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No One Should Have to Give Birth Alone: An Analysis of the Efficacy of Community-based Doula Programs Serving Ethnic Minorities in San Francisco

Maria Margaret Nelson
University of San Francisco, mariamnelson1a@gmail.com

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Maria M. Nelson

University of San Francisco

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Abstract

Adverse birth outcomes disproportionately affect people of color. Evidence demonstrates that one of the ways to mitigate these negative consequences is through the utilization of a doula, a trained birth companion that is not a medical provider but whose role it is to physically and emotionally support the patient through pregnancy, birth, and postpartum. Community- based doula programs, where the doula is of the same cultural background as the client, are particularly effective in improving birth outcomes in communities of color by providing culturally competent care and helping to navigate a healthcare system that continues to demonstrate the pervasiveness of institutionalized racism. Despite their efficacy, community-based doula programs face a number of challenges, including funding constraints, ongoing COVID-19 disruptions to care, and lack of public awareness about the benefit and availability of doula services.

Background

It is widely recognized within the field of public health that pregnant people[1] of color experience more significant health disparities and poorer birth outcomes than people from other racial backgrounds. While these outcomes are impacted by several factors including age and income status, the evidence remains that communities of color are disproportionately affected by structural racism within the healthcare system, high levels of lifelong stress that lead to pregnancy complications, and increased rates of maternal mortality (Altman et al., 2020). In many cases, these patients report not being listened to or being disrespected by their healthcare providers. Patients report being denied the birth experiences they had planned for in favor of

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[1] There has been a recent movement to use gender-inclusive language when possible in healthcare settings. Birth workers acknowledge that people of various genders, including cisgender women, transgender men, and non-binary people have uteri and can therefore become pregnant (MacKinnon et al., 2021). When possible throughout this paper, I will use gender-neutral terms such as "pregnant person" rather than "pregnant woman", "mother", or other gendered terms. There are some instances where the literature points to research done within a specific gender in which I will use gendered terms for clarity (for example, "maternal" mortality).

rushing the delivery along, having pain management measures forced upon them even if they had specifically declined them, and having experiences where hospital rules were enforced differently than with white, wealthy, or private-pay patients (Davis, 2019). According to the CDC, Black women experience maternal mortality rates three to four times greater than White women, and Indigenous women are 2.5 times more likely to die from pregnancy-related complications than white women. Additionally, the CDC estimates that 60 percent of all maternal deaths are preventable, increasing the gravity of this public health crisis that continues to worsen year after year (Building U.S. Capacity to Review and Prevent Maternal Deaths, 2018).

There are interventions at various levels of the Social-Ecological Model that are already working to address disproportionate negative pregnancy outcomes among communities of color. The Social-Ecological Model takes into account that there are many levels within which social issues lie: the individual, interpersonal, community, and policy-level frameworks. To create lasting change to social problems, there often need to be interventions across multiple levels of this framework (The Social-Ecological Model: A Framework for Prevention, 2021). At the policy level, there are currently interventions being made at the national (United States), state (California), and local (San Francisco) levels that are impacting birth outcomes for birthing people of color. Among these policies are the expansion of Medi-Cal services to extend prenatal coverage for a year after giving birth, as compared to the prior 60-day cutoff (Medi-Cal for Pregnancy, 2022), and a "Birthing While Black" report presented by the American Medical Association to members of the House of Representatives in early 2021 to address health disparities people of color face during pregnancy, childbirth, and postpartum (*Birthing While Black,* 2021).

Literature Review

Community-based doula programs are specifically impactful in helping to improve a pregnant person's outcomes and birthing experience for a variety of reasons when compared to private doulas. These benefits include but are not limited to: partnership with local healthcare organizations to work within the context of the current healthcare system in place, a focus on serving low-income clients who otherwise would not be able to access doula care, and being rooted within the clients' communities, which can help to improve trust and rapport between providers and their clients (Kane Low et al., 2006).

