

PRICE. \$0.00

MAR. 12 2021

AMPLIFYING VOICES:

MIDWIVES MENDING MATERNAL MORTALITY

PHOTO SOURCE: HIMSS

TABLE OF CONTENTS

- 1** Letter from the Editor
- 2** Words You Should Know
- 3** From Just a Her to a Mother
- 4** "The Gardener's Tale"
- 5** Refugee & Immigrants
- 7** Silent Killers in Maternal Health
- 8** Case Study: Kira Johnson
- 10** Interview with an Expert
- 12** Pregnancy to Postpartum
- 14** Cesarean Section
- 15** Postpartum Hemorrhage
- 17** Preeclampsia in Pregnancy
- 20** U.S. Maternal Health Legislation
- 22** Guidelines to Midwives
- 23** Interview with an Expert
- 26** Black Midwives in History
- 27** "The Midwife Problem"
- 29** Physicians vs. Midwives
- 30** Midwives: Present
- 31** Insurance: Providing or Dividing?
- 32** Barriers to Midwives
- 34** Midwives: Future



LETTER FROM THE EDITORS

Dear Valued Reader,

How is 'Amplifying Voices' different from other magazines? We bring to you the knowledge, the understanding, and the perspectives of those who struggle to make their troubles heard. We dive deep and give their needs the means to reach a wider audience.

It is our pleasure to welcome you to the first edition of Amplifying Voices where we share the stories and burden of those who struggle and fight every day to have their voice heard. This month, we are bringing to you the voices of women without whom we would not be here.

Mothers.

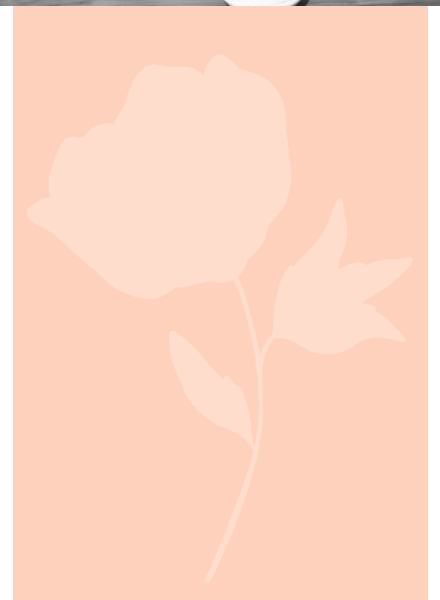
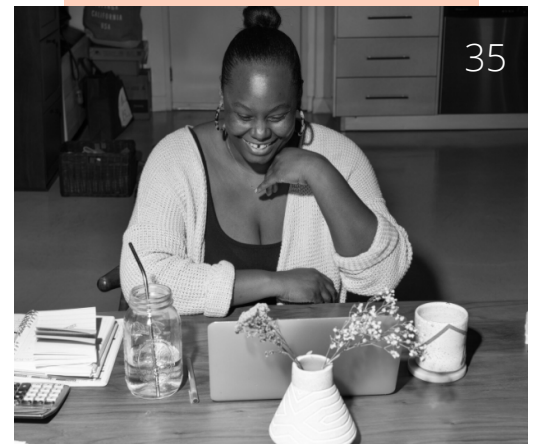
Amongst the developed countries, the United States of America continues to have a high maternal mortality rate of 17.4 per 100,000 live births. For Black women in the US, the rate is 43 per 100,000 live births. Maternal and child health has never been just a biological problem, which is what you will gain a deeper understanding of in the magazine.

Starting with medical racism in maternal health, you will understand what racism is and how it makes itself shown in the medical field. Along with black mothers, racist attitudes affect refugees and immigrants with inequality in access to care and predisposed health outcomes. After a deep-dive into medical racism as experienced by Kira Johnson, you hear from Dr. Gragnani on her understanding of maternal mortality and the presence of implicit medical racism.

Switching gears from the social factors of maternal mortality, you'll learn some of the biology and the medical causes of death in mothers. A quick knowledge check with a key-word will refresh your memory and prepare you for the discussion following the science on midwives and their role in maternal health. We address their past, their present role, their struggles, and what we envision for their future.

We truly hope you are able to hear the voices we aim to share and learn about the intertwined relationship between society and the biology of motherhood.

With the utmost respect for women all over the world,



Karla Arevalo

Too many times women and birth givers are dismissed when voicing their concerns and I believe there needs to be structural change to ensure that they are well and healthy to be with their newborns.



Michelle Tran

This topic is especially important to me because women of color continue to lack access to culturally competent healthcare while disparities are continuously worsening.



Ayushi Shroff

Women of color deserve to be able to safely give birth and watch their children grow up. Without their needs being addressed equitably, change cannot happen.



Samira Torna

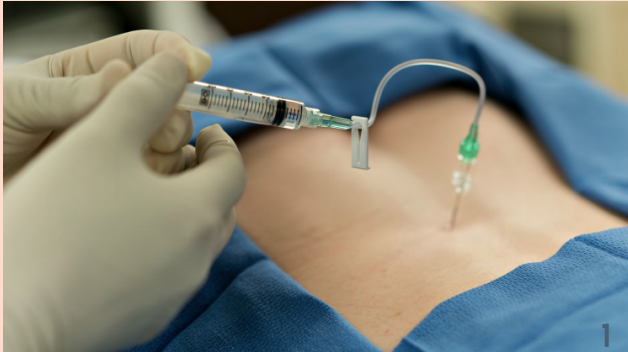
It was important for me to bring the midwifery model of delivery into discussion as it could make the difference for many of our most vulnerable populations.

WORDS YOU SHOULD KNOW

Auscultation: listening to the sounds of the heart, lungs, or other organs

Palpation: examining a person by touch when making a diagnosis.

Birth giver: a gender-neutral term for all persons who give birth to a baby.



Blood Pressure: the pressure of circulating blood against the walls of blood vessels.

Cultural competency: the ability to think, act, and feel in ways that respect cultural, linguistic, and ethnic diversity.

Epidural: an anesthetic, used mostly in childbirth, to numb a person below the waist.

Gestation: The period of development during the carrying of an embryo or fetus inside mammals.

Hemolysis: the rupture or destruction of red blood cells.

Hypertension: A condition in which the force of the blood against the artery walls is too high.

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

2

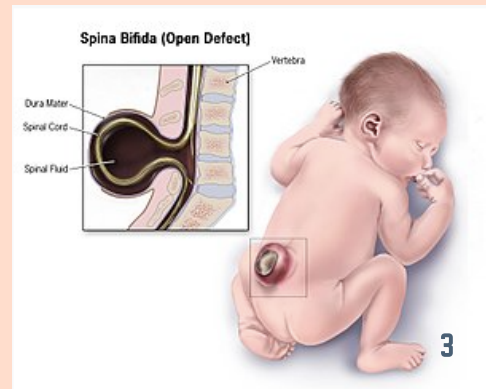
Immigrant: a person who moves to a different country for permanent residence.

Refugee: a person who was forced to leave their countries to escape war or natural disasters

Institutional Racism: Racism embedded as a normal practice within society or an organization. It can show up as racial inequity in institutions and systems of power.

Internalized Racism: the acceptance, by a racially marginalized person, of negative beliefs and stereotypes about their race and themselves.

Neoplasms: an abnormal mass of tissue that forms when cells undergo rapid, uncontrolled growth. These can be benign or cancerous.



Neural Tube Defect: a severe birth defect that affects the brain, skull, and spine.

Personally-mediated racism: deliberate social attitudes that show up as prejudiced action, discrimination, stereotyping, etc. on an individual level

Phthalates: a group of chemicals added to plastics to increase flexibility and durability.

Proteinuria: An excess of protein in the urine.

Refugee: a person who was forced to leave their countries to escape war or natural disasters

Neural Tube Defect: a severe birth defect that affects the brain, skull, and spine.

FROM JUST A HER TO A MOTHER

Written By: Ayushi Shroff

On a sculpture
on a street, I once read,
"A child gives birth to a mother"

For a long time,
I wondered how that was
when science stated otherwise

Until I saw
tears in the eyes of women
from what seemed like the pain

it was the
fruit of their labor
their creation, their own child

with sterilized steel and warm towels
with stitches and blood
with screaming and crying

and amongst the chaos
and excitement
of the newborn in the room

she felt alone
though
she knew
she isn't anymore

At once, I understood how
a woman went
from "pregnant"
to mother

when her body was no longer a home
yet her heart was still beating for two



MEDICAL RACISM

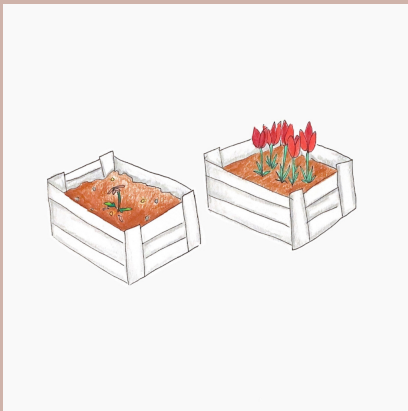
Written By: Ayushi Shroff

Medical Racism is defined as systematic racism against people of color specifically in the medical system. It includes discrimination by medical professionals, disparities in health care insurance coverage, and racism in a society that makes people of color less healthy. When speaking for women and maternal mortality, medical racism is essential to consider because black women are disproportionately affected by the biology of childbirth as well as environmental factors such as climate change or unsafe housing.

"THE GARDENER'S TALE" AS DESCRIBED BY DR. CAMARA JONES (1)

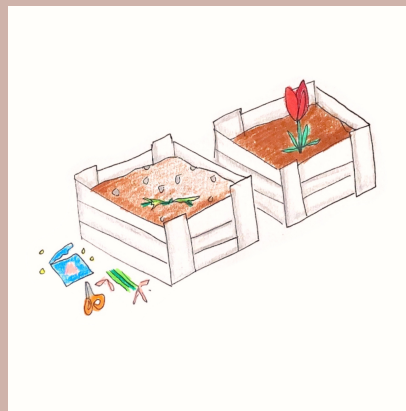
Written By: Samira Torna

Dr. Camara Jones's interview addresses racism in the medical field. She describes racism as a system, rather than individual behaviors or character flaws, with three different levels: institutional, personally-mediated, and internalized. All of these levels have iterations within the medical system that constantly provide barriers to Black communities, whether it be social determinants or access to quality care. Below is a graphic explaining an analogy that Dr. Jones made in explaining these different levels of racism.



INSTITUTIONAL RACISM

There are two flower boxes, one with rich, fertile soil and another with poor, rocky soil. Here, the gardener prefers red over pink flowers. They put strong, red flower seeds in the rich, fertile soil and weak, pink flower seeds in the poor, rocky soil. The gardener comes back later to see that the red flowers are growing much stronger than the pink flowers and then thinks that they were right to prefer the red over the pink flowers.



SELF-MEDIATED RACISM

The gardener thought the pink flowers to be inherently weak and scraggly. Therefore, they pluck them out before the pink flowers could grow properly.



INTERNALIZED RACISM

During pollination, a pink flower would prefer being pollinating with a red flower's pollen over a pink flower's pollen. This is because the flower has internalized that red flowers grow stronger and prettier than do the pink flowers.



In understanding these differences, how do we address these issues when they manifest in the medical field? When stratifications occur such as the differences in the quality of health care or in access to health care, along with differences in living conditions that make some populations sicker? We need to address the resources that are being distributed along with who decides what populations deserve these resources. Not only do we have to address the social determinants of health: the median income of specific populations along with the grocery stores, transportation, amount of pollution in different communities, but we also have to address social determinants of health disparities: the care that these populations receive, the availability of health clinics, the access they have to medical attention.

