Inadequate Maternal Health Care for Women in the United States

Rebecca Stull Zundel
Inadequate Maternal Health Care for Women in the United States

Summary+

Although insufficient maternal health care has seen improvements in most developed countries, it is still a rising issue in the United States. This insufficiency may partly be due to the accessibility barriers that both rural and urban women face in reaching adequate care. Additionally, the expenses of maternal care or gender discrimination within medical establishments may dissuade women from seeking the care that
they need. Women who receive inadequate care are at a higher risk for maternal mortality, the death of their unborn or newly born infant, and having a low-birth weight child, which comes with many issues of its own. One possible practice to improve maternal care in the United States is to promote midwifery.

Key Takeaways+

- Inadequate maternal care is a prominent issue in the United States, affecting more than 15% of American families.
- Accessibility barriers, the expense of care, and gender biases in medical establishments all influence the inadequacy of maternal care in the United States.
- Insufficient maternal care may lead to maternal mortality, infant death, or the health deficiencies of low-birth weight infants.
- Midwifery is one practice that could reduce the negative consequences of poor maternal care in the US as it can potentially prevent more than 60% of maternal and infant deaths.
- The United States currently lacks enough midwives to care for all American birthing mothers.

Key Terms+

**Affordable Care Act (ACA)**—The ACA is a comprehensive health reform legislation enacted by President Barack Obama in March, 2010. Its focus is on increasing health insurance coverage for American citizens.1

**Inadequate Care**—Maternal care can be inadequate in quality or quantity. Insufficient quantity refers to care that does not begin until after the fourth month of pregnancy or less than 50% of the recommended number of prenatal checkups (at least eight per pregnancy is recommended).2,3 Insufficient quality refers to care that is not consistent with current medical knowledge and does not comprehensively address six domains: effectiveness, efficiency, equity, patient centeredness, safety, and timeliness.4

**Infant mortality**—Infant mortality is the death of an infant within one year of delivery.5

**Low-birth weight**—An infant with a low-birth weight weighs 5.5 pounds (2500 grams) or less at birth.6

**Maternal Health Care**—The medical services given to women during their pregnancy, delivery, and postpartum.7

**Maternity Care Desert**—A county is considered a “maternity care desert” if it houses no obstetric centers, no birth centers, no OB-GYN professionals, and no certified midwives.8

**Midwife**—A health professional who is certified to care for mothers and newborns before, during, and after childbirth.9

**Miscarriage**—The spontaneous loss of a woman’s pregnancy before her 20th week of pregnancy.10

**OB-GYN**—OB-GYN refers to a doctor who specializes in women’s reproductive health in obstetrics (OB) and gynecology (GYN).11
Pregnancy-Related Death/Maternal Mortality—The death of a woman during or within one year of pregnancy from a pregnancy complication or an unrelated condition that was aggravated by pregnancy.\textsuperscript{12} 

Stillbirth—When the infant dies before or during delivery.\textsuperscript{13}

## Context

### Q: What does maternal care refer to in this brief?

**A:** Maternal healthcare is the medical assistance that expecting mothers receive from doctors, nurses, OB-GYNs, or midwives. This care starts before pregnancy with a preconception checkup, in which medical personnel look for any conditions that could affect the mother's or infant's health. During pregnancy, maternal care includes 10-15 routine prenatal checkups to ensure regular development. This stage is followed by help and guidance through the delivery process in a hospital, in the mother's home with help from medical personnel, or at a birthing center. Finally, maternal care includes at least one postpartum checkup to ensure that both the mother and baby are recovering and healthy.\textsuperscript{14}

### Q: How does this brief define inadequate care?

**A:** In terms of maternal care, inadequacy can be found in both the quality and quantity of the care. The Centers for Disease Control and Prevention (CDC) defines insufficient quantity as care that does not begin until after the fourth month of pregnancy or is less than 50% of the recommended number of prenatal visits.\textsuperscript{15} The World Health Organization (WHO) recommends at least eight prenatal visits.\textsuperscript{16} As for quality, the Institute of Medicine states that sufficient care should be consistent with current medical knowledge and should comprehensively address six domains: effectiveness, efficiency, equity, patient centeredness, safety, and timeliness.\textsuperscript{17} For example, care within the effectiveness domain pursues processes and outcomes that are supported by scientific research, such as the recommended dosage of 0.4 mg folic acid per day to reduce prenatal defects.\textsuperscript{18} Care within the efficient domain maximizes the services and benefits delivered for each healthcare resource used. Inadequate quality of maternal care, then, does not fulfill one or more of these six domains.\textsuperscript{19}
Q: Who is affected by poor maternal care?

