]. Given the research on fewer complications with doula use and an underserved area's increased risk for these barriers, doulas can be particularly beneficial in these communities to ensure that pregnant people have the resources and support they need.

Sociodemographic Obligation

Figure 5 shows that individuals in underserved, lower-income areas including minorities and adolescents are at an increased risk and predisposed to worsening health risks related to pregnancy [7, 8, 11, 14]. For minorities living in bigger cities with a lack of substantial income, doulas might not be an affordable option for them due to the higher cost of living and fees associated with their services. Limited access within rural communities and poverty are also concerns for individuals in underserved areas.

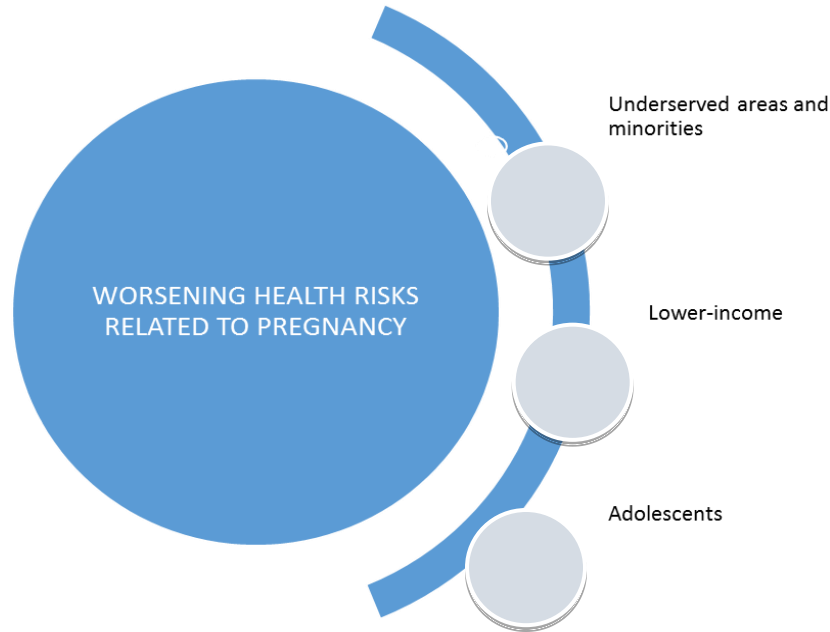


Figure 5. Population facing worsening health risks related to pregnancy

For women immersed in low-income communities, known as “maternal toxic zones,” doulas are often overlooked and out of reach due to financial concerns and limited accessibility. Some areas in California, for example, still have “maternity care deserts” which the March of Dimes refers to as a region where access to maternity health care services is limited or absent, either through lack of services or barriers to a woman’s ability to access that care [5]. This puts pregnant individuals in these areas at high risk for pregnancy complications and future uncertainty. Most of these individuals may sustain very little income and have little to no savings to even consider hiring a doula. Moreover, they could reap great potential benefits from their services due to the high likelihood of medical disadvantages. In areas that do not have the option to ensure affordable doula services tailored to low-income families, they are faced with a great division in care that typically would be accessible if they had the means to afford it.

There is a doula who chooses to provide lower-cost care within underserved areas to pregnant individuals in lower sociodemographic brackets such as minorities, people below the poverty threshold, and adolescents. This might include accepting patients on Medicaid services, despite the Centers for Medicare and Medicaid not covering a doula's services and subsequently forcing them to pay out of pocket for these services. Although many insurance companies do not cover

doula care, including federal programs, as of April 2020, some states have provided Medicaid enrollees with doula care: Indiana, New Jersey, and Washington 2012 [5]. Most clients seeking a doula's services still pay directly out of pocket which raises a significant number of concerns about the affordability of a doula's care.

Although the cost of a doula's service is based on many factors such as what services will be provided (antepartum, intrapartum, and postpartum), location of those services, the cost of living, and the doula's experience, paying out of pocket for many individuals while already accumulating other costs can be critical. A study of the state of doula care in New York City found the average cost of doula services in 2014 was \$1,550 per client, with a range of \$225 to \$5,000 this cost included a range of 2 to 12 home visits. The average hourly fee for postpartum services was \$48, with a range of \$19 to \$300 [9]. The United States is lagging in its overall delivery of maternal care, especially for those in disadvantaged backgrounds.