REFUGEE AND IMMIGRANT BIRTH GIVERS

Written By: Michelle Tran

Women of color, particularly immigrant and refugee women, face structural inaccessibility from the moment they become pregnant to the moment that they give birth. Due to their unique backgrounds and lack of roots in America, issues from having funds to attend prenatal appointments to having transportation access to go to a medical facility whilst in labor can greatly endanger women of color and their newborns. In communities that are lower income, these delays compound and ultimately impact the care that pregnant women can get and their health outcomes. The narrative of a refugee woman is different from that of an immigrant woman; both of these identities have great influence over a woman's experience in healthcare and especially in birth giving. A refugee is someone who has had to involuntarily flee their home country to search for safety and stability whereas an immigrant may leave their country in search of the same things but on their own voluntary basis. For pregnant women, initiating obstetrical and prenatal care should start when a woman is in the first trimester, or around 12 weeks pregnant, but both immigrant and refugee populations have a lower chance of attaining early prenatal care and maintaining a constant level of care following delivery. (2) Women in America are generally expected to have 9-15 prenatal visits throughout their pregnancies. On average, refugee mothers have less prenatal visits compared to non-

hispanic white mothers and other ethnic groups. (3) The reasons for these disparities are understudied but there may be a sense of distrust in American healthcare due to the fear of discrimination of community conditions such as socioeconomic status, language proficiency, and cultural background. Many ethnic and cultural groups rely on traditional medicine to heal the body in a holistic approach. In today's medical model, traditional medicine is seen as ineffective and not taken seriously in healthcare settings. Holistic health approaches are less common in American healthcare models across the board; this may affect a woman's comfortability and desire to visit an obstetrician when there are no serious issues present. However, once in care, immigrant mothers were more likely to seek postpartum care than prenatal care. Preventative care is crucial to ensuring that both the patients and providers are being proactive in their maternal health care. (4)

Due to non-transferable credentials and degrees, many immigrant and refugee women need to take on jobs that are readily available to them and do not rely on citizenship paperwork, proficient English language, or education. Many of these laborious and physically straining jobs can expose pregnant immigrant and refugee women to dangerous materials, chemicals, and situations that may affect their maternal and birth outcomes. This is generally overlooked but many hair and nail salons are run by Vietnamese or Mexican

families, usually with all members of the family working in the same room and exposed to the same chemicals. It is not uncommon for many ethnic households to be multigenerational where grandparents, parents, and children all reside in a single housing unit. Toxic chemical effects from any person in the family may cause harm to pregnant women and their infants. For example, many Vietnamese refugee and immigrant women are in the beauty and nail industry where they are constantly exposed to noxious fumes and chemicals that have been proven to cause adverse maternal and infant outcomes. (5) It has been shown that Vietnamese women working in nail salons were found to be at greater risk for gestational diabetes and placenta previa than their white and non-white ethnic counterparts throughout their pregnancies. (6) The phthalates found in nail polishes, hair sprays, and gels are also found to have teratological effects in males which can contribute to poor infant outcomes, birth defects, and birth complications of the mother. (7) In an examination of immigration and the effect it can have on pregnant women, it was revealed that anthropometric factors, such as neural tube defects, are sevenfold more likely to happen in recent Mexican immigrant pregnant mothers. (8) It is equal risk for white mothers and American-born Mexican mothers to give birth to a child with neural tube defects therefore this study implies that the physical and emotional process of immigration has a detrimental effect on a pregnant mother's chances of having a neural tube defect affected pregnancy.

Cultural taboo for many Western health procedures can also prevent a pregnant immigrant or refugee woman from seeking medical care. For example, there is a Hmong belief that taking too much of one's blood can be fatal or damaging; therefore, undergoing procedures such as cesarean sections or other surgeries may be deliberately avoided, which can lead to worse health outcomes for

pregnant Hmong women and other women of color. The spirituality aspect of medical procedures can be seen in the belief that disfigurement or surgery in this lifetime will continue to affect other lifetimes and prevent souls from being reborn. This creates a multitude of communication barriers between physicians and patients because there is a lack of cultural competency on how to communicate with communities of color regarding necessary medical practices. The current model of cultural competency is society's way of taking into consideration the differences in culture, medicine, value, and bodies but we need to understand that the way cultural competency is taught to non people of color providers can be detrimental to the perception of people of color in the healthcare context. The model of teaching cultural competency in healthcare and midwifery may portray patients as static representations of dominant cultural stereotypes and provides a false sense of understanding simply because a provider may be familiar with a culture's general practice and values. (9) Refugee women are more likely to have psychosocial risk factors which can impact their birth experience and the communication between a patient and a provider. (10) The model of refugee maternity needs to consist of continuity of care, quality interpreter services, education for both women and professionals, and psychosocial support for refugee women. (11)

In 2013, Massachusetts passed the Refugee and Immigrant Health Act that made immigrants and refugees Universally eligible to health services including maternal and prenatal care. (12) Though this act is limited in Massachusetts, it serves as a good model of policies for proactive maternal health. Due to lack of translated documents or community health workers, there is insufficient outreach and proactive maternal health efforts to vulnerable immigrant and refugee communities. (13) Providing sexual and prenatal health resources for immigrant teenagers and young adults can create a community where maternal health is prioritized and resources are unstigmatized and accessible.

THE SILENT KILLERS IN MATERNAL HEALTH

Written By: Michelle Tran



Language Barriers:

Lack of translators and multilingual forms may lead to dangerous miscommunication in prenatal, delivery, and postpartum care. Women may not be able to express allergies or other conditions that may affect the treatment plan. This inability to communicate may be deadly and is very preventable in healthcare.

Food apartheid:

Maternal health starts far before delivery. Low resource communities of color often face structural and economic barriers in accessing nutritional food. As a result, many women of color face hypertension, obesity, and diabetes. All of these are risk factors for preeclampsia, hemorrhage, and maternal mortality.

Traditional medicine:

Cultural clashes between traditional medicine may cause distrust in physicians and hospitals. Physicians often disregard women's spirituality and traditions. This distrust can lead to delayed admittance, missed warning signs, and ultimately death.

Domestic Violence:

It has been shown that women experiencing domestic violence have higher rates of maternal mortality. They may feel unsafe voicing their concerns and may delay seeking help or even going to a hospital setting. This leads to many alone at-home and dangerous births.

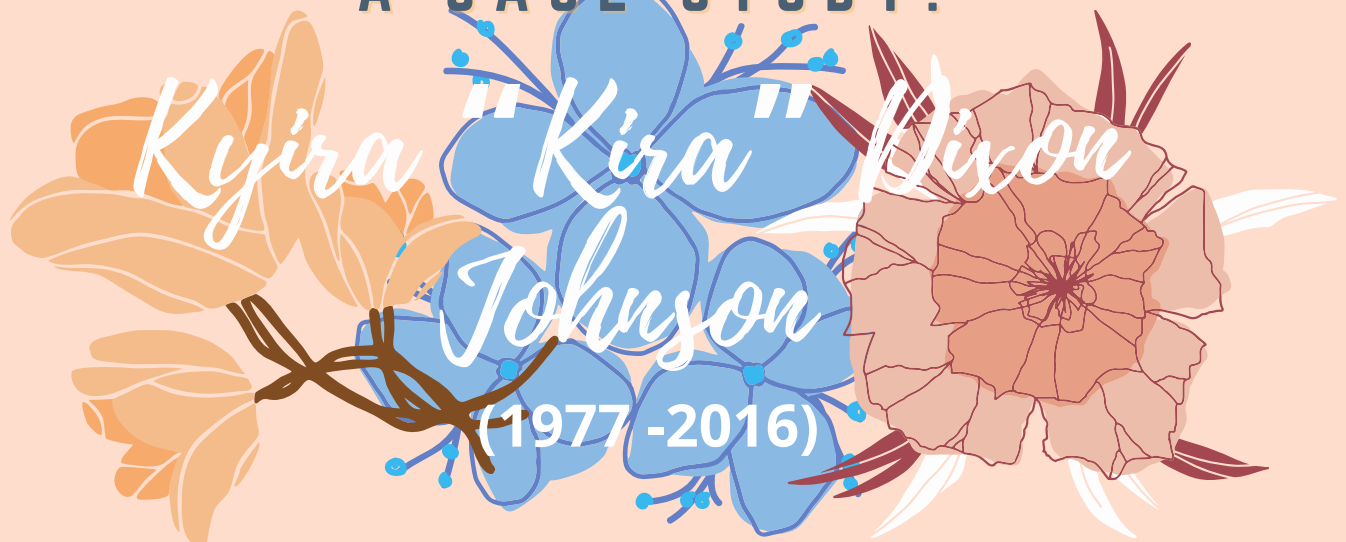
Residence:

Women who live in rural areas have a less access to hospitals and technology in the case of an emergency. Many of the women who live in rural, inaccessible areas are women of color, making them more susceptible to hemorrhage and maternal mortality.

Education and Employment:

The less education a woman has, the more likely she is to have a worse health status and complications during pregnancy. Women with laborious jobs or exposure to dangerous chemicals are at high risk for maternal mortality.

A CASE STUDY:



Written By: Karla Arevalo

Kira Johnson | Credit: <http://4kira4moms.com/home>

Kyira “Kira” Dixon Johnson was a very accomplished woman. A college graduate, entrepreneur, and life enthusiast had lived in China for four years, where she was a part of opening language schools. Upon her return to the United States, she rekindled her relationship with Charles Johnson the IV, and in 2014 they became pregnant and later gave birth to a healthy baby boy, Charles. In 2015, after Kira and Charles married, they became pregnant with their second baby boy, Langston, via a scheduled cesarean section at Cedars-Sinai in California.

Unfortunately, their night was going to take a turn. Around 5 pm, Charles noticed blood in her Foley catheter, which was later replaced, however, blood continued to flow into the new catheter. After performing an ultrasound, there was sight of fluid in her abdomen, however, physicians only gave Johnson pain medication. At 6:44 pm, here was an alleged scan of Johnson’s abdomen, but her medical records did not provide evidence that it was performed. Johnson continued to receive pain medication for her abdomen pain and blood transfusions to address the blood clot.

Over six hours after the c-section, the physician who delivered Langston returned to Johnson’s bedside and at 10:55 pm a nurse reported that her blood pressure had dropped drastically. Kira became paler and groggier over time, still trying to avoid worrying her family, Charles became impatient urging doctors to take action and investigate why his wife was still bleeding. It was now 11:25 pm and the overseeing physician became aware of potential “active internal bleeding”. (15) An additional ultrasound displayed evidence of “an expanding blood clot and fluid that shouldn’t have been there” and after two other physicians recommended surgery to explore possible explanations, her head physician denied. An hour later, Kira was rushed into surgery where three liters of blood were found in her abdomen, she had hemorrhaged after ten hours of bleeding internally. On April 13, 2016 at 2:22 am Kira Johnson was pronounced dead.

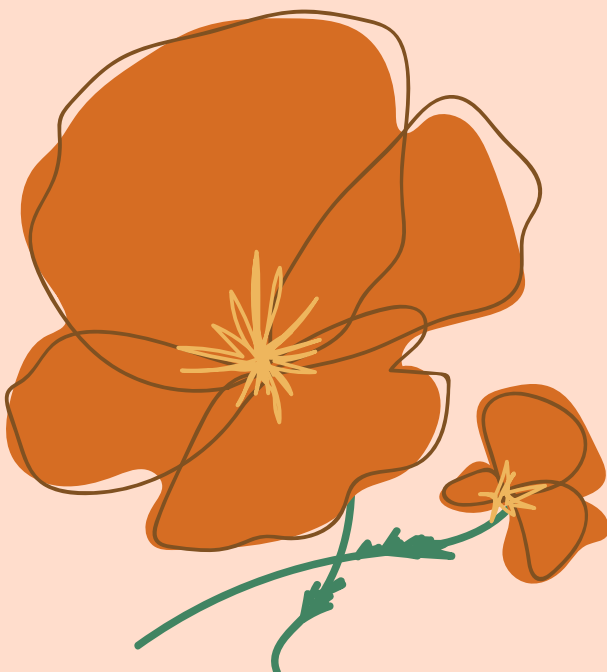
According to the Center for Disease Control and Prevention (CDC), the rates of maternal mortality for Black women over the age of 30 are four to five times higher than white women. (14) Since her death, Charles has been seeking justice for the medical neglect his wife faced, leading to her untimely death. He has since filed a malpractice lawsuit against Cedars-Sinai and advocates for the protection of mothers during labor because "No one should have to feel this immense pain", Charles says.