The presence of a doula or professional birthing companion, specifically one of the same cultural background as the birthing person, is an evidence-based intervention that has been shown to help mitigate harmful birthing experiences (Wint et al., 2019). Unfortunately, many people remain unaware of the availability of doula services, are swayed by stereotypes about who deserves access to doula care, or are not in a financial position to afford to pay for a doula's services during their pregnancy, birth, and postpartum journey (Wint et al., 2019). The role of a doula is not to be a medical provider, but rather to provide physical, psychological, and social support for the birthing person, and to advocate on their behalf throughout their birthing experience. Studies have shown that parents who are assisted by a doula during their pregnancy and birth journey are less likely to experience complications such as low birth rate, the need for cesarean intervention, and subjection to medical interference that could have health impacts on the baby during or after birth (Gruber et al., 2013).

Doula care is especially important for birthing people of color because of the institutionalized racism within the healthcare system that contributes to people of color, specifically Black people, receiving inadequate medical treatment and pain management, having

medical procedures performed without their consent, and reporting not being listened to by their healthcare providers (Altman et al., 2019). Nine state-based maternal mortality review committees (MMRCs) reviewed the statistics they had collected on causes of maternal death during and up to a year after pregnancy. They found that 60 to 70 percent of these complications were preventable, and that negative birth outcomes disproportionately affected Black people of color (Building U.S. Capacity to Review and Prevent Maternal Deaths, 2018). While the causes of pregnancy-related complications are varied and can be attributed to non-healthcare causes in some cases, it is important to recognize that the medical provider and the healthcare system at large do contribute to a patient's overall health status. Additionally, distrust of the medical system, while justified by the historic context with which people of color have been treated in this country, does limit a person's willingness and ability to access health services that may be key to helping to mitigate these outcomes (Unequal Treatment, 2003). Having a doula who can help navigate the healthcare system on a client's behalf and to serve as their advocate in the delivery room has been shown to have positive effects on the outcomes of both the parent and the child, with fewer complications arising from doula-attended births (Gruber et al., 2013).

While doula care has been co-opted by the grassroots natural birth movement in the US beginning in the 1960s (Morton & Clift, 2014), the act of having a support person present at the birth in order toto emotionally support the birthing person, with or without providing medical support, is an ancient, multicultural, and deeply ingrained tradition in a variety of non-white cultures (*The Historical Significance of Doulas and Midwives*, 2022). Historically, people who gave birth were accompanied by community members, family, or friends in nearly every culture that has been studied. The medicalization of childbirth in the US and other industrialized countries in the last several decades has transferred the authority over the birthing process from

the individual and the community to the medical provider (Morton & Clift, 2014). As such, many

pregnant individuals, specifically patients of color, have experienced their birthing wishes being

disregarded in favor of a more efficient delivery process at the recommendation of the medical

provider. Having a doula can help patients feel more confident navigating these circumstances

and advocating for the birthing experience the patient prefers, when clinically appropriate.

Having a doula also helps the patient understand and emotionally process situations in which

they are unable to adhere to their original birthing plan, due to complications that arose during

labor. Many patients express that the decision to defer from the original birthing plan is not

something that is discussed with them prior to it happening, and that these circumstances can be

confusing and stressful for the birthing parent to navigate if they do not have someone assisting

them in navigating these complications as they arise (Altman et al., 2020).

Culturally competent doula care can be critical to successful birth outcomes, specifically

for individuals who experience structural racism within the healthcare system or who are not

comfortable speaking English or the dominant language of the culture. Studies have shown that

in comparison to patients who are native to the dominant culture, immigrants who give birth

report less satisfaction with their care providers, the information and explanations they receive,

their empowerment to make decisions about their own care, and their continuity of care

following birth (Kang, 2014). These negative birth outcomes can be disrupted by the presence of

a culturally-competent doula or other trained birth companion. Additionally, patients who share

the same cultural background as their care providers are reported to experience less pain during

labor, as attributed to the social and emotional support they receive from their birth attendant

(Kang, 2014). While there has been substantial research done indicating that doula care greatly

improves birthing outcomes in communities of color, it is also important to consider individual

experiences in order to assess where shortcomings may lie and invest even more in the strengths of the community-based doula organization.