A: Poor maternal care affects women and infants who need or would benefit from pregnancy services because maternal care lowers the chance of infant and maternal mortality. Maternal care also decreases the likelihood of a variety of other pregnancy-related health issues for the mother and child, such as blood infections or eclampsia for the mother and preterm birth for the infant. The women most affected by poor prenatal care are in the child-bearing years of roughly 15 to 44 years old. Women first benefit from this care with the birth of their first child, which is, on average, at 27 years old. Additionally, the average woman will have at least two children, so she may repeatedly encounter the negative effects of inadequate care.

While poor prenatal care has been shown to affect 15% of families all across the United States, certain minority groups are disproportionately affected. A CDC report found that 61% of women under the age of 20, particularly young adolescents, receive inadequate care; 62% of women who have not completed a high school education receive insufficient maternal services; and the rates of inadequate care reach up to 68% among Native Hawaiian, Native Alaskan, Pacific Islander, Native American, and Black families.

Q: How has maternal care evolved in the US?

A: In the late 1800s, pregnancy care in the United States was unstructured, and childbirth was considered a domestic responsibility. Maternal data was not yet recorded in the US at that time, but CDC records from the year 1900 suggest that maternal mortality was common; over 800 mothers died for every 100,000 live births. In the early 1900s, America's medical practices gained structure: Modern hospitals were built, nursing was professionalized, and medical education and licensing requirements were standardized. However, the maternal mortality rate did not consistently decrease until 1930, mainly due to poor obstetric education and practices. At this time, delivery practices included excessive and inappropriate interventions, such as inessential episiotomies and cesarean deliveries, which led to 40% of maternal deaths. In the 1930s, reports like The White House Conference on Child Health Protection, Fetal, Newborn, and Maternal Mortality and Morbidity Report linked poor care to maternal deaths. As a result, obstetric
Post World War II, America turned its focus to ensuring a healthy and numerous population to supply industry labor and military forces. This transition reinforced the drive for safe, hospital-based prenatal care in the US, and the maternal mortality rate dropped to roughly 100 deaths per 100,000. Then, the women's health movement in the 1960s and 1970s expanded reproductive rights and encouraged woman-centered practices within prenatal care. By the end of the 1970s, the maternal mortality rate had dropped to roughly 15 deaths per 100,000. Maternal mortality has not decreased since 1980 and has actually risen since the start of the 2000s. Despite the improvement to maternal care over the past century, inadequate care in the United States continues to be a prevalent issue.

Q: How does maternal care in the United States compare globally?

A: While the United States' maternal services fare better than the majority of underdeveloped countries, this brief focuses on inadequate maternal care within the US because America fares poorly in comparison to countries similar in wealth and development. A Commonwealth Fund study found that the US has the highest maternal mortality among ten other developed countries and is the only country to have a gradually rising maternal mortality rate in the 2000s. In 2018, New Zealand's and Norway's maternal mortality rates were both less than two deaths per 100,000 live births. France, the country with the second highest maternal mortality rate in the study, saw 9 deaths per 100,000 live births. America's maternal mortality rate nearly doubled France's rate with 17 deaths per 100,000 live births.

The study also found that the US has a shortage of maternity care providers and significantly less midwives than in all of these other countries besides Canada. The United States has roughly 11 OB-GYNs and 4 midwives (a total of 15 providers) for every 1,000 live births. In contrast, the other nine countries in the Commonwealth Fund study have between 35 and 78 maternal care providers for every 1,000 live births. Finally, the study found the US to be the only country to not guarantee paid parental leave in the postpartum period. As a developed country, America's maternal services lag behind similar countries' maternal services.
Q: Where in the United States is inadequate care an issue?