The unfortunate loss of Kira Johnson only demonstrates the experience and risks Black women face in the medical field. Oftentimes the concerns of Black folk go unattended and result in preventable deaths. Had the head physician acted according to the recommendations of the other

physicians and based on the symptoms Kira had presented hours before, her death may have not come this early in her life. It is disheartening that even when Black women have an education and access to the best medical professionals, they are still 3-4 times more likely to die than a white woman of lower socioeconomic status or educational background. Charles along with his mother, a judge, are calling for action to ensure the safety of Black mothers while delivering their babies. Below is the website to learn more about Kira Johnson and the fight to protect mothers from instances of medical negligence leading. (4kira4moms.com) (15)



Charles V, Charles IV and Kira Johnson
Credit: Courtesy Charles Johnson



Kira Johnson with baby Langston
Credit: Courtesy Charles Johnson



IN CONVERSATION WITH: DR. CANDACE GRAGNANI

THIS WEEK, I SAT DOWN WITH DR. CANDACE GRAGNANI, AN ASSOCIATE PHYSICIAN DIPLOMAT IN THE CHILD HEALTH POLICY PROGRAM OF THE DEPARTMENT OF PEDIATRICS AT THE DAVID GEFKEN SCHOOL OF MEDICINE AND ON FACULTY FOR THE UCLA PREVENTIVE MEDICINE PROGRAM. WE'RE GETTING THE INSIDE SCOOP ON HER EXPERIENCE WITH MATERNAL AND CHILD HEALTH AND HOW MEDICAL CARE PROVIDERS STRUGGLE WITH IMPLICIT BIAS IN THEIR PRACTICE.

Ayushi Shroff: Good morning Dr. Gragnani, thank you for your time today. We'll jump right in and get started. How do you define maternal mortality?

Dr. Gragnani: Of course, thank you for having me. In terms of maternal mortality rates, usually we use it as a measure of deaths due to either complication from pregnancy or childbirth as well as from the immediate postpartum period. Essentially it means death from being pregnant. And oftentimes, we do that per 100,000 live births and that's how it gets complicated to calculate.

AS: Postpartum period too?! I had always assumed the numbers always take into consideration death during childbirth. So how would you say maternal mortality rates in the US differ from other developed countries?

Dr. G: Maternal mortality rates in the US are higher than other developed OECD countries. This obviously does not apply to all the sub-populations of the country. There are obviously, populations within the US population particularly black women and American Indian and Alaska Native women who suffer from much higher mortality rates even overall.

AS: So focusing more on the higher rates for the US, what are some causes in your experience for the care to be inadequate?

Dr. G: Obviously, there's a lot of issues. It's really layered; it's different for every woman and even individual subgroups of women that we lump together. We don't really spend a lot of money in terms of social support systems. So we spent a decreased proportion of our GDP on social support systems.

AS: And so what does that mean?

Dr. G: It can mean, you know, people don't have health insurance, people don't have access to food security, people don't have access to health care and mental health services, we do better for this for kids. And in the United States, a lot of our insurance is based on employment so the kind of care you get depends a lot on the type of job you have.

AS: To what extent would insurance affect access to care?

Dr. G: The impact would be large and it would add up. There is some kind of safety nets in place, but again, they're very difficult systems to navigate. People don't know they exist. But there are also layered issues if someone's an immigrant or is undocumented, and they choose to avoid care altogether. So that can come into play for certain populations.

Also in general, people may not be insured or are underinsured; even when you're insured, you have to pay out of pocket for a lot of people. In the beginning, so people who are lower-income may not go, even though like Affordable Care Act (ACA) should cover your care, people may not know that, or they might be afraid that they're gonna have to pay out of pocket or they might just not have time, you know, it's not time that's easily carved out from their job for them to go seek care.

AS: It is so interesting to learn that access to medical care is not as easy as just going to the doctor and getting the treatment, there are so many hurdles for an individual to address.

Dr. G: Yes exactly, and there is more with employment as well. Speaking more to the disparities in communities of color, it is just lower provider access, not having also access to providers that people really trust can be really divisive. There are also issues that come up, again, kind of getting with cross-cultural communication with a provider-patient mismatch, like being able to clearly communicate risks or signs that people need to look out for.



AS: Wow, communities of color face so many additional challenges! Are there any factors coming into play for inadequate care?

Dr. G: I think a lot of it has to do with a lack of social support structures in place that promotes prenatal care. I think people understand that it's important. But you know, do they understand how important it is? And do they have places? I think the other honestly, the really big thing is - do they have people places that they can easily access? Like, meaningfully? Not that I have to take a bus for hours to go see a doctor? And are there providers that, speak to me and my experience and can, get me and get what I want and know, the approach that I want and things like that? And the worst part is that the mortality rate actually ticked up a little overall, even in the last maybe, like 10 or 15 years in the United States, which is interesting. It should definitely be going the other way around, not going up.

AS: You briefly mentioned this and talked about this, but how do treatment and racism, and all of these other factors come into the higher rates of maternal mortality?

Dr. G: Your health is built up over your lifetime. This idea that the systemic racism that exists, obviously, I mean, it's apparent in this country. And the stress of that and the stress of living with that and discrimination throughout the lifetime perhaps affects to some of the maternal outcomes for African American women.

AS: What about a bias in the medical system also known as medical racism?

Dr. G: So this idea of implicit bias comes in explicit care. People aren't recognizing it. And so I think that also obviously becomes, a big factor in terms of, you know, what do people what are people assuming when they have a black and indigenous woman coming in? So are they making assumptions about their needs, their wants? Are they not recommending things because they think they're not going to want to need them for whatever reason, you know, and I don't think people do it out of malice.

AS: I'm sure every physician wants the best outcomes, but implicit bias can affect how care is given. So you would say that if patients had access to the doctors and physicians with the same backgrounds that would obviously reduce bias, but also there's a shortage of how many people from those backgrounds are actually in the medical field?

Dr. G: Yes, that's a huge problem.

AS: Switching gears a little bit, as a physician, what are your thoughts on midwives supporting women during their pregnancy journey?

Dr. G: I really liked that idea. You get a lot more one-on-one kind of time and interaction. In general, I would say, with a midwife, as opposed to an OB-GYN. Patients who want someone they can trust or really have deep conversations with, you know, midwives would be like, a really great, I think, a really great option. I think they also provide an opportunity for more education that's specific and tailored to the patient, you know, not just a generic, like, oh, here's like your flyer

AS: That is definitely true, midwives can help with the emotions of childbirth.

Dr. G: Also more midwives probably

are coming from the communities that they serve like they live where they serve. And that's not really true of doctors, I would say, for the most part. In general, after you have a baby, you don't go see your ob-gyn for six weeks after you give birth. And, you know, there's obviously a lot of complications that can happen, especially those first few days, two weeks postpartum. And so again, I think that's the beauty of having like, a midwife that you're comfortable with, who can also help you navigate that situation.

AS: Thank you so much for your time and for all the work you do to improve the lives of mothers and children.

Dr. G: My pleasure



PREGNANCY TO POSTPARTUM

Written By: Samira Torna

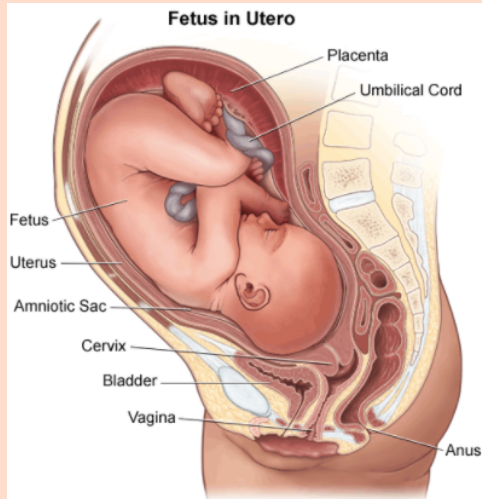


PHOTO SOURCE: STANFORD CHILDREN'S HEALTH

ANATOMY OF A PREGNANT PERSON

CHILDBIRTH

Labor, specifically an unassisted vaginal delivery or natural childbirth, occurs over three stages. (16) Contractions begin the first stage, in which the cervix becomes thinner and dilated. Dilation means that the cervix stretches to allow for the passage of the baby through the birth canal. In the first stage of birth, the cervix is about 4 inches. The second stage is the active stage, during which the birthgiver will begin to push downward and the baby's scalp will come into view through the vagina. This view is called crowning. At the end of the second stage, the baby is born. The third stage is when the placenta is delivered.

- **Forceps delivery:** caretaker uses an instrument to guide the baby through the birth canal
- **Vacuum extraction:** caretaker uses a plastic cup to gently suction the baby through the birth canal
- **Episiotomy:** caretaker creates a cut in the tissue of the vaginal opening and the anus called the perineum in order to quickly deliver the child
- **Amniotomy:** also known as "breaking one's water," the caretaker uses a small plastic hook to create an opening in the amniotic sac

TYPES OF ASSISTED VAGINAL BIRTH (17)

PREGNANCY TO POSTPARTUM

VACUUM EXTRACTION

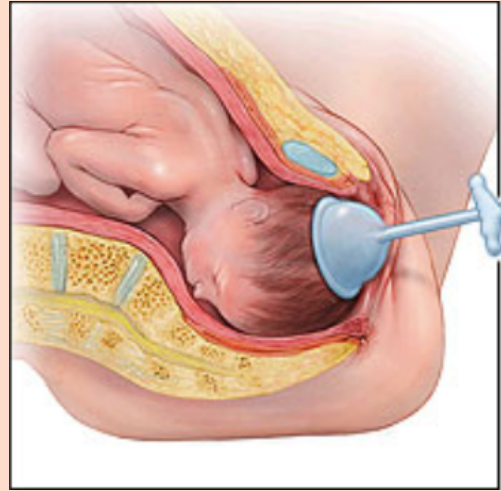


PHOTO SOURCE: HEALTHWISE, INC

Induced labor is when the caretaker starts contractions before labor begins. This can be done by administering a gel or vaginal insert of prostaglandin or a tablet given by mouth. Prostaglandin is the hormone that begins contractions in the body. If this does not work, the caretaker will attempt to start labor by swiping their finger across the membrane of the amniotic sac. This will allow for the release of prostaglandin and for labor to begin. Additionally, the caretaker may use amniotomy to rupture the membrane. If none of these techniques work, the caretaker will administer pitocin, a synthetic form of oxytocin, which will cause strong, frequent contractions.