One such organization in San Francisco is SisterWeb, "a network of culturally congruent community doulas and birth workers from and for Black, Pacific Islander, and Latina/o/x communities, (that) works to dismantle racist health care systems, strengthen community resilience, and advance economic justice for birthing families and doulas in San Francisco" (Our Story). SisterWeb is based in the Bayview-Hunters Point neighborhood of San Francisco, a community that is 33 percent Black, with 39 percent of the community living below two times the Census poverty threshold, and 62 percent utilizing either Medicaid or Medi-Cal services. Additionally, 31 percent of pregnant people in this neighborhood do not receive prenatal care in their first trimester and 9 percent of babies born in this community are classified as being at a low birth weight (Your Neighborhood at a Glance: Bayview-Hunters Point and Visitacion Valley, 2012). While SisterWeb supports clients throughout San Francisco, 33 percent of their clients reside in the 94124 Bayview-Hunters Point neighborhood and 19 percent reside in the Mission District, which is 38 percent Hispanic/Latinx (SisterWeb, 2021). At the community level, organizations such as SisterWeb are conducting community outreach events and are training community members to serve as culturally-competent doulas within their own community. Additionally, SisterWeb has partnered with local hospitals in the San Francisco area to ensure that their clients have access to respectful medical care and to bi-directionally send and receive client referrals with physicians' offices as individuals' medical needs change (SisterWeb, 2021).

During my time in the University of San Francisco's MPH program, I had the pleasure of working with SisterWeb to collect their client satisfaction data for 2020, 2021 and the first

quarter of 2022. This final review and recommendation were created through a two-part process: research into the history and evidence-backed effects of doula care, and hands-on experience with SisterWeb's doulas and clients. Next, I will outline the methods I used to collect my research, and will make recommendations about how to enhance and improve doula care in order to provide birthing people of color with the best possible outcomes for themselves and their babies.

Methods

Literature Review

In conducting this literature review, I primarily used PubMed as my research database. In PubMed, I searched specifically *pregnancy outcomes women of color*, *birth complications women of color*, *pregnancy complications by race*, and *community-based doula program* to begin collecting data on the prevalence of various health issues that result from adverse birth outcomes. In searching for sources, I prioritized research published in the last 10 years but considered other sources published after 2000. I focused specifically on studies that centered American patients, or patients giving birth in the United States, regardless of their race or citizenship. I only used sources that were written in English. I selected the articles I wanted to review more closely by reviewing their titles and abstracts. For articles particularly relevant to my topic, I also reviewed their references to identify additional literature that could deepen my understanding of the topic. Towards the end of my research, I came across a study published by a number of SisterWeb staff members. I was able to use this article and its relevant references to find hyper-specific information about my target organization and its specific recommendations for helping to address this health disparity in the local community environment.

In addition to PubMed, I used Google to access census and California Department of Public Health (CDPH) data regarding the demographics of the population I am focusing on: people of color giving birth in San Francisco. While I hoped to be able to focus my search on specific zip codes or neighborhoods within the city, I found this extremely difficult to maneuver on the census site and therefore needed to extrapolate some location-specific data from other sources. Additionally, as the demographics of these neighborhoods have changed and continue to change from recent census periods, it is difficult to make claims about the demographic breakdown of specific areas of the city.

Client Satisfaction Survey

For the SisterWeb client satisfaction survey part of my research, I began with the survey the organization already had in place and reviewed it for clarity, editing and removing questions as necessary to ensure that the results received were sufficient to draw conclusions from. One question in particular "I was aware of instances in which my wishes were not being honored and was able to speak up and use my voice in these cases" was removed, as this question was generating 50 percent 'yes' and 50 percent 'no' responses depending what part of the question people were focusing on, and was not a good measure of what was intended to be measured. Additionally, we added three open-ended short response questions to collect written testimonials from patients about their experiences to be used for marketing purposes. Survey questions can be found in **Appendix A**.

Compyle, a data collection product of ClearImpact, was the database that SisterWeb used for their client interaction documentation. Because client data already existed in this database, it was easy to add surveys and assessments to be assigned to specific groups of clients, and to analyze the way the data collected related to other demographic information. For example, we

were able to compare the way "number of hours spent with the client" related to the responses generated for the "How would you rate your overall feeling of being supported, heard, and respected by your doula(s) during the pregnancy/birth/postpartum time? (scale of 1-10)" survey question. We were also able to determine that the majority of clients who live in overcrowded housing are Latinx, which helped us assess some specific challenges faced by this community in comparison to the others SisterWeb serves. Being able to maintain one central database of all client information was essential for being able to disaggregate the data we collected and make program-specific recommendations based on our understanding of each program's unique needs and assets.