A: Research has found that inadequate care is an issue all across the United States. For instance, rural areas often do not have the medical personnel or the necessary facilities to provide sufficient care without geographic restrictions. On the other hand, more densely populated urban areas have the medical personnel and the facilities, but crowded, untimely, and uncomfortable public transportation systems can discourage women from seeking care. Even with access to private transportation, the overpopulation common in urban areas can reduce the likelihood of a woman accessing adequate care in these areas.

While inadequate care is an issue in cities and towns all across the United States, most southern states are disproportionately affected. One study found the states with highest infant mortality rates, fewest maternal care providers, and lowest levels of family friendliness within health care are all southern states. For example, Louisiana has the highest maternal mortality rate of 58.1 deaths per 100,000 and is closely followed by Georgia, Arkansas, Alabama, and Texas. In contrast, California has the lowest maternal mortality rate of 4 deaths per 100,000. California also has the smallest percentage of a population that lives in a maternal care desert at 0.3%, while the percentages are as high as 23% in southern states like Mississippi, Oklahoma, and Missouri.

Contributing Factors

Accessibility Barriers to Care

One of the most prominent contributing factors to inadequate maternal health care in the United States is the inaccessibility that excludes many women from receiving the care that they need. Nearly 5 million American women reside in counties with limited access to care, which means that those counties only have one medical facility that offers prenatal services. Having only one facility means that these women are faced with limited choice in their care and the prenatal specialists
may be overwhelmed and overbooked in caring for all of the pregnant
women in the area. Another 2 million women live in US counties that are
considered maternity care deserts, meaning that the county offers no
prenatal services, facilities, or midwives within its county borders. The
women in these counties may be forced to look for care outside of their
residential area, reducing the timeliness and convenience of their care.

Among these millions of women living with limited to no maternal care, one out of three women live in
urban areas, such as Houston, Texas and Miami, Florida. Even survey reports from New York City, the
most populated city in the US, demonstrate accessibility barriers to adequate care. One NYC-based study
showed that this inaccessibility to maternal health care in urban areas is due to a variety of correlates. One
such correlation is the low number of maternal healthcare facilities and providers in certain counties.
For example, the New York county of Queens has only 25 maternal beds, and more than 35% of women in
Queens receive late or no prenatal care. Conversely, Manhattan has over 100 maternity beds, and less than
20% of women in Manhattan receive late or no prenatal care. Other potential barriers to inadequate care
in urban areas include inaccessibility to private transportation and difficult transportation methods. One in
four urban mothers feels that transportation is a barrier to care, and research shows that public
transportation can increase stress, anxiety, and nausea in pregnant women. Together, these
accessibility issues challenge millions of women in urban areas seeking adequate maternal care.

Unfortunately, the accessibility barriers faced by many women cannot be restrained to only urban areas.
Approximately 18 million women of the childbearing years live in rural areas, and these women have
challenges of their own when it comes to health care access. In contrast to women from urban areas,
women residents of rural areas are more likely to be restrained by the longer travel distances to receive
adequate medical attention. A recent study found that less than 50% of women in rural areas live within a
30-minute drive from the closest facility offering obstetric care, and only 80% live within 60 minutes. The
long distances can significantly increase the challenges that pregnant women from rural areas face in
finding and accessing care. Overall, the geographical barriers faced by women all across the United States
may minimize the patient-centeredness, timeliness, and access essential to adequate care.

Expense of Maternal Care and Coverage

Another contributing factor to America’s poor maternal care is
the expense of pregnancy services in the United States with
or without insurance coverage. Because maternal care
expenses are so high, many women are left unable to pay for
the care that they need before, during, and after pregnancy. On average, uninsured childbirth costs $13,000 for a vaginal birth and $22,000 for a cesarean birth, but a study done in 2014 at the University of California San Francisco discovered that childbirth can reach up to $70,000 depending on the number of complications during pregnancy. The average working American woman makes around $50,000 a year. This figure means that the costs of childbirth could range from one fourth of an uninsured woman's income to completely exceeding their entire yearly income. Given that approximately one in eight women (12.9%) ages 19 to 44 do not have health insurance coverage in the US, these high costs significantly impact uninsured women.