INDUCED LABOR

AMNIOTOMY

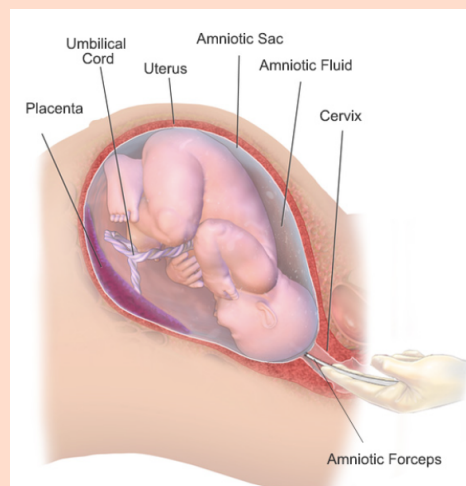


PHOTO SOURCE: FAMILYGP.ONLINE

CESAREAN SECTION

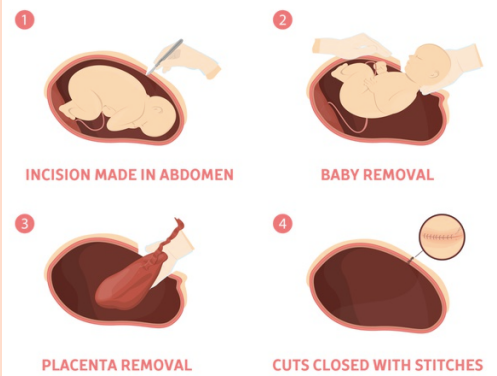
Written By: Samira Torna

Cesarean section is an operation in which an incision is made in the abdominal wall and uterus in order to deliver the child. (18) This is performed usually in high-risk pregnancies or when the baby is in the breech position, a position in which the baby is feet-first and cannot be flipped for the labor. A breech delivery can be dangerous because the head is the largest part of the body and should be delivered first to make way for the rest of the body. Additionally, a cesarean section can be indicated in conditions where delivery by birth canal is not possible. This includes neoplasms, a growth in the birth canal, that blocks the baby's pathway. Other reasons are previous uterine surgeries, such as cesarean section, hysterotomy, myomectomy, or a cervical suture along with, hemorrhage or toxemia of pregnancy, meaning preeclampsia.

MEDICAL REASONS FOR A C-SECTION



STAGES OF BIRTH VIA C-SECTION



Cesarean sections put birthgivers at approximately two times the risk of maternal morbidity and mortality. Currently, the World Health Organization recommends a rate of 10-15% of cesarean sections however, the U.S.'s current rate is around 30%. Many of these cesarean sections are unnecessary interventions that put the birthgiver at greater risk for other complications. Rates of cesarean section, whether planned or emergency, are much higher in Black birthgivers. The underlying reasons for this are linked to racial disparities in care along with the differential treatment of Black birthgivers by providers and caretakers. Black birthgivers are more likely to have other complications that indicate the use of cesarean section such as, preeclampsia or heart issues.

PROS TO CESAREAN SECTIONS

- allows birthgiver to plan their pain and the experience of their delivery
- individuals that receive a cesarean section are less likely to have urinary incontinence
- lowers rate of birth trauma for baby
- HIV-positive birthgivers are less likely to pass it on to their child

CONS TO CESAREAN SECTIONS

- increases the risk for uterine rupture
- can limit the number of children the birthgiver can have
- recovery is longer
- babies can be injured by the operation
- babies can develop breathing problems due to the operation

POSTPARTUM HEMORRHAGE

Written By: Michelle Tran



Postpartum hemorrhage (pph) is the leading cause of maternal mortality and accounts for up to 35% of maternal deaths worldwide. (19) Postpartum hemorrhage is defined as blood loss in excess of 500ml in vaginal birth and 1000ml in cesarean delivery but any blood loss that has potential to produce hemodynamic instability can be considered a postpartum hemorrhage. (20) There are two types of postpartum hemorrhage, primary and secondary. Primary, or immediate, postpartum hemorrhage occurs within 24 hours of delivery and 70% of primary hemorrhages occur due to uterine atony, or the uterus's inability to contract following delivery. Secondary, or late, postpartum hemorrhage occurs from 24 hours following delivery to six weeks postpartum. Secondary hemorrhage is caused by retained or leftover products of birth giving, infection, or both. It is difficult to identify and determine postpartum hemorrhage because taking into account predisposing health factors is complicated and not always a culturally-competent process.

It was found in a 2020 study that cesarean section was shown to be the most important clinical risk factor for disproportionately high rates of black maternal mortality. (21) If cesarean rates continue to increase, in annual incidence of delivery complications, postpartum hemorrhages, and maternal death will rise greatly. (22) The risk factors for developing a postpartum hemorrhage are difficult to identify in each woman, and especially in women of color, and the process of hemorrhage can happen very quickly. (23) In our target population of Black and immigrant women, many social and economic factors contribute to the odds of developing a hemorrhage after delivery.

Hispanic, Asian, and Pacific Islander women are at higher risk of developing atonic postpartum hemorrhage and are disproportionately affected. (24) Black women are more likely than non-hispanic white women to undergo entire hysterectomies (1.9%) although Asian and Pacific Islander women were at highest risk for hysterectomy (2.9%) (25); the risk for death for non-Hispanic Black women was significantly higher than for nonblack women. The baseline risk of severe maternal morbidity was 1.34 times greater among black mothers compared with white mothers. (26) The severity of postpartum hemorrhage due to uterine atony, or atonic postpartum hemorrhage, heavily depends on the quality of care and clinical management throughout the entire process of delivery and postpartum care, which can greatly differ within ethnic groups due to institutional and structural racism in healthcare. In low resource settings, extra attention is required to prevent postpartum hemorrhage and maternal mortality. There are many areas all around the world and even in the United States where midwives are not permitted to prescribe medication for postpartum hemorrhage despite being required to prevent postpartum hemorrhage and maternal mortality. There are many areas all around the world and even in the United States where midwives are not permitted to prescribe medication for postpartum hemorrhage despite being serving in mainly low income and resource communities. As a result, low income and resource women face barriers in decision making during the birthing process which heavily contributes to the rates of preventable maternal mortality. (27)

Delays in recognizing a complication during or after delivery and recognizing when to seek help by both the patient and the provider contributes to large numbers of hemorrhages that had progressed too far and preventable maternal mortality; this is deeply rooted in patient-provider communication and the believability of women of color in a healthcare setting.



Public policies revolving around maternal health are centered around resource allocation politics rather than preferred outcomes and accessibility. Medical care is based upon standards and patterns but many of the observed patterns for postpartum hemorrhage are based on white women whereas there is very little information on the experiences and risk factors of women of color, especially immigrant and refugee populations. The most important prevention approach is to ensure that mothers are healthy prior to giving birth by monitoring and treating for anemia; many institutional barriers to improving and promoting maternal health are present in underserved, underrepresented communities of color. (28) In women who have gone through 6 or more pregnancies, they are considered multiparous which means the uterus is thinner, weaker, and more prone to blood loss and uterine atony following delivery. Many women of color with many children live below the poverty line so the biological wear on their bodies combined with malnutrition and anemia leads to very high maternal mortality rates in low-resource areas. Some of the current interventions to try to address racial inequities in postpartum hemorrhage and maternal mortality include active prevention methods, community resources and education, and a holistic approach that perceives the delivery process as more than a biological process but as a woman with her own individual life experiences and pre-existing conditions going through a delivery. In order to

determine if it is a postpartum hemorrhage or not, an approach that includes paying close attention to changes in blood pressure rather than standardized units to take into account each woman's pre-existing conditions. (29) An active management approach in the third stage of labor including controlling umbilical cord traction, fundal massage, and administration of IV or IIM oxytocin can act as powerful preventative measures for postpartum hemorrhage. The use of oxytocin, uterotonic drug that is given within 1 minute of delivery to assist in uterine contraction to prevent atony, to prevent postpartum hemorrhage is widely used but can be inaccessible in low resource or rural areas. (30) If oxytocin is unavailable or inaccessible, the use of misoprostol in the third stage of labor can help prevent postpartum hemorrhage and it is much more accessible. With the correct community education and community based distribution, a medical team can greatly reduce maternal mortality in low resource areas; misoprostol can even be self-administered in home birth situations, which many women of color choose to undergo. There has been a business industry created within the healthcare for birth giving and for people who choose at-home births or midwife supported births; they should be able to receive the same level of care and comfort with accessible medications and culturally competent providers. The financial burden of a hospital stay often discourages many women of color to seek help and they may have cultural or traditional preferences to have at-home births with midwife assistance. The International Confederation of Midwives (ICM) and the Federation of Gynecology and Obstetrics (FIGO) created a worldwide campaign in 2003 to address preventing and treating postpartum hemorrhage and preventable maternal mortality. (31) This campaign focused on a shift to early prevention and treatment for maternal bleeding, which led to greatly decreased use of blood products. (32) The deliberate shift to active prevention earlier in the delivery process and integrating preventative measures into the medical model has been shown to not only improve maternal health outcomes but also staff and physician perceptions of patient safety. (33)

PREECLAMPSIA IN PREGNANCY

Written By: Ayushi Shroff



Preeclampsia affects about 3% of pregnancies, while all other types of hypertensive disorders make up approximately 5–10% of pregnancies in the United States. In industrialized countries similar to the US, rates of preeclampsia, gestational hypertension, and chronic hypertension have increased suggesting that the steps being taken to address maternal mortality due to pre-eclampsia are ineffective and need more management. Diagnosis and acute management of severe hypertension are central to reducing maternal mortality.

Increased maternal mortality is associated with negative effects on multiple organ systems for example eclampsia, hemolysis, elevated liver enzymes, and hepatic or central nervous system hemorrhage. While pre-eclampsia is prevalent in maternal mortality, it affects women of color disproportionately due to their genetic disposition and experiences of racism throughout their life journey. Even though research on genetic factors is limited, it is evident that outcomes are different for African American women versus Hispanic and Caucasian women (34).

PHYSIOLOGY

Pre-eclampsia is defined by two criteria – the development of hypertension in women after 20 weeks of gestation who previously has normal blood pressure and the presence of proteinuria or new symptoms (35)

Diabetes, obesity, higher age, insufficient renal function, pre-existing hypertension, personal history of pre-eclampsia, family history of pre-eclampsia, multifetal gestation, and thrombophilia are among some of the risk factors for the development of pre-eclampsia. (37)

Specifically, abnormalities in the formation and development of the placenta, immunologic factors, vascular changes, and inflammation have all been identified as contributing to the pathophysiology of preeclampsia. (37)

HYPERTENSION IN PREGNANCY

This diagram provides a visual representation of different hypertensive disorders of pregnancy and their relationship to each other. A subset of women can develop eclampsia from any of the hypertensive disorders of pregnancy and can also develop in normotensive patients. Another subset of women with chronic hypertension who may develop preeclampsia symptoms is diagnosed with superimposed preeclampsia.

Additionally, some women with gestational hypertension may develop preeclampsia later in the pregnancy after the gestational period. Only chronic hypertension can be diagnosed before the 20th week of gestation. (36)

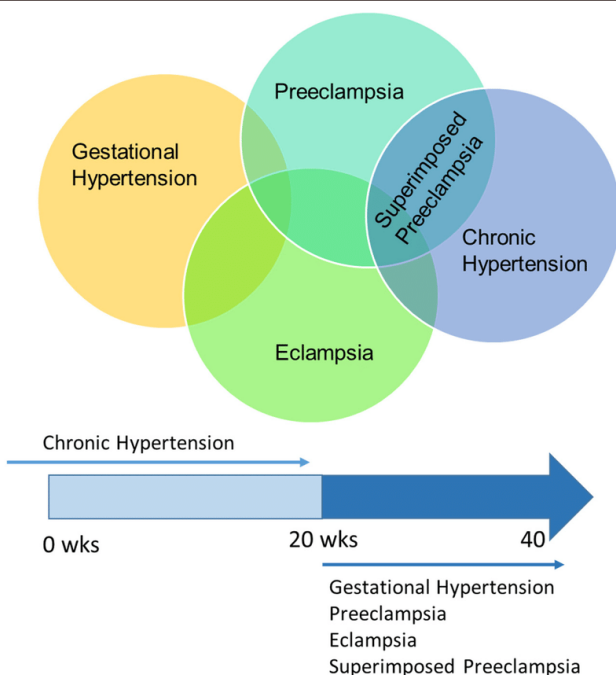


PHOTO SOURCE: RESEARCHGATE

PREECLAMPSIA IN PREGNANCY

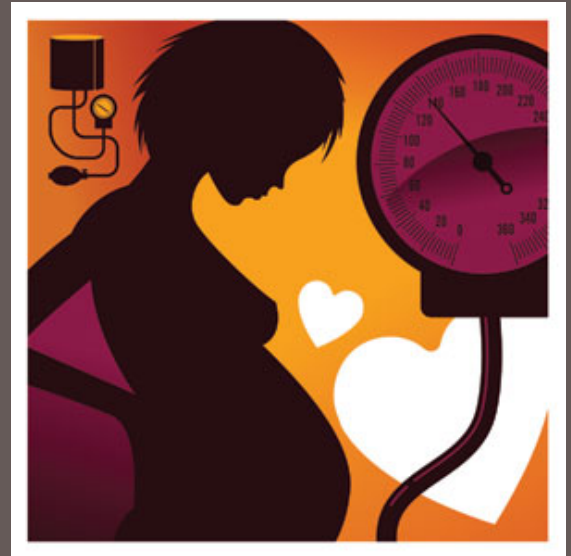
Written By: Ayushi Shroff

RACIAL INEQUITY

Racial differences are noted in the occurrence, presentation, and short-term and long-term outcomes of preeclampsia. Well-established clinical risk factors for preeclampsia such as obesity, diabetes, and chronic hypertension disproportionately affect non-Hispanic Black, American Indian, or Alaskan Native, and Hispanic populations. (37)

The higher rates of preeclampsia among Black women are explained by common coding variants in the apolipoprotein L1 gene (APOL1) that are potent risk factors for a spectrum of kidney diseases in Black Americans which is a risk factor for black women developing preeclampsia. Investigators hypothesized that APOL1 variants play a role in the excess risk for preeclampsia among Black women. (37)

While this is one aspect of genetics that can explain different outcomes, life experiences and access to healthcare can make a difference in the diagnosis and treatment process for women with pre-eclampsia.