Each participant was grouped into a survey instance based on the month they gave birth, to ensure that they were only added to one instance and we could avoid duplicate submissions interfering with the data. Eligibility criteria were created and 113 clients were eligible to receive the survey based on the criteria: a client from either 2020 or 2021, not having completed the survey already, having completed at least one prenatal visit, and having completed at least one postpartum visit. An additional version of the survey was created and administered in Spanish. While the survey was generally emailed to participants, participants without a valid email address or who required more technological assistance could also complete the survey via text message or phone call. Participants were compensated with a $25 Visa gift card in exchange for their survey submission.

The initial goal for the survey collection was to create a comprehensive understanding of the late-2020 and 2021 births to date. To do this, we began by contacting clients who had given birth within the last year. Unfortunately, due to the amount of time that had passed between termination of care and feedback being requested, many patients did not respond, and those that

did may have had difficulty recalling precise details about their experiences. The survey was emailed on three separate occasions, and people who completed the survey were removed from the next round of emails. Emails were sent at various times throughout the day in order to maximize the opportunity for a client to see and complete the survey. After three email attempts, the clients who had not responded were sent a text message invitation. In some of these cases, the individuals' email addresses were entered incorrectly or were no longer valid. In others, the survey had been filtered into people's spam mailbox or had not been received. In total including both the email and text outreach, 43 clients of the eligible 113 submitted survey responses between October 2021 and February 2022 for this initial round of client enrollments. Each survey response was reviewed, and particularly positive or negative responses were highlighted. Clients who reported a very positive experience were contacted asking if they'd be willing to provide a more detailed oral testimony of their experience in exchange for an additional $25 gift card. Clients who reported a negative experience were escalated to SisterWeb program directors for follow-up.

Once the retrospective data had been collected, we turned our attention to creating a sustainable practice for sending surveys promptly after a client's care was completed to avoid loss to follow-up and maximize the validity of the responses received. The initial round of data collection followed the same methods as the 2020-2021 data collection, consisting of multiple emails and text message outreach. Eight clients who gave birth between January and March 2022 were contacted via email, and only one survey response was received. In an attempt to collect more survey results, and to increase friendliness and accessibility, we decided to send handwritten "Congratulations on your new baby" cards in the mail containing QR codes linking to the survey. Between April and June 2022, 23 cards were sent, and 15 responses were received.

The combination of faster timing in following up with clients shortly after they complete their care, as well as the mail versus email outreach, resulted in a 71 percent increase in survey responses. In order to draw conclusions about the efficacy of any research study, the sample surveyed must be reflective of the population being studied (Representative Samples: What You Need to Know, n.d.). One way to maximize the validity of the study is to survey a larger percentage of the population. As such, the rate with which we were able to improve survey response rates means that we will be able to draw better conclusions from the 2022 survey than from the 2021, and we know now to continue this method of survey recruitment moving forward.

Results

SisterWeb's clients are separated into one of three groups based on their racial/ethnic background: Kindred Birth Companions (KBC) for Black/African American clients, Semilla Sagrada (SS) for Latinx clients, and M.A.N.A. Pasefika for clients of Pacific Islander descent. As such, survey results were analyzed as an aggregate of data from all SisterWeb clients as well as separately by program. Program-specific results were presented to the doulas of each program, while aggregate SisterWeb data was presented to all staff and will be used in external-facing communication about the organization. Complete survey results, both collectively and disaggregated by program can be found in **Appendix A**. Overwhelmingly, clients reported that they were walking away from their birth experience feeling proud and dignified (95.2 percent), that their doula helped them feel more confident navigating the healthcare system (97.6 percent), and that they felt supported, heard, and respected by their care team (average response: 8.76/10). Additionally, 90 percent of clients indicated that it was important for them that their doula be of the same cultural background as them and their family.