Birth Team Dynamics

Doulas can function as an interdisciplinary member of the mother's birth team. Doulas promote advocacy for mothers and their birth partners by supporting their wants. Specifically, communication and advocacy are an integral part of the birth team, for pregnant individuals, and a doula's civility to uphold this on behalf of the Doulas of North America International (DONA). The DONA's standards of practice emphasize the doulas as advocating for the client's wishes as expressed in their birth plan, in prenatal conversations, and the intrapartum discussion by encouraging /her client to ask questions of their care provider and to express her preferences and concerns [15]. Doulas help to enhance communication and incorporate changes in plans as they arise.

Doulas do not make speaking decisions for the client. Instead, doulas do advocate for the client's desires such as adhering to their birth plan and what is discussed in prenatal conversations. The doula can build advocacy by encouraging the client to ask questions and express any concerns or preferences at their appointments. As changes to the birthing plan are made, the length of gestation increases, new screening and diagnostic tests, and more patient encounters take place the client has the continual presence of a doula who will follow them through the entire pregnancy and postpartum process.

As an advocate, a doula can speak up in support of the woman, based on her desires. Doulas can provide practical support including helping the women to move around during labor and change positions. They also ensure customs and traditions are respected and provide support by holding her hand, praising and offering encouragement such as reminding her of a focal point to focus on during contractions. They assist the partner by aiding in comfort through massage or demonstrating to the support person how to do so and how to be confident in supporting the woman. Simply the physical presence of a doula can make a huge impact that the women may not have had otherwise. Renteria-The Society for Maternal-Fetal Medicine (SMFM) concluded in a joint statement that one of the most effective tools to improve labor and delivery outcomes is the continuous presence of support personnel, such as a doula [16]. This also gives laboring women the opportunity to feel valued, gives them confidence, and feels empowerment during the management of their labor and ability to give birth.

Participants in another study also shared how doulas function as a coach [17]. In the role of the coach, the doula provided direct care between the mother and support person, rather than functioning as a liaison between the family and medical personnel. Many mothers and nurses from this study viewed a doula's coaching role as attending to the nonmedical aspects of labor [17]. To the parents wanting a doula's services, they felt doulas were different from regular birth coaches such as Lamaze instructors or Bradley methods of teaching by being certified to provide birthing support and had a level of distance from the family that a partner would not have, and one particular doula felt that a father would appreciate the doula acting as a coach because she could demonstrate techniques to calm and support the mother and/or himself. An expectant mother also conveyed that she felt the doula supported both her and her husband and that he looked forward to someone to watch over their own needs during the birth [17].

One study surveyed doulas, mothers, expectant parents, and medical staff to determine inter-collaborative relations. Concerning doulas serving as liaisons, these participants all shared the idea that doulas work as a liaison for the family and medical staff. Nurses expressed that the patient may feel more comfortable approaching a doula with requests especially since she might be more accessible. In this way, doulas facilitated conversations between medical staff and family members while also acting as a mediator by facilitating communication between groups. Doulas primarily facilitate conversations and mediate between groups by filling in gaps of

information and clarifying unfamiliar terms. Some patients, for instance, found important value when doulas would help them seek clarification on something that was just discussed. This was especially necessary from a doula's perspective because there may be assumptions or protocols behind what medical personnel discusses. This can easily cause the patient to disconnect or additional worry for the patients making it more difficult for them to process what is going on around them.

The role of a doula to enhance patient-provider communication is key in serving the pregnant individual holistically to provide quality maternal and infant outcomes. Some doulas serve in the capacity that they build relations with the medical providers and as the study noted one doula's perspective as a liaison over time, she has developed good working relationships with providers and has served as a liaison when they have suggested interventions that she knows her clients have been against [16]. This doula described a specific laboring example where her client was faced with getting an episiotomy but refused. While the doctor was present the doula acted as a liaison by asking her if she would prefer a mirror to be brought in so that she could have a visual representation of what the doctor was referring to. This liaison approach allows for shared communication and understanding between the provider and client, all while the doula remains neutral but still can help speak on the patient's beliefs.

Some providers, however, note conflicts when interacting with doulas such as them lacking purpose and boundaries, increasing the workload on the provider, being in the way, and arriving unprepared. Additionally, some medical staff when asked about doulas noted that doulas were not always perceived to be contributing members of the team and may be viewed hostilely as 'anti-medical establishment' or as a threat to the role of midwives or nurses [4]. It is also important to note that while some providers are getting used to or refuse to work with doulas, communication and support skills are key to creating a positive and enriching environment where doulas and the medical team can co-exist. Some doulas even agreed that when they are present helping the mom, they may have overlapping roles with the nurses (i.e., supporting or comforting the patient), which can result in added friction between them and nurses, making it a challenge to collaborate with them as a team.