MINORITIES' DIMINISHED RETURNS

In a cohort of 718,604 Black and White women drawn from a population-based California cohort, high socioeconomic status in White women was associated with a decreased risk of preeclampsia. However, Black women continued to have a higher risk of developing preeclampsia independent of their education or insurance status. This phenomenon has been labeled as Minorities' Diminished Returns (MDR) which is when Black women do not receive the same protective benefit from the improved sociodemographic factors. These findings, however, should not be a factor discouraging providers from supporting all patients in their risk-reducing behaviors. However, it should be noted that even in the absence of these sociodemographic risk factors some racial or ethnic groups continue to be at a higher risk of preeclampsia (37).

UNLOCK YOUR MATERNAL HEALTH WITH THIS KEY-WORD SEARCH

Made By: Ayushi Shroff

Amplifying Voices: Maternal Health

E	I	N	E	Q	U	A	L	I	T	Y	S	A	T
P	Y	C	N	A	N	G	E	R	P	R	I	D	O
L	T	N	H	M	U	T	R	A	P	T	S	O	P
E	P	R	E	E	C	L	A	M	P	S	I	A	T
G	S	Y	G	O	L	O	C	E	A	N	Y	G	H
I	M	P	L	I	C	I	T	B	I	A	S	C	E
S	D	A	R	C	M	C	U	L	T	U	R	E	M
L	O	C	C	E	Y	M	S	O	O	Y	A	S	O
A	U	C	O	T	C	M	I	L	S	I	G	A	R
T	L	E	P	H	I	U	M	G	L	C	E	R	R
I	A	S	I	I	L	N	A	E	R	R	H	E	H
V	U	S	B	C	O	A	O	T	E	A	I	A	A
E	I	H	O	S	P	I	T	A	L	A	N	N	G
M	I	D	W	I	V	E	S	P	L	B	E	T	E

IMPLICIT BIAS
 POLICY
 BIPOC
 GYNAECOLOGY
 LEGISLATIVE
 IMMIGRANT
 MIDWIVES
 INEQUALITY
 POSTPARTUM
 CULTURE
 PREECLAMPSIA
 HEMORRHAGE
 PREGNANCY
 CESAREAN
 HOSPITAL
 DOULA
 ACCESS
 ETHICS

TIMELINE OF U.S. MATERNAL HEALTH LEGISLATION AND BREAKTHROUGHS ⁽³⁸⁾

Written By: Michelle Tran

In the United States, the role of midwives has evolved alongside the rapidly improving healthcare system and society's perception of birth giving. Since the early 1900's, legislation to decrease maternal mortality rates has been at the forefront of policy development. In today's society, disproportionately high maternal mortality rates continue to devastate communities of color.

New York City requires the licensing of midwives to act as servants of the state to maintain social order

1765

The American Medical Association creates a section for **Obstetrics and Diseases of Women**

1921

Title V of the Social Security Act creates programs for maternity and infant care. Funds were allocated to dedicate to maternal and infant health

1962

Medicaid was established to provide health insurance to low income individuals including pregnant and postpartum women

1970

The Special Supplemental Food Program for Women, Infants, and Children (WIC) provided food to low-income pregnant women, nursing women, infants, and children

1716

Dr. William Chippen opens the first formal training for midwives

1903

The Sheppard-Towner Act was the first federally funded social welfare program passed to provide reduce high rates of maternal and infant mortality

1935

Migrant Health Act offered prenatal, postpartum, and infant care to migrants, seasonal farm workers, and their families

1965

Family Planning Act was passed as the first statute to provide authority and funds for family planning to pregnant women and their families

1972

1981

Nurse-midwives were licensed to practice in every single state of the United States

The National Healthy Mothers, Healthy Babies Coalition (HMHB) provided prenatal care and education to low-income pregnant mothers

1984

Healthy Start Initiative community program provides preconception care, postpartum care, and infant care in rural and low-socioeconomic areas

1991

The Maternity Protection Act ensures that women can take maternity leave cannot be terminated during or immediately after

1994

The Maternity Protection Act of 1994 is amended to provide further benefits and rights, as well as paid maternity leave for pregnant women

2004

Maternal Health Accountability Act established State maternal mortality review committees to assess and eliminate maternal health disparities

2011

Mothers and Offspring Mortality and Morbidity Awareness Act (MOMMA) addresses maternal mortality and expands Medicaid for pregnant women

2017

Ending Maternal Mortality Act requires the Secretary of Health to submit a plan to Congress to reduce maternal mortality on a biennial basis

2018

Modernizing Obstetric Medicine Standards (MOMS) Act targets increasing and standardizing maternal mortality and morbidity data collection

2019

Maternal Care Access and Reducing Emergencies (CARE) Act aims to address and eliminate racial disparities in maternal health outcomes

2020

Black Momnibus Act proposed to address racial and social determinants of health, support mental health, and serve incarcerated and veteran mothers

2021

MIDWIVES SAVING MOTHERS FROM MEDICINE



GUIDELINES


Written By: Karla Arevalo

Midwives provide a model of care that focuses on the birth giver and aims to provide care that is centered around making them feel a part of the delivery process and amplifies their wishes and concerns. In order for one to become a licensed midwife, they must successfully complete one of three midwifery educational programs approved by the Medical Board, some which include clinical experience and examinations that reflect the standards the state provides to be a practicing midwife. In addition, they must complete the written exam that is equivalent to the American College of Nurse Midwives exam. According to the Practice Guidelines for California Licensed Midwives of May 2014, a "midwife is a professional health care practitioner who offers primary care to healthy women and their normal unborn babies throughout normal pregnancy labor, birth, postpartum, the neonatal and I interconceptional periods." The term 'normal' in this context signifies: "(1) absence of preexisting maternal disease or conditions likely to affect the pregnancy,

(2) absence of significant disease arising from the pregnancy, (3) a singleton pregnancy, (4) cephalic presentation, (5) gestational age of the fetus is more than 37 weeks and less than 42 completed weeks of pregnancy, (6) labor is spontaneous or induced in an outpatient setting (39).

In case the pregnancy, delivery, or postpartum conditions become abnormal, the midwife must immediately refer or transfer the birth giver to a physician until the condition is resolved and risks are not likely to affect the pregnancy or delivery, the midwife may continue being the primary care provider for the birth giver. If the conditions do not improve or risks persist to the pregnancy or delivery, the midwife should surrender primary care and can work in collaboration with the physician and provide them with the birth giver's records from the pregnancy.

Midwives must ensure that they are abiding to



evidence-based policies and the guidelines for routine care. Their responsibilities to birth givers and their children include individualized forms of maternity care including education throughout three of the four stages of pregnancy: antepartum, preparation for birth, and postpartum. They must conduct risk assessments throughout and monitoring their condition while maintaining clear communication with the birth giver and physician, when necessary. Midwives must maintain “an individual plan for consultation, referral, transfer of care and emergencies.” (40) In case an emergency arises, they must rely on proper medical assistance and have the necessary documents and supplies accessible to them and those that need the information. Postpartum education includes counseling and education, for example breastfeeding techniques and overall parenthood.

Overall, licensed midwives aim to provide birth givers a safe pregnancy and delivery, ensuring that their client is autonomous in the process while providing them with the necessary information and education in order to make quality decisions. They must be vigilant of postpartum complications, such as maternal infection and postpartum depression, and refer the client for a physician consultation when necessary. Midwives’ goals are to provide a model of care that is driven by the birth givers’ needs and desires, while acknowledging their limitations and scope of knowledge and transferring care over to physicians when appropriate.

ROLES OF A MIDWIFE: INTERVIEW WITH SUSAN HUSER

Written By: Samira Torna

The role of a midwife can vary greatly dependent on the setting that they work with including the specific programs that they work for. However, there are certain aspects of midwifery that remain constant no matter where a midwife works. Midwives always work in the interest of the birthgiver with a focus on empowerment. They act as guides to their clients before, during, and after birth constantly working to make sure that the birth giver has an experience of deep connection with the needs of their bodies. A midwife that currently works at Cedars-Sinai Medical Center, Susan Huser, describes the role as to “give women options... women who really believe that birth has become too mechanized and too overwhelmed by technology and interventions to be very safe.”

Susan, with experience going back to the 1970’s, has first-hand seen how the role of the midwife has shifted and how it has stayed the same. Up to a few years ago, many programs required for midwives to work under physician supervision which has worked to limit the scope of practice for midwives and in turn, deprived rural, deprived rural communities in California of the much needed access to delivery care. As the regulation of midwives has started to shift, it has become more apparent how there is no standard role for a midwife. Susan described the role of the midwife at Cedars-Sinai as one where she

works directly with physicians and nurses to care for low-risk patients, helping curb the volume of clients on a given day. She emphasizes that midwives at Cedars-Sinai are there to encourage patients and staff to consider other natural birthing options before turning to pain management or unnecessary interventions. This work is especially important for hospitals like Cedars-Sinai where the cesarean section rate is high and usage of epidurals is overly common. Meanwhile, Susan’s time at UCLA Health “was more conversations with people than actual physical work, more sitting in rooms with patients and more explaining things and working out decisions on what we should do next.”

The role of the midwife is plentiful as they act as guides, informants, confidants, and friends. They work to curate a bond with the birth giver that serves to empower the individual to make their own decisions in birth and feel confident about it. Although the specific duties and responsibilities may shift from setting to setting, midwives have one primary priority: to advocate for their clients in order to, ensure the care and comfort of them through the pregnancy, delivery and postpartum.

NECESSARILY BY YONA HARVEY

She's got a hundred & two temperature, delivery room nurses said. You're gonna live, though — long enough to know you're going to go as quickly as you came, gonna make your mother swear by you, going to shake your Bible with red-tipped nails before you vanish into Chicago South Side skies that bleed — not like watercolor, not like a wound, not like a fat, bitten plum — not necessarily. No, not necessarily.

Nothing that precious or predictable. *Speak nicely to others & they will nicely speak to you*, your mother said. No, not so, you said fairly close to the end. No time to wait for mother's ride home or for saviors, coming soon.

TWO POEMS FOR BLACK MOTHERS IN AMERICA BY CAMILLE T. DUNGY

Expectant; or, American women are more likely to die in childbirth than women in any other developed country and black women make up fifty percent of those mortalities.

When I reached St. Peter, he was too small to crawl. I introduced myself as someone's mother, and he consulted his big Book of Roles.

Stand there, said Peter, pointing to the line with all the other hopeless mothers.