Additional data from the client satisfaction survey indicated that 100 percent of clients said their doula empowered them to use their voice to speak up throughout their birth experience. 97.6 percent said they were active participants in consenting to treatment from their care providers. 97.6 percent of clients said their doula encouraged them to use all the resources available to them. 92.9 percent said their doula helped them feel more connected to their baby and to their body during the pregnancy, birth, and postpartum experience. 93 percent said they felt understood by their doula regarding specific challenges, strengths and cultural considerations of their community. 86 percent of respondents said they would be open to serving their community as a doula. 93 percent said their doula helped them achieve their pregnancy, birth, and postpartum goals. 96 percent said they would like to have a doula if they were to become pregnant again in the future.

By disagregating this data into the three specific program groups: Kindred Birth Companions, Semilla Sagrada, and M.A.N.A. Pasefika, we were able to measure client satisfaction metrics against other statistics we already had data for about the programs. For example, KBC served a total of 77 clients in 2021 with an average of 5.7 non-appointment interactions per client. KBC clients reported a 95 percent satisfaction with meeting their pregnancy, birth and postpartum goals . M.A.N.A., on the other hand, served 11 clients, with an average of 22.3 non-appointment interactions per client and clients reported 100 percent satisfaction with achieving their goals with the support of their doula, as well as 100 percent satisfaction scores across many more metrics than either of the other programs.

Recommendations

Through background research about the efficacy of doula programs, as well as hands-on work with SisterWeb's staff and clientele, I would like to present the following

recommendations. In tackling any health problem, the first step is to increase awareness. Many people are not aware of the benefit of having a doula present for one's pregnancy, birth, and postpartum experience. There is a pervasive myth that doula services are only used by a certain type of individual (white, wealthy, naturalist) and an internal sense of unworthiness to ask for and receive help in navigating this process. As such, potential clients and other community members need to be made aware of the history, benefits, and availability of doula services so that they can have a safe and empowering birth experience. One of the values that SisterWeb doulas share is the sentiment that "no one should have to give birth alone". This taps into the ancestral tradition of community members supporting one another throughout their birth journey, and the depth of the collective knowledge available in these cases to safely bring a child into the world. Reminding pregnant people, specifically people of color, that they are worthy of being able to access care, and deserving of being supported through this experience, can help to disrupt some of the patterns of disrespect and distrust that many of these individuals have faced throughout their lives when trying to access medical care. In order to reach pregnant individuals who would benefit from SisterWeb services, SisterWeb partners with doctors' offices to collaborate with medical providers in a client referral program. Additional ideas for increasing awareness include targeting locations that relevant community members frequent, such as bus stops, as many do not have cars, in order to increase community recognition of the program for both potential future clients and for community members that may be interested in being trained to serve as a doula for their neighbors.

In order to best support more clients, SisterWeb and other community doula programs need to be able to hire more doulas. As a nonprofit and being reliant on corporate and private donations to do their work, SisterWeb does not have the resources to hire enough doulas to be

able to serve every client that is referred to them. This specifically affects programs that are serving higher capacities of clients, such as Kindred and Semilla, rather than M.A.N.A. that is serving relatively few clients in comparison. Efforts to hire more doulas should therefore be concentrated in the Black and Latinx populations, in order to increase levels of access to care for these community members, some of whom are currently unable to access doula services due to increased levels of demand and not enough available doulas.

An additional consideration in hiring doulas is that doulas deserve to be paid a living wage and provided benefits so that they can remain within the community and care for themselves. Government and private insurance funding can help to ensure that programs like SisterWeb are able to pay their doulas a competitive rate and ensure that they are available to serve community members, at no cost to the patient themselves. Doula care should be paid for by Medicaid and private insurance companies. Having a doula minimizes birth complications, which lowers cost of care post-birth and throughout childhood. Investing in doulas saves the medical system money throughout these patients' lives by offsetting some of the negative health outcomes that result from birth complications. The California Department of Health Care Services (DHCS) is currently in the process of adding doula services to the list of services covered by Medi-Cal but has not yet been successful and is currently delayed until an estimated completion date of January 2023. In the meantime, lack of financial resources to support community doula programs prevent patients from being able to access the care they deserve. Currently, SisterWeb doulas are required to carry a larger caseload to provide services to more clients, sustain the program while shortstaffed, and to work enough hours to make enough money to support themselves. As a result, the doulas expressed feelings of being burnt out, but still being committed to serving their community as much as they could. Improving salary and

benefit resources, as well as providing doulas with the mental and emotional support necessary to continue to do their jobs effectively, can benefit both patients and staff in SisterWeb and similar organizations.