Overall, the worst interactions between providers and doulas were reported from doulas who were protective of their clients or seen as interfering with patient-provider interaction or being interruptive to their care. Since it is a part of a doula's scope of practice to take on communicative roles as an advocate, coach, and liaison, doulas in one study reported helping parents go into the childbirth experience more informed about the process, ready to ask the right questions, and prepared to speak up at the right time during labor, although they also know their advocacy has boundaries and limitations [16].

Summary of Findings

These research findings convey women were more likely to have a positive birth experience, improved family dynamics, including better maternal-infant bonding, more positive-infant interactions, and less need for pharmacological interventions such as Pitocin and analgesics. There are several benefits to doula use which include decreasing the risk of cesarean section, postpartum hemorrhage, uterine rupture, and forceps-assisted births. These may decrease the average length of stay, and improve postpartum and newborn recovery. Doulas have an integral role in the dynamics within the birth team. They predominantly follow the individual from shortly after the beginning of pregnancy to months into the postpartum period. Findings are displayed in Figure 6.

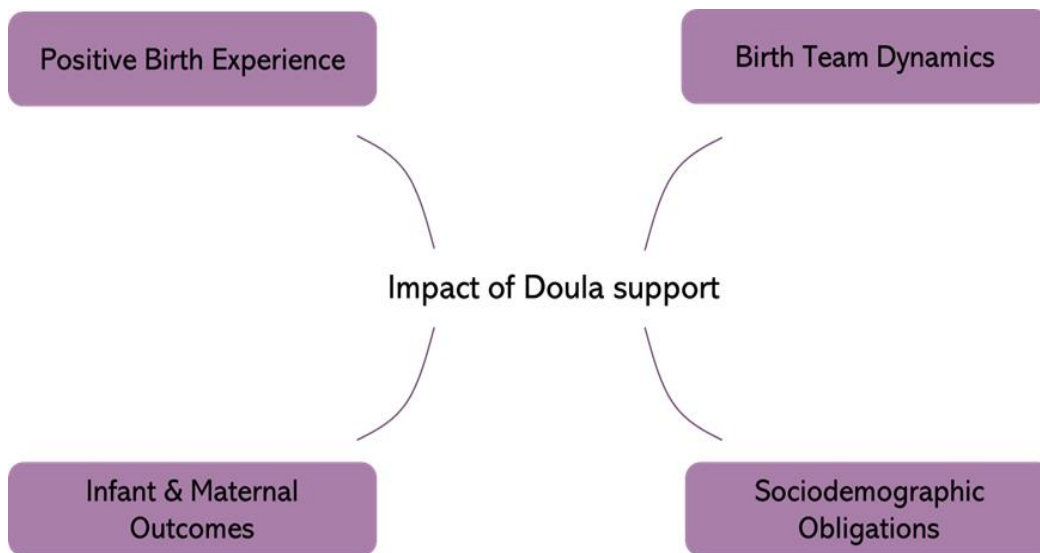


Figure 6. Emerging themes for the impact of doula support

Major deficits are present when there is a lack of access to doula care and financial constraints that prevents one from hiring a doula. Those without this one-on-one support often reported facing higher rates of postpartum depression, longer labors, increased analgesic and Pitocin use, less guidance throughout the pregnancy journey, and an overall lack of support. It is essential to ensure that cost-effective care via location and client population is being provided for underserved areas that have barriers to improving maternal and infant health. Most individuals pay for doulas out of pocket, and very few insurance plans cover these services, including the Centers for Medicare and Medicaid.

DISCUSSION

Considering the question, there are strengths, weaknesses, disparities, and recommendations to make evidence-based practice modifications regarding incorporating and sustaining doula care. Meeting sociodemographic obligations would include revising service costs to be inclusive of pregnant individuals who cannot afford to pay fees ranging from several hundred to thousands. Needs-based financial assistance like scholarships and fee waivers should be made available [5]. This would allow doulas to embody full-spectrum care more completely for individuals within these underserved and low-income areas.

Doulas are also very underrepresented for women who are going through or have gone through miscarriage or abortion. From a survey of doulas in California, one doula who responded to the survey emphasized the importance of full-spectrum care: Miscarriage and abortion support must be included. Postpartum doula care also must be included [5]. Full-spectrum care can be defined as providing multiple doula services including prenatal care, miscarriage and abortion support, lactation assistance, labor and delivery coaching, and postpartum care. For doulas who provide this care, this is how they are of extreme benefit to this subgroup.