But, I said, *I've been there all along*.

The woman in front of me had been reading *Lamentations* for hundreds of years. I needed to hear my baby breathing, but couldn't over all her tears.



*Give me a ribbon, said Peter,
who sucked the silk.*

*Give me your hand, said Peter.
He suckled my thumb.*

My hair still grew fast as a pregnant woman's.

*My fingernails, short when I arrived
that evening, needed cutting soon.*

*Give me your papers, said Peter.
Then he gummed them. I don't trust my eyes,
he said, but believe in this mouth.*

*Give me your heart, said Peter.
I hadn't slept that long in ages: five hours,
six hours, seven.*

Stop this, I said. Stop now.

Expectant; or, What the Transition Phase of Labor Confirmed about Being a Black Woman in America

*I thought I would say, now!
and a new life would suddenly crown—
another beautiful, ordinary head
driven to split me wide open.*

*———But look at me. Still
on my hands and knees—still pushing.*



MIDWIVES: PAST



BLACK MIDWIVES IN HISTORY ⁽⁴¹⁾

Written By: Samira Torna

Midwifery, specifically Black midwives, have had a significant role in improving the care and outcomes of Black birthgivers and their families. Midwifery, now, stands on the shoulders of these women yet, Black midwives then and now face the most challenges in practicing and serving families in need of their care. Here we will highlight some important Black midwives in history:

Bridget "Biddy" Mason, 1818-1891: Biddy learned the techniques of midwifery from other women with origins in African, Caribbean, and Native American traditions. After moving to California and being freed, she became a well-known midwife in Los Angeles.

Maude E. Callen (1898-1990): Maude practiced midwifery in one of the poorest, rural communities in South Carolina. She was known for walking miles through the country in order to get to her patients.

Mary Francis Hill Coley (1900-1966): Mary practiced midwifery in Georgia. She was known for

her advocacy work in the Black community and worked to bridge the healthcare gap for Black birthgivers.

Margaret Charles Smith (1906-2004): Margaret worked as a midwife in Alabama and delivered more than 3,000 babies. She lost almost none of the babies that she helped deliver despite the high rate of Black neonatal mortality.

Claudia Booker (1949-2020): A more recently famous midwife, Claudia worked to reduce the racial disparities for birthgivers of color. She was known for being an advocate and an activist for her communities. Claudia worked as a lawyer and judge before she became a childbirth educator, doula, and lactation counselor.

These are only a few of the renowned Black midwives that were the influencers of the current model of midwifery, all making great contributions to the protection of Black families and their babies.

"THE MIDWIFE PROBLEM"

Written By: Samira Torna and Michelle Tran

What do you think of when you think of someone giving birth? What is the setting? Who is the caregiver? If you are like most others, you think of giving birth in a hospital under the care of a physician. That makes sense because often the images we consume, in movies or in tv shows is a dramatized scene of people giving birth in a sterile hospital, screaming at a physician for an epidural. Whereas, midwives and at-home births are depicted as comedically unorthodox and strange. This has not always been the case.

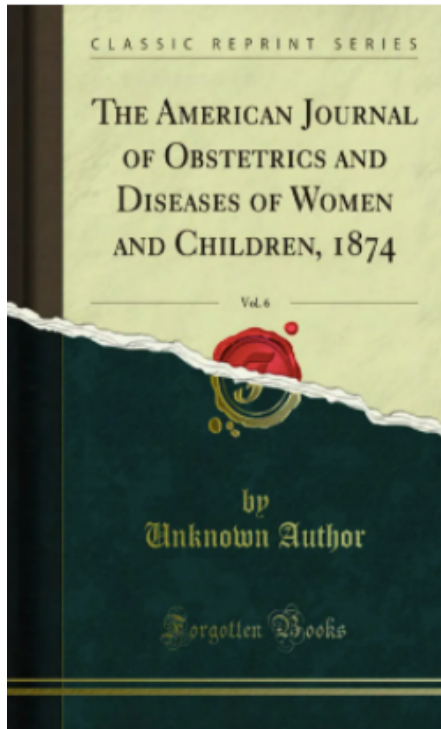
Before the early 20th century, midwives and doulas were attending 50% of the nation's births. (42) The history of midwives in the United States begins in the early 1700's when midwives of New York City, one of the most densely populated and growing areas in the United States at the time, were required to get certified to assist in the birth giving process, give medical advice, and to standardize midwifery practices. Midwives were seen as servants to the state to keep social and civil order in society as doctors were low in numbers and difficult for many women to access. As a result, midwives acted as primary care providers during the birthing process and were heavily involved in a woman's pregnancy experience. Doctors were often too busy with numerous patients to provide consistent maternity check ups. In Black and rural communities, the midwife was the only accessible birth worker.

During colonial times, the common practice was for women to assist women - men were never present during births, it was seen as indecent to witness a woman's birthing process. Due to unhygienic resources and high maternal death rates in colonial times, midwives helped guide women through the fear and shame they may have experienced while giving birth; women commonly faced pregnancy and birth giving with fear of death and eternal judgement, rather than excitement and joy. Until the mid 1700's, midwives were trained through apprenticeship and experience. The construction of hospitals in the early 1700's began the creation of the safe and

sterile environment that would prevent countless deaths in the general population. In 1765, the first medical school was chartered and the first formal training for midwives was established. (43) Unfortunately, due to societal stigmas against educated and literate women, many midwives could not seek formal education. Additionally, these schools excluded Black women completely despite midwifery being an essential practice in Black communities. For those who were literate and had the means, many midwives believed that childbirth was fully within the domain of female competence and chose not to seek formal education. By the end of the 18th century, the conception that educated doctors, who were all male, could provide better care than female midwives could and increase chances of a successful pregnancy became widespread. In the mid to late 1700s, obstetrics was introduced to the United States but was only accessible for upper and middle-class white families; obstetricians came to replace midwives for this population. Paralleling social patterns and influences, there was a decline in women pursuing midwifery or medicine in general to rather serve in a domestic role at home. With the proliferation of medical schools and hospitals, the shift from midwives to doctors began with the urban middle class. This hit the most vulnerable populations the hardest. Rural regions along with low socioeconomic status Black communities depended on midwives for birth care.

These communities were left with a dwindling midwife population and inaccessible obstetricians. Historically, specifically Black midwives and midwives of color have acted as the primary caretakers and guides during childbirth and delivery for decades; the terms "midwife," "granny-midwife," and "granny" all originate from the traditional Black midwife role in society. (44)

In the 1860's in Sweden, mandated midwives during childbirth greatly decreased maternal mortality rates and created an institution of a comprehensive birth giving community with a midwife lead with physicians there for support



and medical knowledge. (45) This was implemented in Sweden, which still has the lowest maternal mortality rates to this day. Around the same time in the United States, obstetrics was a new, unfamiliar profession that saw midwives as barriers to the advancement of this speciality. The arrival of germ theory and a deeper understanding of disease heavily reduced the danger of giving birth and pushed women towards hospitals. More so, physicians led a public health initiative, coined the “The Midwife Problem” by the American Journal of Obstetrics and Diseases in Women and Children. Physicians classified primarily immigrant and Black midwives as “dirty,” “evil,” and “ignorant” and called for the eradication of their profession. (46) Paired with the introduction of anesthesia, this campaign effectively pushed many women to seek the comfort and sterility of giving birth in a hospital setting, pushing midwives out of the picture. (47) The voices of physicians called for others to “save our women,” as quoted by Dr. J. Clifton Edgar. (48) By the mid to late 1900’s, healthcare had greatly advanced, hospitals had grown, and midwives were deemed obsolete.

“...MIDWIVES WHO, EXCEPT IN SOME RARE INSTANCES, ARE DARK , DIRTY, IGNORANT, UNTRAINED, INCOMPETENT WOMEN....SHE IS EVIL, THOUGH A NECESSARY EVIL, AND MUST BE CONTROLLED. WE MUST SAVE OUR WOMEN” - DR. J. CLIFTON EDGAR, 1911

The field of obstetrics was built upon the techniques and methods of midwives, as many physicians would often observe midwives in their training, yet rejected midwives completely for its own advancement. This campaign, etched in a saviorist framework, worked to push midwives out of the communities they had served for decades. It placed white male physicians as the saviors of women across the country, with Black and immigrant midwives as the villains of the story. “The Midwife Problem” was not only an issue of different professions but of race and gender as well. Formerly a Black and women of color dominated field, midwifery has evolved to become a predominantly white field and actively suppresses midwives of color. The erasure of the midwife of color has changed what it means to have a child in vulnerable populations. Delivery has become a dangerous act when it used to be perceived as something spiritual and beautiful for these populations.



MIDWIVES VS. PHYSICIANS

Written By: Samira Torna

With white, male obstetricians heading the field of delivery and birth work, the methods of childbirth has changed drastically from the midwife model. Within this field, predominantly white male obstetricians are viewed as experts which in turn, endangers the lives of Black, immigrant, and birth givers of color. Delivery has been medicalized by the obstetrics model, meaning the focus has been shifted from the comfort and care of the birthgiver and child to the efficiency of the birth. It has become the norm to think of delivery with an obstetrician in-hospital, done with many technological interventions. (49) Many opt for a birth in hospital because they believe that this is the safest course of action, considering the complications that can arise. However, this is not always true. Midwives have been proven to have better outcomes with birth as their work centers care and comfort of the birth giver and the baby.

Aforementioned, midwives approach birth much differently from obstetricians. Midwives use less interventions and invasive technology. They rely on the natural process of birth entrusting strategies as palpation and auscultation instead of technology that is often overused in hospitals. (50) This technology oftentimes misrepresents the state of the person giving birth and could cause for a misdiagnosis leading to an unnecessary intervention. For example, the World Health Organization recommends for the rate of cesarean sections to be 10 - 15% however, in the US a third of babies are born by cesarean section. (51) This is because the current model of care in hospitals along with the technology used places an expectation of efficiency on childbirth. For birth givers from marginalized groups, this can add even more stress as often dismissal, lack of proper care after birth, and racial bias can be the difference between life and death for them. These unnecessary interventions often put birth givers at risk. In many cases, physicians and medical personnel push birthgivers to consent towards these

procedures when they are at their most vulnerable. Delivery with a midwife allows the birthgiver to have all the control of what happens during delivery along with permitting them a strong network of support from family and the midwife, themselves.

Another major difference is the methods by which a midwife guides birth. In most birthing centers along with at-home births, midwives allow for the birthgiver and their partner to take on positions that relieve the stress of birth and provide the most comfort to the patient. Meanwhile, in hospitals, obstetricians have patients in positions that often stress the patient or cause for more discomfort. Photos from Maggie Shannon, seen throughout this magazine, show the most intimate moments of birthgivers and their partners during delivery. These photos, in black and white, exhibit birth to be a beautiful, close, intimate process between birthgivers, their partner, and their baby. Some depict birthgivers with their partners in water while they give birth and others show positions not commonly observed in hospital. These positions along with the guiding care that a midwife provides, give a comfortable, inclusive experience to the birthgiver which too often is not present in a hospital under an obstetrician's care.

It is important to challenge the idea of normalcy in birth as often this perception is what perpetuates harmful and racist practices by obstetricians and thus leads to maternal mortality. With the centering of midwives and their practices in childbirth, along with shifting of what a "normal" birth looks like, childbirth can begin to become a safer practice for all communities. The most significant determinant of a birthgiver's experience, is who their caretaker is. Birthgivers, especially those from Black populations and communities of color, would be best served by shifting the focus to allow for the perspective of midwives to be included.



