Maternal Health

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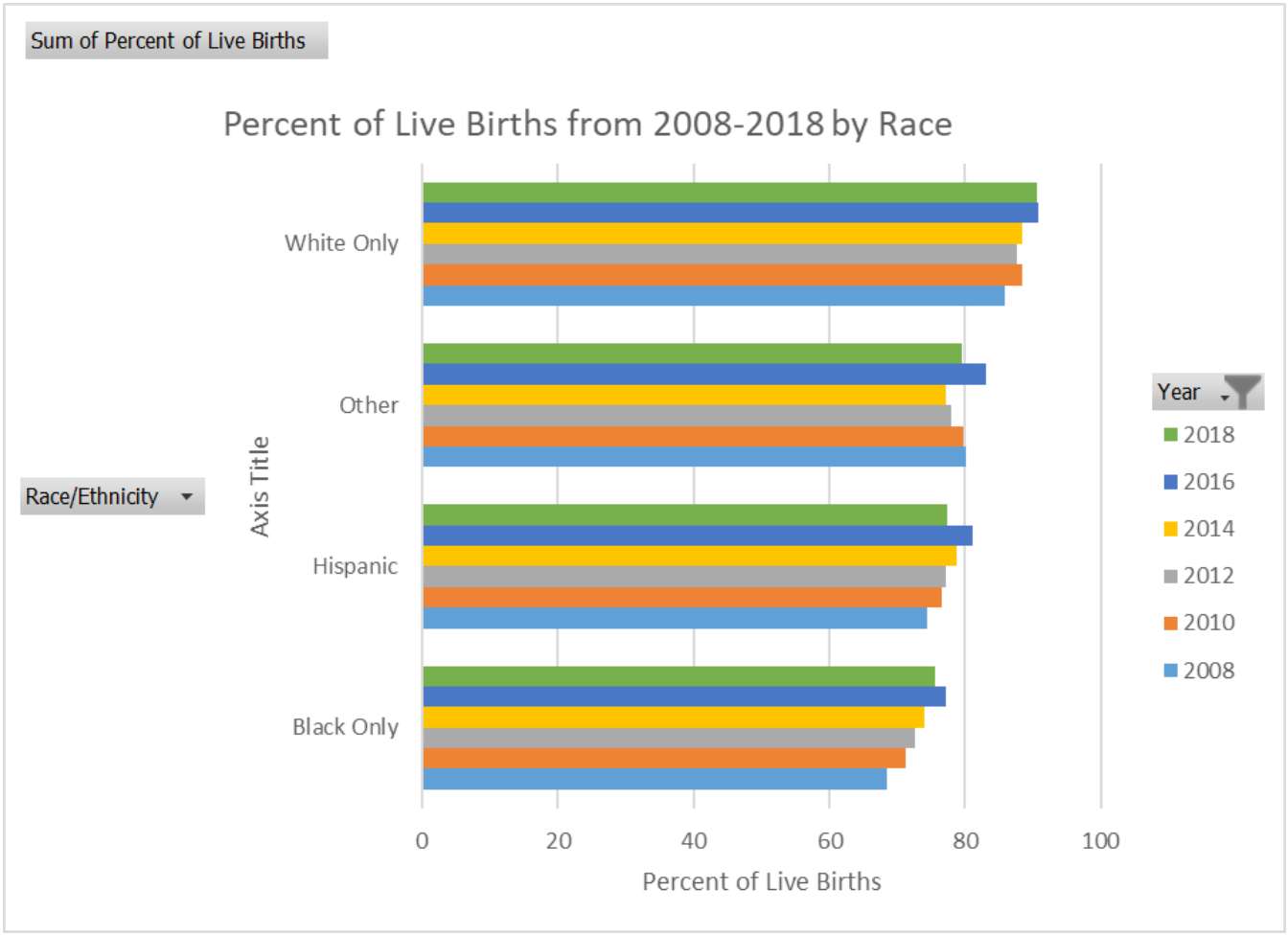
Background

- Maternal Health is the health of women during pregnancy, childbirth and postnatal care (World Health Organization, 2022)
- Maternal Health has made great strides in the last two decades, however, “about 295,000 women died during and following pregnancy and childbirth in 2017” (World Health Organization, 2022).
- Addressing these inequalities that occur is essential to ensuring that all women have a high quality of maternal care (World Health Organization, 2022).