More than two years into ongoing the COVID-19 pandemic, ongoing COVID-related concerns continue to cause complications in the doula-client care relationship. When interviewed, some doulas expressed the shock they've felt when meeting their client in person for the first time at their delivery, after months of Zoom and phone appointments, or the phenomenon of not recognizing their client with a mask on. The doulas expressed that, while they were able to build rapport with their clients virtually, it was much more difficult than establishing patient relationships in person pre-COVID. There was a period in 2020 when no more than one guest was allowed in the delivery room with the patient, so doulas described instances in which they or the patient's partner or other family member needed to be present for the birth virtually, rather than being there in person. The risk of contracting COVID-19 affects patients, their families, and SisterWeb staff, who are already overextended even when they are all available. As such, precautions should be available for community doulas to avoid contracting COVID-19 wherever possible to protect both themselves and their patients. Backup support should be available for doulas to take sick leave as necessary in order to care for themselves, so that they do not need to risk their health or the health of their patients in order to continue to provide care during the ongoing pandemic. Additionally, while doulas are able to support their clients through virtual methods including text and Zoom, but hospital policies should allow doulas to be present in the delivery room when proper PPE recommendations and to support their clients in person wherever possible.

Overall, clients reported that they felt more trust and respect from their doulas than from their medical team (9.67 vs 8.76) and doulas described instances in which they needed to advocate on behalf of their patient when they were being pressured to make a decision to do something that they did not want to do, such as having an epidural. This indicates that the respect and bodily autonomy that providers allow patients of color to have still need to be improved, and that patients' wishes are being disregarded, even in instances when a respected birth companion is present. While the doula is able to speak up or empower their client to speak up in these instances, this data demonstrates that this is a continual problem faced by this community, specifically by those that do not have an advocate to speak up on their behalf and would benefit from access to doula services. This data demonstrates how important it is for more bitrhing people of color to have access to a doula to help them navigate the medical system, but also goes to show how institutionalized racism in the healthcare system is still pervasive, and medical providers need to be exposed to more implicit bias training to help disrupt some of their patterns of behavior that leave ethnic minorities disenfranchised.

The data also demonstrated that culture is important, and that having a doula from your own cultural background matters to most clients. This helps reveal the areas in which the organization needs to concentrate their growth, based on level of demand for their services. In 2021, for example, SisterWeb served 77 Black clients, 38 Latinx clients, and 11 Pacific Islander clients. This data, as well as the demographic information for the clients that were turned away due to a lack of capacity, can help the organization to concentrate their efforts into recruiting more doulas of a specific cultural background, in order to better serve that community. SisterWeb should specifically work to recruit more Black doulas in order to serve the heightened demand for KBC care providers, and to help offset some of the current demand restrictions being

placed on existing KBC doulas, causing them to spend less time per client interaction, and not

having enough doulas available to continue to serve the existing caseload should a doula become

unavailable. Hiring community members to serve community members provides an added

benefit by keeping the organization hyper-local: benefitting the community both financially and

socially/emotionally.

Implications and discussion

Increasing accessibility of doula services has a number of implications on the health

outcomes of the community. Research demonstrates that pregnancies and births that are attended

by doulas are less likely to result in pre-term labor, low birth weight, and cesaerean intervention

(Building U.S. Capacity to Review and Prevent Maternal Deaths, 2018). These factors are

significant because it is recognized that birth complications such as these can cause health

complications for the child later in life, including but not limited to asthma, heart disease, and

higher propensity towards contracting infections. Additionally, extended hospital stays, babies

that need to spend time in the NICU, and repeated doctors' visits or hospitalizations to combat

the consequences of birth complications are expensive. If the individual is low-income or

otherwise unable to pay, the cost of these services is born by the government-funded medical

systems, including Medicaid.