MIDWIVES: PRESENT

Written By: Michelle Tran

Today, more than 90% of certified midwives are white. (52) From the beginning of standardized midwifery training, racism has been built into midwifery education and the healthcare structures that surround healthcare for people of color and maternal health. Midwives of color are in a unique situation in society to serve communities of color and low-resource areas in ways that the majority of healthcare providers cannot. It has been shown that patients of color tend to receive better interpersonal and emotional care in race-concordant interactions across the board, but especially in maternal care. In the current socio-political climate, midwives of color may use racial justice as motivation for their career and dedication to the cause to serve their communities. Midwives of color can provide culturally competent care to communities of color and especially to their own communities. The role of the midwife of color is to provide physically and emotionally safe care to communities of color but the structural issues that create barriers for these women and communities stem from a larger unjust and racist healthcare system.

In today's society, cultural competency is recognized as a pillar of equitable healthcare but in midwifery education, simply teaching the concept of cultural competency is not enough; it requires a foundational knowledge of structural competency to have a deeper understanding of how the midwife profession and the healthcare system promote the health and wellness of some, but degrade others. (53) The reason why teaching cultural competency is not nearly enough to create an environment of equitable healthcare is because it can falsely create a sense of mastery or perceived "complete knowing" of other cultures which may lead to the perpetuation of stereotypes and a disregard to a patient's individuality.

With a disproportionately white midwife population, communities of colors are at risk of not having their needs met and worse health outcomes of women and babies of color. (54) Increasing the population of midwives of color is an important step to achieving health equity but there are many different avenues to making maternal healthcare more accessible, digestible, and effective. By providing educational resources from the ground level and educating young girls and women on how and when to receive adequate, effective healthcare, maternal mortality rates in low-resource communities or communities of color have the power to decrease and proactive maternal healthcare can be built into pre-existing structures. Securing maternal health starts from conception and many women do not receive proper prenatal care information until their doctor's appointments which may be inaccessible too many. There is a lack of racial, ethnic, and cultural diversity in the maternal health field that can be addressed with education curriculum development, community education, and the empowerment of midwives of color. Midwives of color can address the disparities caused by the educational, socioeconomic, and access barriers that attribute to high maternal mortality rates but they are a part of a much larger, privatized system.

INSURANCE: PROVIDING OR DIVIDING?

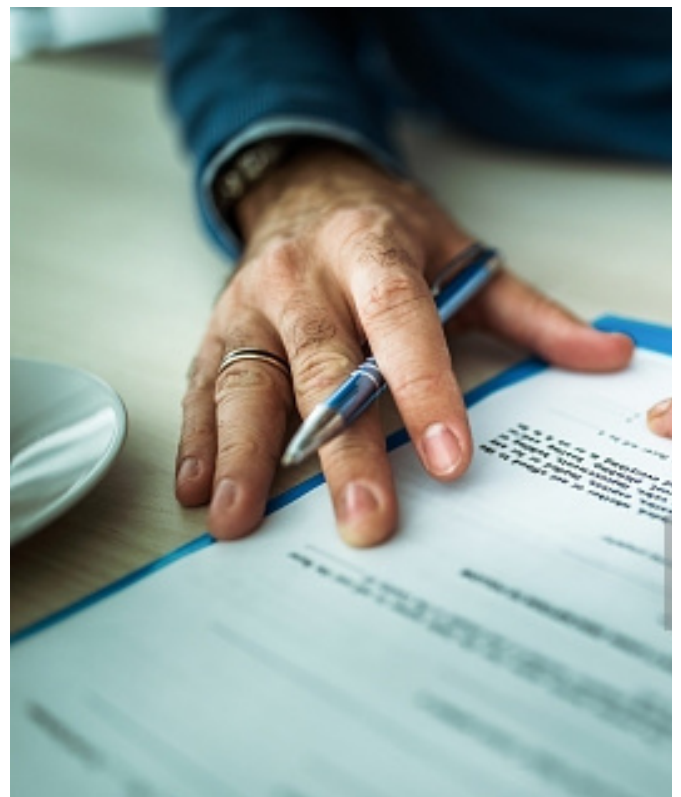
Written By: Karla Arevalo

The health insurance industry in the United States is largely privatized and requires that one buys a form of health insurance through private companies, such as Kaiser Permanente, Blue Shield, etc. The costs for health insurance plans can vary, however, “In 2020, the average national cost for health insurance [was] \$456 for an individual and \$1,152 for a family per month.”⁽⁵⁵⁾ Based on these numbers alone, it is worth noting how difficult it may be for low income communities to afford insurance. Not only is it expensive to afford health insurance, maternal care leads other developed nations in cost for maternal care.

The Affordable Care Act, created under the Obama administration, requires that all Americans have health insurance by law, however, states that “maternity care and newborn care are essential health benefits ... [and] all qualified health plans inside and outside the Marketplace must cover them.”⁽⁵⁶⁾ A qualified health plan for low income families and individuals include Medicaid and Children’s Health Insurance Program and include maternal and infant care.

In California the Medicaid program, Medi-Cal, passed California Senate Bill 407 which gives the California Department of Health Care Services authority “to recognize licensed midwives as providers in the Comprehensive Perinatal Services Program (CPSP).”⁽⁵⁷⁾ In order for Certified Nurse Midwives to be covered through Medi-Cal, they must be certified as CPSP. ⁽⁵⁸⁾

In the United States, the “average cost of pregnancy between \$30,000-\$50,000 [and an] out of pocket cost for women with insurance around \$3,400.” ⁽⁵⁹⁾



Although it only applies to Certified Nurse-Midwives, excluding other types of midwives – licensed and certified midwives – it provides birth givers of lower socioeconomic status access to the benefits midwives provide. By granting women who are at greater risk of maternal mortality access to midwives may be helpful in reducing the rates and providing them with a greater sense of safety and support during their maternal care, labor and delivery, and postpartum care.

BARRIERS TO MIDWIVES

Written By: Ayushi Shroff



Institutionalised

Racism:

Repeated exposure to discrimination and racist attitudes—whether intentional or out of ignorance—is oppressive and distracts them from their true mission of addressing maternal and infant health care, increasing the number of midwives of color, and better serving their communities. (60)

Regulations:

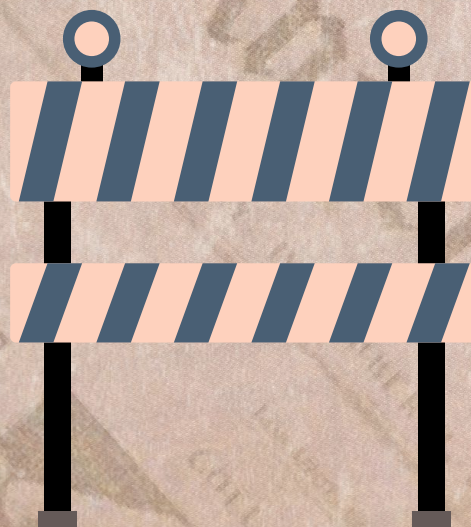
State laws and regulations establish midwives' scope of practice, set licensure requirements, and frequently determine their ability to get paid and obtain access to health care facilities. Certified nurse midwives have more uniformity whereas direct-entry midwives have much less uniformity. (60)

Economic Issues:

Economic issues include low or absent wages, informal payments and a lack of governmental financial commitment. The low wages and economic difficulties portray midwifery as an undervalued profession which refers to a midwives lower social standing. (61)

Gender Inequality:

Maternal and newborn mortality reduction is described as being hampered by gender inequality on two fronts—the gender discrimination experienced by the woman who provides the care and the additional gender inequality experienced by the childbearing woman. (61)



Education and Training:

Professional development barriers can include lack of investment in quality midwifery education; weak or absent regulation; inadequate numbers of staff; lack of affordable transport; weak facility management and poor working conditions. (60)



MIDWIVES: FUTURE

Written By: Karla Arevalo and Samira Torna

With the hope that midwifery becomes more accessible for communities at risk for higher rates of maternal mortality and morbidity, ten steps are proposed in order to ensure positive outcomes from the incorporation of midwives into the model of care for all birth givers in the medical setting. The continuum of care for pregnant persons consists of family planning, the gestational period, labor and birth, and postnatal care. First and foremost, the goal is to provide more people with access to education and resources in respect to pregnancy through the use of midwives.

Hoope-Bender and colleagues argue that all women of reproductive age should have access to midwives through their health insurance. (62) This leads to important roles policy makers and governments play are responsible for providing people with health plans that include access to sexual, reproductive, maternal, newborn, and adolescent health. As the access and need for midwives increases, the more regulations and expectations there are for midwives, which should increase the quality of care women receive and decrease the rates of maternal mortality. In order for the proper care to be administered, midwives need health facilities in which they can work in and meet with clients to discuss and educate them on what would be the best course of action and together form a care plan. Lastly,

national health health budgets must be cost-friendly for those seeking health budgets must be cost-friendly for those seeking midwives as well as allocate enough financial resources for the education of midwives. The second aspect for a stronger and more prominent midwifery field, is by incorporating and encouraging collaborative care between healthcare professionals that are woman-centered. In order for midwives to grant better outcomes, it is important they acknowledge and respect their scope of knowledge and refer a client to physicians when necessary. For smooth transitions between getting primary care from a midwife to a physician requires clear communication between all parties. Lastly, support and practice is needed from health care workers. For



midwives to be successful in caring for mothers, their education must be high quality, needing consistent review and updating to stay current with evidence-based procedures and interventions. This education must be made available for those who are qualified to enroll in training and educational programs for midwifery. Most importantly, the field should be regulated in order to ensure that they are serving their purpose of administering the best care for women and reducing the rates of maternal mortality. Midwives should also have the opportunity for leadership which can help with communication and reduce barriers between the collaborative care team.

In order to ensure that the best quality of care is administered to clients, it is important to collect data that can help update plans and models of care. Overall, people of all levels of care contribute vastly in being a remedy in maternal mortality rates. Policy-makers can ensure that women have access to midwives through subsidized health insurance for low income folk. Health professionals including midwives must have proper communication with each other and work together to provide the mother when the level of care changes.

In analyzing what works, we can look towards California: maternal mortality rates in California have seen a decrease of 55% when the country's rates have been increasing. (63) This decrease is due to better interventions within hospitals such as hemorrhage carts, a cart stocked with all the supplies necessary to stop bleeding, and other standardized protocols. Although these measures have been able to decrease maternal mortality overall, California still has blatant racial disparities between Black and white birth givers. California's protocols and standard procedures have been able to save lives however, the focus must be on prevention and addressing the inequality seen in maternal care in order to truly address the issue of maternal mortality.

Black midwives and midwives of color, as guides in birth and pillars of empowerment for birth givers, are proven to be able to address this issue. Not only would this be able to start directly addressing the issue of inequality in birth but also, midwife-involvement in pregnancy, delivery, and postpartum serves as a protective factor for birth givers. To address this need along with reducing racial disparities in maternal health, Los Angeles County has started a 5-year initiative to provide doula care and midwife services to Black birth givers. This initiative is one of many that are a part of the African American Infant and Maternal Mortality prevention initiative. Through this initiative, Black birth givers from communities of color in Los Angeles are able to receive doula services at no cost including prenatal visits, postpartum visits, and constant support through labor and delivery. Not only does this initiative address the lack of access to midwives and doulas but it is also set to address the lack of Black midwives and doulas in the workforce.

The Black Maternal Health Omnibus, an initiative to address the racial inequality of birth care was not passed in 2020 but will be considered again in 2021. This Act would have implemented a 12-month period of postpartum Medicaid coverage, invested into rural maternal health while also diversifying birth workers and training them on implicit bias. Significantly, this Act would have also provided Black birth givers with doula and midwife services.

Midwives, specifically Black midwives and midwives of color, are starting to get the recognition that they deserve. However, there is much still that needs to be done. Black birth givers should have the option of delivering with a Black midwife to reduce the anxiety of possibly entering a life or death situation due to the current medical model as well as implicit bias from physicians and medical staff. Simply just this option could save millions of lives. However, first we need to address the barriers that midwives have in getting educated and trained and additionally, the racism that we see in our medical model currently. There can be a future where Black, immigrant, and birth giver of color mortality is reduced however, there needs to be a commitment and effort towards midwives.