Most commonly, the women without insurance fall into the "coverage gap," meaning that they make too much to qualify for Medicaid but make too little to cover the costs of private insurance. An estimated 800,000 American women of reproductive age fell into this category in 2019. Whether in this coverage gap or not, receiving no care or a less-than-sufficient amount of maternal care may be all that is financially accessible for these uninsured women during their pregnancy.

For the women who do qualify for Medicaid, employee-based insurance, or private insurance, the Affordable Care Act ensures that all pregnancy costs, including prenatal care, delivery, and postnatal care, will be covered by all major medical insurance plans. Even these women, however, are faced with the expenses that come with health care. Private insurance in the United States costs on average $500 per month for individuals and $1,000 for families; women with employee-based coverage are expected to pay between 18%-40% of their health insurance costs; and insured women can expect to pay between $450 and $8000 out of pocket for medical expenses on top of their monthly insurance payments. Additionally, only eight states in the US have mandated paid maternity leave. This gap means that working women may be left with no income during their postpartum recovery while paying their out-of-pocket expenses. These healthcare expenses are significantly lower than that of uninsured women, but the cost of maternal care coverage and the potential of unpaid maternity leave increases the difficulty of affording and accessing a sufficient quantity of care. A CDC report found that over 20% of women, both uninsured and insured, receive no care or do not begin prenatal care until their second or third trimester. This timeline suggests that the costs of maternal services in the US may act as a barrier to adequate care.

Gender Biases in Healthcare
The prevalent gender biases that still exist in the current United States healthcare also add to faulty maternal health care for women. Gender bias in healthcare refers to cases in which patients are treated at a lower quality because of their gender. For example, these gender biases may include disbelief in symptoms, harassment, and delayed diagnosis. Such biases leave women feeling unsafe and unheard in medical environments. One study found that 26% of women with a chronic illness, compared to 18% of men, felt that a healthcare worker had ignored or dismissed their symptoms and that their pain was not taken seriously. Additionally, 31% of women, compared to 19% of men, felt that they needed to convince the healthcare provider of their symptoms, and 17% of women, compared to 6% of men, felt that they had been treated differently in a healthcare setting because of gender.

These findings carry over into maternal care as well. In 2019, WHO researchers expanded on seven dimensions of mistreatment in maternity care that negatively affect care quality and women’s safety. These include autonomy loss, meaning the woman is unable to choose her care procedures with all relevant knowledge and without coercion; being threatened, scolded, or shouted at; and being ignored or refused after asking for help. One study found that one in six women experience at least one of these types of mistreatment in their material care experience. The discrimination and mistreatment that mothers face lower the equity and safety of their maternal care, which are two of the key dimensions of quality healthcare according to the Institute of Medicine.

Aside from the discrimination and mistreatment that women face in medical establishments, women of childbearing ages were banned from the clinical research that determines medical practices and treatments for nearly 20 years. This ban was first enacted in the late 1970s by the Food and Drug Administration (FDA) to protect pregnant women and their infants from fetal exposure to unknown drugs and, in turn, possible birth defects. However, clinical trials are the primary way to determine the safety and effectiveness of a drug or practice for different individuals, and men and women react differently to the same treatments because they differ in cell physiology, metabolism, hormone levels, and more. In other words, women are needed in clinical trials to ensure the safety and effectiveness of the drug or practice on women. With the nation’s efforts to enhance individualized treatment for varying populations and pushback from women’s health advocates, the FDA reversed the ban. While this ban ended nearly 30 years ago, some drugs and practices that were approved by the FDA during the gender-based ban are still prescribed to women today. This practice means that drugs only tested on men are being used on women without full knowledge of the safety and effectiveness for women. Interestingly, a recent study actually found that women experience negative reactions to drugs nearly twice as often as men.
this is not a causal connection, the gender-based gaps in medical research and clinical trials may contribute to the inadequate quality of maternal care in the United States.