Difficulty navigating the healthcare system, especially when due to systemic racism

resulting in medical trauma, can have lasting effects on patients' trust, confidence in, and

likelihood to access health services in the future (Davis, 2019). Having a doula to assist patients

with their confidence asserting themselves and advocating for their choices surrounding their

birthing experience can help patients of color to feel more confident navigating the medical

system moving forward. This advocacy and allyship from a respected group of care providers

can also help to disrupt insensitive behavior in the hospital environment. Specifically with regards to SisterWeb, who has a partnership with local hospitals, doula consistency in speaking up for patients whose wishes are not being honored can help to bring this behavior to light and hopefully help to mitigate these patterns even in instances where a doula is not present to advocate on the patients' behalf.

Community-based doula programs, in particular, can help to improve birth outcomes, specifically for patients of color. Unlike private doulas, community-based organizations have the capacity to serve clients who otherwise would not be able to pay for doula care themselves (Kane Low, 2006). Continuing to invest in community-based health services can help to improve health outcomes for individuals and the group as a whole, specifically in communities that have historically faced barriers to accessing health services. Focusing on community-based services also helps to improve the self-efficacy of the community to work together to solve common problems they are facing. In this case, while it is not the obligation of communities of color to solve racism, community-based support helps individuals from various ethnic backgrounds to better navigate the system that is currently in place, advocate for themselves and others, and have access to employment opportunities that enable individuals to serve their community while also financially supporting themselves and their families.

Conclusion

Having a doula present throughout pregnancy, birth, and postpartum can be an effective intervention to minimize the risk of either the parent or the child experiencing complications. This birth companion, while not being a medical provider, is able to physically and emotionally support the family throughout this birthing experience to help ensure that the parent is able to have a labor and delivery experience that is empowering and takes their wishes into

consideration. While having a doula is a historic tradition deeply ingrained in a variety of cultures, the modern birth experience has been medicalized, and being attended by a birthing companion is seen as an unnecessary luxury by many. Doula care can be incredibly beneficial and all birthing parents deserve to be able to access this service to increase the support they have available to them throughout this tumultuous period in their lives.

Community-based doula organizations, in particular, are able to help provide this evidence-led doula care with a particular focus on cultural considerations. This is an incredibly valuable distinction as patients of color are often disenfranchised by the medical system, and having an additional advocate present to help them navigate these encounters can help to empower patients to speak up for themselves, and hold medical providers accountable for honoring and addressing the patients' requests.

While community-based doula organizations are helping members of their community to have the dignified birthing experiences they deserve, they are also threatened by many external factors including funding limitations, COVID-19 risks, and lack of public awareness about the efficacy of doula support services. In making this care more accessible, communities are also empowered both through providing and accessing the care themselves. Continued investment in doula support services and increase of public awareness of the benefit of these relationships can help to improve the health outcomes for a group that has historically suffered disproportionate levels of birthing complications.

Appendix A:

Results from SW data collection (2021):

n=42, KBC=20, SS=18, M.A.N.A.=4

My doulas encouraged me/helped me to feel confident using my voice and to assert my own wishes/ask for a moment when I needed time to think over a decision.

- Total: 100% yes
  - KBC: 100% yes
  - SS: 100% yes
  - M.A.N.A.: 100% yes

During birth, I was an active participant in giving consent to my care providers.

- Total: 97.6% yes, 2.4% not sure
  - KBC: 95% yes, 5% not sure
  - SS: 100% yes
  - M.A.N.A.: 100% yes

I am walking away from my birth experience feeling proud and dignified.
- Total: 95.2% yes, 4.8% not sure
  - KBC: 95% yes, 5% not sure
  - SS: 100% yes
  - M.A.N.A.: 75% yes, 25% not sure

How would you rate your overall feeling of being supported, heard, and respected by your doula(s) during the pregnancy/birth/postpartum time? (scale of 1-10)
- Total average: 9.67
  - KBC: 9.75
  - SS: 9.47
  - M.A.N.A.: 9.67

How would you rate your feeling of being supported, heard and respected by your team of medical providers during the pregnancy/birth/postpartum time? (scale of 1-10)
- Total average: 8.76
  - KBC: 8.37
  - SS: 9.35
  - M.A.N.A.: 8.76

I felt encouraged by my SisterWeb doulas to use all of the resources available to me during pregnancy and early parenting.
- Total: 97.6% true, 2.4% false
    - KBC: 100% true
    - SS: 94.7% true, 5.3% false
    - M.A.N.A.: 100% true