JESSICA DIGGS, A MIDWIFE, TALKING TO A CLIENT OVER VIDEO

PHOTO BY: MAGGIE SHANNON

SOURCES

- 1. Podcast with Dr. Camara Jones:
<https://unnaturalcauses.org/assets/uploads/file/camarajones.pdf>
- 2. Katherine Kentoffio et al., "Use of Maternal Health Services: Comparing Refugee, Immigrant and US-Born Populations," *Maternal and Child Health Journal* 20, no. 12 (December 1, 2016): 2494–2501, <https://doi.org/10.1007/s10995-016-2072-3>.
- 3. Kentoffio et al.
- 4. Kentoffio et al.
- 5. Thu Quach et al., "Adverse Birth Outcomes and Maternal Complications in Licensed Cosmetologists and Manicurists in California," *International Archives of Occupational and Environmental Health* 88, no. 7 (October 1, 2015): 823–33, <https://doi.org/10.1007/s00420-014-1011-0>.
- 6. Quach et al.
- 7. Zane R Gallinger and Geoffrey C Nguyen, "Presence of Phthalates in Gastrointestinal Medications: Is There a Hidden Danger?," *World Journal of Gastroenterology: WJG* 19, no. 41 (November 7, 2013): 7042–47, <https://doi.org/10.3748/wjg.v19.i41.7042>.
- 8. Ellen M. Velie et al., "Understanding the Increased Risk of Neural Tube Defect-Affected Pregnancies among Mexico-Born Women in California: Immigration and Anthropometric Factors," *Paediatric and Perinatal Epidemiology* 20, no. 3 (2006): 219–30, <https://doi.org/10.1111/j.1365-3016.2006.00722.x>.
- 9. Serbin and Donnelly, "The Impact of Racism and Midwifery's Lack of Racial Diversity."
- 10. Kentoffio et al., "Use of Maternal Health Services."
- 11. Ignacio Correa-Velez and Jennifer Ryan, "Developing a Best Practice Model of Refugee Maternity Care," *Women and Birth* 25, no. 1 (March 1, 2012): 13–22, <https://doi.org/10.1016/j.wombi.2011.01.002>.
- 12. Kentoffio et al., "Use of Maternal Health Services."
- 13. Kentoffio et al.
- 14. Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths | CDC Online Newsroom | CDC. (2019, September 6). <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>
- 15. Caitlin Keating. "Judge Hatchett's Son Seeks Justice After His Wife's Tragic Childbirth Death". (n.d.). PEOPLE.Com. Retrieved February 5, 2021, from <https://people.com/human-interest/judge-hatchetts-son-seeks-justice-after-wifes-childbirth-death/>
- 16. Posner, G. D. (2013). *Oxorn-Foote Human Labor & Birth* Sixth Edition.
- 17. Types of Delivery. (2004, June 7). WebMD. <https://www.webmd.com/baby/guide/delivery-methods#1>
- 18. Posner, G. D. (2013). *Oxorn-Foote Human Labor & Birth* Sixth Edition.
- 19. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource: Textbook | GLOWM," accessed February 3, 2021, https://www.glowm.com/resource_type/resource/textbook/title/a-comprehensive-textbook-of-postpartum-hemorrhage-2nd-edition/resource_doc/1275.

- 20. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource."
- 21. Elliott K. Main et al., "Reduction in Racial Disparities in Severe Maternal Morbidity from Hemorrhage in a Large-Scale Quality Improvement Collaborative," *American Journal of Obstetrics & Gynecology* 223, no. 1 (July 1, 2020): 123.e1-123.e14, <https://doi.org/10.1016/j.ajog.2020.01.026>.
- 22. Karla N. Solheim et al., "The Effect of Cesarean Delivery Rates on the Future Incidence of Placenta Previa, Placenta Accreta, and Maternal Mortality," *The Journal of Maternal-Fetal & Neonatal Medicine* 24, no. 11 (November 1, 2011): 1341–46, <https://doi.org/10.3109/14767058.2011.553695>.
- 23. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource."
- 24. Bryant et al.
- 25. Cynthia Gyamfi-Bannerman et al., "Postpartum Hemorrhage Outcomes and Race," *American Journal of Obstetrics & Gynecology* 219, no. 2 (August 1, 2018): 185.e1-185.e10, <https://doi.org/10.1016/j.ajog.2018.04.052>.
- 26. Main et al., "Reduction in Racial Disparities in Severe Maternal Morbidity from Hemorrhage in a Large-Scale Quality Improvement Collaborative."
- 27. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource."
- 28. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource: Textbook | GLOWM," accessed February 3, 2021, https://www.glowm.com/resource_type/resource/textbook/title/a-comprehensive-textbook-of-postpartum-hemorrhage-2nd-edition/resource_doc/1275.
- 29. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource."
- 30. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource."
- 31. "A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition | Resource."
- 32. Laurence E. Shields et al., "Comprehensive Maternal Hemorrhage Protocols Improve Patient Safety and Reduce Utilization of Blood Products," *American Journal of Obstetrics & Gynecology* 205, no. 4 (October 1, 2011): 368.e1-368.e8, <https://doi.org/10.1016/j.ajog.2011.06.084>.
- 33. Laurence E. Shields et al., "Comprehensive Maternal Hemorrhage Protocols Improve Patient Safety and Reduce Utilization of Blood Products," *American Journal of Obstetrics & Gynecology* 205, no. 4 (October 1, 2011): 368.e1-368.e8, <https://doi.org/10.1016/j.ajog.2011.06.084>.
- 34. Lo, J. O., Mission, J. F., & Caughey, A. B. (2013). Hypertensive disease of pregnancy and maternal mortality. *Current Opinion in Obstetrics & Gynecology*, 25(2), 124–132. <https://doi.org/10.1097/gco.0b013e32835e0ef5>
- 35. Moussa, H. N., Arian, S. E., & Sibai, B. M. (2014). Management of Hypertensive Disorders in Pregnancy. *Women's Health*, 10(4), 385–404. <https://doi.org/10.2217/whe.14.32>
- 36. Jones-Muhammad, & Warrington. (2019). Cerebral Blood Flow Regulation in Pregnancy, Hypertension, and Hypertensive Disorders of Pregnancy. *Brain Sciences*, 9(9), 224. <https://doi.org/10.3390/brainsci9090224>
- 37. Johnson, J. D., & Louis, J. M. (2020). Does race or ethnicity play a role in the origin, pathophysiology, and outcomes of preeclampsia? An expert review of the literature. *American Journal of Obstetrics and Gynecology*, 3–5. <https://doi.org/10.1016/j.ajog.2020.07.038>

- 38. Young, D. (2019, August 26). Legislative Proposals Addressing Maternal Mortality. National Health Law Program.; MCH Timeline. (n.d.). Retrieved February 23, 2021; Kelly, R. L. (2018, May 25). H.R.5977 - 115th Congress (2017-2018): MOMMA's Act (2017/2018) [Webpage].
- 39. "Midwifery Practice Act of 1993 | Medical Board of California." Retrieved February 4, 2021 (https://www.mbc.ca.gov/Licensees/Midwives/Midwives_Practice_Act.aspx).
- 40. Medical Board of California. "Practice Guidelines for California Licensed Midwives." 15.
- 41. Muza, S. (2021, February 5). Champions for Safe Childbirth - A Spotlight on Black Midwives of the Past. Lamaze International. <https://www.lamaze.org/Connecting-the-Dots/Post/champions-for-safe-childbirth-a-spotlight-on-black-midwives-of-the-past-1>
- 42. Goode, K. L. N. (2014). Birthing, blackness, and the body: black midwives and experiential continuities of institutional racism.
- 43. Adrian E. Feldhusen, "The History of Midwifery and Childbirth in America: A Time Line • Midwifery Today," Midwifery Today (blog), January 17, 2000, <https://midwiferytoday.com/web-article/history-midwifery-childbirth-america-time-line/>.
- 44. Goode, K. L. N. (2014). Birthing, blackness, and the body: black midwives and experiential continuities of institutional racism.
- 45. Sabaratnam Arulkumaran, "Postpartum Hemorrhage Today," in A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition, 2, n.d.
- 46. Goode, K. L. N. (2014). Birthing, blackness, and the body: black midwives and experiential continuities of institutional racism.
- 47. THE EDITORS, "The U.S. Needs More Midwives for Better Maternity Care," Scientific American, accessed February 22, 2021, <https://doi.org/10.1038/scientificamerican0219-6>.
- 48. Goode, K. L. N. (2014). Birthing, blackness, and the body: black midwives and experiential continuities of institutional racism.
- 49. Akileswaran, C. P., & Hutchison, M. S. (2016). Making room at the table for obstetrics, midwifery, and a culture of normalcy within maternity care. *Obstetrics & Gynecology*, 128(1), 176-180.
- 50. Everly, M. C. (2012). Facilitators and barriers of independent decisions by midwives during labor and birth. *Journal of midwifery & women's health*, 57(1), 49-54.
- 51. World Health Organization. (2019, January 24). WHO statement on caesarean section rates. https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/cs-statement/en/
- 52. Jyesha Wren Serbin and Elizabeth Donnelly, "The Impact of Racism and Midwifery's Lack of Racial Diversity: A Literature Review," *Journal of Midwifery & Women's Health* 61, no. 6 (2016): 694-706, <https://doi.org/10.1111/jmwh.12572>.
- 53. Serbin and Donnelly.
- 54. Jennifer Almanza et al., "The Experience and Motivations of Midwives of Color in Minnesota: Nothing for Us Without Us," *Journal of Midwifery & Women's Health* 64, no. 5 (2019): 598-603, <https://doi.org/10.1111/jmwh.13021>.
- 55. "How Much Does Individual Health Insurance Cost? - EHealth Insurance." Retrieved February 28, 2021. <https://www.ehealthinsurance.com/resources/individual-and-family/how-much-does-individual-health-insurance-cost>.
- 56. U.S. Centers for Medicare & Medicaid Services. (n.d.). Health Coverage Options for Pregnant or Soon to Be Pregnant Women. Retrieved March 7, 2017, from <https://www.healthcare.gov/what-if-im- pregnant-or-plan-to-get-pregnant/>

- 57. Sarah Davis. 2015. "Update from the States: California." Midwives Alliance of North America. Retrieved February 4, 2021 (<https://mana.org/blog/update-from-the-states-california>).
- 58. "Comprehensive Perinatal Services Program (CPSP) - Public Health Department - For Providers - County of Santa Clara." Retrieved February 28, 2021 (<https://www.sccgov.org/sites/phd-p/programs/cpsp/Pages/cpsp-home.aspx>).
- 59. Rosenthal, Elisabeth. 2013. "American Way of Birth, Costliest in the World." The New York Times, July 1.
- 60. Filby, A., McConville, F., & Portela, A. (2016). What Prevents Quality Midwifery Care? A Systematic Mapping of Barriers in Low and Middle-Income Countries from the Provider Perspective. PLOS ONE, 11(5), e0153391. <https://doi.org/10.1371/journal.pone.0153391>
- 61. Reed, A. (2000). State regulation of midwives: issues and options. Journal of Midwifery & Women's Health, 45(2), 130–149. [https://doi.org/10.1016/s1526-9523\(00\)00006-4](https://doi.org/10.1016/s1526-9523(00)00006-4)
- 62. Hoope-Bender, Petra ten, Sofia Tavares Castro Lopes, Andrea Nove, Michaela Michel-Schuldt, Nester T. Moyo, Martha Bokosi, Laurence Codjia, Sheetal Sharma, and Caroline Homer. 2016. "Midwifery 2030: A Woman's Pathway to Health. What Does This Mean?" Midwifery 32:1–6. DOI: 10.1016/j.midw.2015.10.014.
- 63. Howard, J. C. (2020b, April 16). Maternal mortality: Could California hold the key to reducing deaths in childbirth? CNN. <https://edition.cnn.com/2020/04/14/health/maternal-deaths-california/index.html>