Negative Consequences

Greater Risk of Maternal Morbidities and Mortality

Inadequate care is correlated with many different negative consequences including an increased risk of maternal morbidities and mortality. Each year in the United States, nearly 60,000 women are affected by a severe maternal morbidity, meaning that the women face an unpredicted short- or long-term health issue connected to their pregnancy or delivery. Some of the most common severe maternal morbidities include heart attack or failure, blood infections, the need for a hysterectomy (surgical removal of the uterus), and eclampsia (high blood pressure leading to seizures in pregnancy). While the direct causes and preventability of these severe maternal morbidities are currently understudied and difficult to quantify, one study predicted that nearly 50% of maternal morbidities are preventable. Other sources, including a report from the CDC, suggest that improved maternal care could lower the likelihood of maternal morbidities as medical personnel could identify risk factors and decrease the effects of health issues related to pregnancies.

In addition to the thousands of American women affected by maternal morbidities, over 700 women die from pregnancy related causes each year in the US. Further analysis of the CDC’s national health statistics reveal that this number is rising. In 2018, 658 women passed away from maternal causes, 754 mothers in 2019, and 861 in 2020. According to WHO, the most common causes of maternal mortality are high blood pressure during pregnancy, unsafe abortion practices, complications in delivery, and severe bleeding and/or infections after childbirth. However, research has found that 50% of these maternal deaths are preventable. Proper care before, during, and after pregnancy can help detect risk factors and problems that lead to maternal deaths before they become serious and potentially lower the chance of a pregnancy-related death.
Greater Risk of Low-Birth Weight

Another issue related to the United State’s poor maternal care is the number of infants born with low-birth weight, meaning that the infant is born weighing less than five pounds, eight ounces. In the United States, one baby for every twelve is born with a low-birth weight. While a baby’s weight in and of itself, may not be an issue, the problems associated with low-birth weight are. These infants are born into a higher chance of many developmental complications, both short-and long-term, and of infant mortality.

Being born within this weight range often means that these babies will immediately have more difficulty eating, gaining a healthy amount of weight, and fighting off infections. They are also more likely to have health issues that leave them in the newborn intensive care unit (NICU) in their first few weeks of life. These issues include respiratory challenges, bleeding in the brain, heart problems, and more. Even later in life, those born with a low-birth weight are more likely to face health challenges, such as diabetes, heart disease, high blood pressure, and intellectual and developmental disabilities.

However, prenatal care reduces the chance of a baby being born with low-birth weight. Many factors that increase the likelihood of low-birth weight can be monitored and prevented by maternal care. For example, some of the leading associated factors include maternal infections, low pregnancy weight, and the use of drugs, tobacco, or alcohol during pregnancy. Each of these factors can be monitored and prevented with adequate prenatal care. Some associated factors are not preventable, such as being part of a minority population that is disproportionately affected by the consequences of inadequate care, but research suggests that prenatal care does reduce the likelihood of low-birth weight. In fact, infants born to mothers who did not receive prenatal care are three times more likely to be born with low-birth weight than those who did receive prenatal care. Without adequate care, infants are more likely to face the challenges associated with low-birth weight.

Greater Risk of Infant Mortality
Whether during pregnancy or in the first year after birth, the death of an infant is another potential consequence of receiving inadequate prenatal care. During pregnancy, research shows that as many as 20% of pregnancies end in miscarriage, meaning that the pregnancy spontaneously ends before the twentieth week.\textsuperscript{110} The causes of miscarriage vary from unknown to known causes. Some of the currently known causes of miscarriage include chromosomal problems, developmental issues in the fetus, maternal infections, hormone irregularities, and poor lifestyle choices.\textsuperscript{111} In reality, there is no sure way to avoid miscarriages, but regular and quality prenatal care can educate women of miscarriage risk factors like drug and alcohol use, keep chronic conditions in check, and potentially detect developmental issues before miscarriage.\textsuperscript{112}