SisterWeb doulas helped me feel connected to my baby.
- Total: 92.9% true, 7.1% false
    - KBC: 90% true, 10% false
    - SS: 94.5% true, 5.5% false
    - M.A.N.A.: 100% true

SisterWeb doulas helped me feel connected to my body in Pregnancy / Birth / Postpartum.
- Total: 92.9% True, 7.1% false
    - KBC: 95% True, 5% False
    - SS: 88.9% True, 11.1% False
    - M.A.N.A.: 100% True

I felt understood by my doula regarding specific challenges, strengths and cultural considerations of my community
- Total: 29 responses, 13 no responses, of 29: 93% true, 7% not sure
    - KBC: 88% true, 12% not sure, 2 no response
    - SS: 100% true, 6 no response
    - M.A.N.A.: 100% true, 3 no response

SisterWeb doulas helped me feel more confident navigating healthcare systems and understanding my rights and options.
- Total: 97.6% true, 2.4% false, of those who responded, 1 no response
    - KBC: 100% yes
    - SS: 94.2% yes, 5.8% no, 1 no response
    - M.A.N.A.: 100% true

Someday I would like to help members of my community by becoming a community doula.
- Total: 86% yes, 14% no, 1 no response
    - KBC: 80% yes, 20% no
    - SS: 88% yes, 12% no, 1 no response
    - M.A.N.A.: 100% yes

Do you feel that your SisterWeb doulas helped you achieve your Pregnancy / Birth / Postpartum goals?

- Total: 93% yes, 7% no, 1 no response
  - KBC: 95% yes, 5% no
  - SS: 88% yes, 12% no, 1 no response
  - M.A.N.A.: 100% yes

If you were to get pregnant again, would you want to have a doula with you for that experience?

- Total: 96% yes, 4% not sure, out of 27 responses, 15 no response
  - KBC: 100% yes, 3 no response
  - SS: 88% yes, 12% no, 9 no response
  - M.A.N.A.: 100% yes, 3 no response

Was it important to you that your doula be of a similar cultural background to you and your family?

- Total: 90% yes, 10% no, out of 30 responses, 12 no response
  - KBC: 88% yes, 12% no, 2 no response
  - SS: 91% yes, 9% no, 7 no response
  - M.A.N.A.: 100% yes, 3 no response

What would you tell someone who was considering having a doula but was unsure?

What do you feel was the biggest benefit of having a doula be a part of your Pregnancy / Birth /

Postpartum journey?

Is there anything else you would like to share about your experience?

Appendix B:

MPH Program Competencies

Competency Chosen From Foundational & Concentration Competency List (to be completed at the beginning of the semester)	Specific Portion of Paper and/or Poster Creation & Presentation Synthesizing Competency (to be completed at the end of the semester)
4. Interpret results of data analysis for public health research, policy and practice	Data analysis methods were used to collect client satisfaction survey results. These results were then used to influence public health program creation at the organization level, and to make recommendations for policy and practice improvements on a larger scale.
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels	The data collected specifically takes race-based data into consideration and focuses on the ways in which social inequities are intertwined and compounded in people of color's lived experiences. The literature review was conducted through a lens of focusing on social inequeties to ensure that the information collected can be directly applied to the population we are working to serve.
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs	The program is designed to split participants into cohorts depending on their cultural background to ensure that the care they receive is culturally competent and rooted in their own cultural traditions. Recommendations to improve the program emphasized maintaining cultural considerations, including hiring more staff with the intention of increasing access to care for clients from specific cultural backgrounds
11. Select methods to evaluate public health programs	The client satisfaction survey was generated to evaluate the efficacy of SisterWeb's programs. Throughout this project, I modified the survey to make it a more valid metric by which to measure program results. I then analyzed the results received to evaluate the program, create a follow-up plan, and provide the program stakeholders with analysis of the data results
14. Advocate for political, social and economic policies and programs that will improve health in diverse populations	I made recommendations based on my literature review and survey analysis to improve access to care for populations of color, including economic and political criteria to be taken into consideration when expanding this and other similar programs
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	Both the paper and the presentation addressed this competency through the format in which they were presented. Content was accessible to non-public health professionals in its presentation

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