One possible approach is to have doula organizations, such as DONA International, come provide additional education to providers and medical staff on the role of doulas, the impact of doula support on patient satisfaction, as well as ways in which doulas and nurses can collaborate [16]. The inter-collaborative care team caring for the pregnant individual and family continues to face challenges regarding communication, overlapping roles, hospital protocols, and banning doula care. Therefore, it is integral to the patients and care team that they examine what is best

for the patients, influence decision-making, establish clear inclusive roles and determine what outcomes result in the most patient-centered care approach possible. Given the abundant positive outcomes and continuity of care, all women should have the presence of a doula in labor, and many do not fully understand the role of the doula or the scope of a doula's practice [18]. It was found that personal attitudes may have an impact on practice in a more beneficial way than actual evidence [18]. A better comprehension of how doulas can aid and contribute to the roles of the medical and interdisciplinary team is called for. These concepts are discussed further in this section.

Strengths

The nursing evidence hierarchy I to VII was used to determine the strength of confidence of the studies [19]. With 10 studies in the top 4 tiers, the collected information was substantial in certain areas. Some strengths include the extensive number of articles available on doula care. With the current amount of research and statistics, more evidence-based decisions can be made for clients, obstetric floors, and medical facilities. The variety of research included meta-analyses, systematic reviews of randomized control trials, qualitative and quantitative studies, current practice guidelines, retrospective analysis, literature reviews, and randomized control trials. Another strength included having multiple studies that sought after the perceptions of individuals receiving doula care including adolescents and minorities, members of the healthcare team, and doulas themselves.

Weaknesses

A predominant weakness included the lack of recent research regarding how doulas negatively impact the chosen themes, further research is needed in this area. For instance, attitudes about doula care from physicians, nurses, and other medical staff were included in very few studies, and not heavily debated as indications for not using a doula's services. If there were more studies relevant to the impact of doulas more developed themes and comparisons could be made. There was also difficulty finding more recent studies that were within the last three years. Studies used could incorporate more appropriate controls or comparison groups. Additionally, more results should be included from rural areas, instead of just major cities.

Recommendations

Recommendations for the healthcare team and doula support are built on being inclusive to include full-spectrum doula care in all pregnant and postpartum services. Recommendations based on these findings indicate if doula services are appropriate for a client, the client should become well educated regarding the availability of doulas in their area, their level of experience, reviews, and their knowledge about pregnancy and childbirth. Additionally, the health care team should have clearly defined roles that incorporate doulas into providing care and improving the outcomes for mothers and their babies.

Overall, individuals in these areas with a high infant or maternal mortality and high poverty populations are often more at risk for adverse outcomes such as preterm births, low birth weight babies, increased postpartum depression rates, and increased pregnancy complications. As a result, a doula's decision to deliver care within these underserved areas expands access to include full-spectrum doula care while acknowledging health disparities, providing crucial education, and aiding in mental, social, physical, and emotional support they might not get otherwise. The inter-collaborative care team caring for the pregnant individual and family continues to face challenges regarding communication, overlapping roles, hospital protocols, and banning doula care. Therefore, it is integral for all cohorts to examine what is best for the patients, influence decision-making, establish clear inclusive roles and determine what outcomes result in the most patient-centered care approach possible. Considering birth team dynamics, current recommendations would be to establish and examine how facilities have clarified the roles of doulas on obstetric floors and whether they are an inclusive part of the interdisciplinary team.

CONCLUSION

Despite the overwhelming evidence that doulas provide distinctive support in many workplaces, doulas commonly are excluded from the obstetric care team. There was overwhelming support in favor of doulas meeting birth expectations, easing the mental and emotional toll, increasing both parental and inter-collaborative communication, encouraging bonding, and are a resource with a wealth of knowledge that feeds well into the function of the birth team. Overall doulas were found to offer specialized pregnancy, laboring, and postpartum support in a variety of ways

whether it's promoting a positive birth experience, enhancing maternal and infant outcomes, and adding to the birth team dynamics. Based on the benefits of doula care, individuals who do not choose to have a doula may face increased complications, longer labor, increased cesarean rates, and increased medical interventions. Sociodemographic obligations such as affordability, accessibility, the cost of living, and insurance coverage can hinder the ability to employ a doula's services. A better comprehension of how doulas can aid and contribute to the roles of the medical and interdisciplinary team is necessary.

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