In addition to miscarriages, some infants die during delivery or in their first year of life. In the United States, over 20,000 infants die each year due to a variety of causes.\textsuperscript{113} The CDC reported that the leading causes of infantile death in 2020 included congenital malfunctions, low birth weight, sudden infant death syndrome (SID), unintended injuries, and maternal complications.\textsuperscript{114} While miscarriages are generally difficult to prevent, adequate prenatal care can reduce the risk of infantile death.\textsuperscript{115} Looking to find the effects of prenatal care, one cohort study observed the records of 28 million births in the United States between 1995 and 2002. The researchers found that as the adequacy (in terms of timeliness and access) of the prenatal care decreased, the risk of stillbirth, neonatal death, and infant death all increased.\textsuperscript{116} In fact, infants with mothers who received prenatal care are five times more likely to survive the first year of life than infants whose mothers received no care.\textsuperscript{117} After the infant is born, postnatal care can also reduce the risk of infant death.\textsuperscript{118} Postnatal care may include care for the mother, such as an examination of the mother’s physical recovery and emotional well-being, chronic disease management if needed, and time to discuss any questions or concerns about caring for the new baby.\textsuperscript{119} Adequate postnatal care may also include the start of well-baby exams in which medical personnel can ensure the infants' normal development and physical growth, administer vaccines, and discuss safety risks.\textsuperscript{120} Doing so can potentially protect the infants from unintended injuries, one of the top causes of infant death, and detect early signs of health abnormalities that could lead to the baby’s death.\textsuperscript{121}

Best Practices
Midwives are healthcare professionals who care for mothers and newborns before, during, and after childbirth. While varying types of midwives exist (i.e., certified nurse-midwife, certified midwife, certified professional midwife, direct entry midwife, and lay midwife), they all complete training specifically tailored to women’s health and maternal care. Many midwives also receive higher-education degrees, certification, and licensure. These midwives offer a wide variety of services ranging from contraceptive counseling and gynecological examinations before pregnancy to general prenatal care during pregnancy. They also assist in labor/delivery support as well as newborn care and postpartum assistance.

Aside from these care services, midwives also provide education on fertility, women’s nutrition and exercise, pregnancy health, breastfeeding practices, and quality infant care. All of this is done on a personal level with each family. For example, midwives often meet with women and families in private care centers or in the family’s home. Additionally, midwifery services are generally covered by insurance, and are thousands of dollars cheaper than the average prenatal care prices for uninsured American women. While uninsured childbirth costs an average $13,000 for a vaginal birth and $22,000 for a cesarean birth, midwifery services (including prenatal and postpartum care on top of childbirth) cost an average of $2,000 in the United States. Overall, midwives offer comprehensive, personal, and affordable maternal services.

Multiple studies have shown the positive impact of midwifery internationally and in the United States, such as reduced maternal mortality, low-birth weight, and infant mortality. One such study found associations between midwife care and more than 50 short- and long-term positive effects. These ranged from psychological health improvements to public health effects to decreased numbers of unnecessary interventions. Also among these positive outcomes were reduced maternal deaths, infant and neonatal deaths, and low-birth weight infants. To this point, another study found that universal coverage of midwifery interventions has the potential to prevent 87% of maternal deaths and 64% of infant deaths. In other words, the practice of midwifery has the potential to create a significant positive impact by lowering the rates of maternal deaths, low-birth weight, and infant mortality. However, the number of midwives currently in the United States is significantly low. In 2019, for example, the American Midwifery Certification Board reported that roughly 12,500 midwives worked in the United States, while nearly 4 million infants were born in that same year. This figure means that the current number of midwives could not reach and assist all birthing mothers in the United States. For midwifery interventions to meet
their full impact potential and improve the adequacy of maternal care, that difference would need to be reduced by increasing the number of midwives in the United States.

United States

Rebecca Stull Zundel

Rebecca is a graduating senior majoring in human development with a minor in design thinking. After graduation, she plans to continue her education at BYU with a master's in instructional psychology and technology. Rebecca hopes to combine her knowledge of human development and instructional psychology with a passion for helping people thrive within any circumstances to form learning communities that help adults through difficult transitions in their lives.

WaSH Practices in Mozambique

Violence Against Refugee Women in the MENA Region