Mortality & Morbidity

- Maternal mortality rates increased from 9.8/100,000 (1900) to 26.4/100,000 (2015) (Gad et al, 2020)
  - 4x higher than Canada or Western Europe (Gad et al., 2020)
  - Black women- 38.9/100,000 (Somer et al., 2017)
  - White women- 12/100,000 (Somer et al., 2017)
- Maternal morbidity- about 60,000 women annually suffer from obstetric morbidity (Howell, 2018)
  - Black women at highest risk (Howell, 2018)


Sum of Percent of Live Births
Percent of Live Births from 2008-2018 by Race
White Only
Other
Hispanic
Black Only
Axis Title
Race/Ethnicity
Year
2018
2016
2014
2012
2010
2008
0
20
40
60
80
100
Percent of Live Births

Social Determinants of Maternal Health- Access

- Hospitals- minority women often “deliver in different and lower quality hospitals than whites” (Howell, 4, 2018)
  - ¼ of hospitals in US responsible for 75% of black deliveries, those same hospitals account for 18% of white deliveries (Howell, 2018)
  - Hospitals serving primarily black women scored lowest on quality scales, poorer health outcomes (Howell, 2018)
  - Access to timely and affordable care- 42% of health departments provided prenatal services (Gadson et al., 2017)
  - Difficulty finding providers, accepting public insurance (Gadson et al., 2017)
  - Transportation can lead to barriers to care (Gadson et al., 2017)
- Access to food sources affecting maternal health
  - Food deserts- predominantly in black neighborhoods (Gad et al., 2020)
- Access to other care
  - Psychological stress- increased depression, associated with stress levels, contributes to poorer health outcomes (Gad et al., 2020)

Social Determinants- Timing

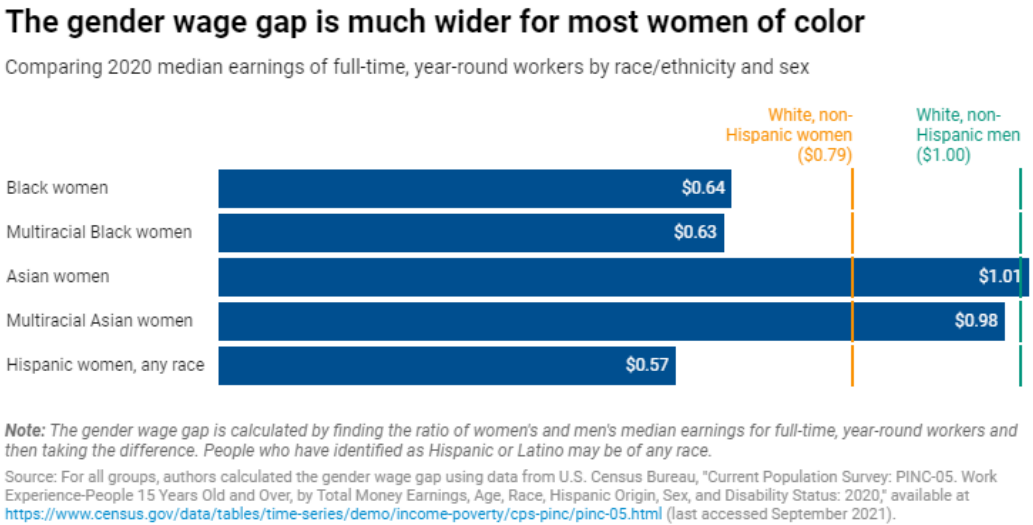
- Black women- most likely to start prenatal care late, or use inadequately (Gadson et al., 2017)
- Disparities- black women have lowest percentage of women starting prenatal care in first trimester
  - More likely to start in 2nd/3rd trimester- associated with poorer health outcomes (Gadson et al., 2017)
  - Fewer prenatal visits associated with increased risk of maternal death and maternal morbidity (Gadson et al., 2017)
- Delays to Care
  - Delay to seek care
    - Black women less likely to initiate prenatal care, 10% started care late, have no care at all compared to 4% of white women (Gadson et al., 2017)
  - Delay to arrival
    - Access to timely and affordable care, transportation to care , difficulty finding providers (Gadson et al., 2017)
  - Delay of provision of adequate healthcare
    - Related to education, lack of insurance, unplanned pregnancy, social/environmental supports (Gadson et al., 2017)

Cardiovascular Disease and Pregnancy

- Top 10 leading causes of death in women 20-44 (childbearing age) (Howell, 2018)
- Most common cause of maternal mortality
  - Black women 1.4 times more likely compared to white women to enter pregnancy with chronic hypertension, influencing preeclampsia (Ghosh et al., 2014)
  - Black women- higher prevalence of cardiovascular risk factors (Ghosh et al., 2014)
- Cardiovascular conditions- 46.8% of pregnancy related deaths in black women, compared to 40% in white women (Howell, 2018)
- Black women disproportionately at risk for comorbidities affecting maternal health (Howell, 2018)
  - Cerebrovascular disease, pulmonary disease, renal disease, other traumas
  - Black women- less likely to manage comorbidities, further increases risk for complications

Income, socioeconomic status, maternal health

- Clear wage gap between females and males, working women are paid less for the same work compared to men
- In 2020, women's annual earnings were 82.3% of men’s (Census.gov)

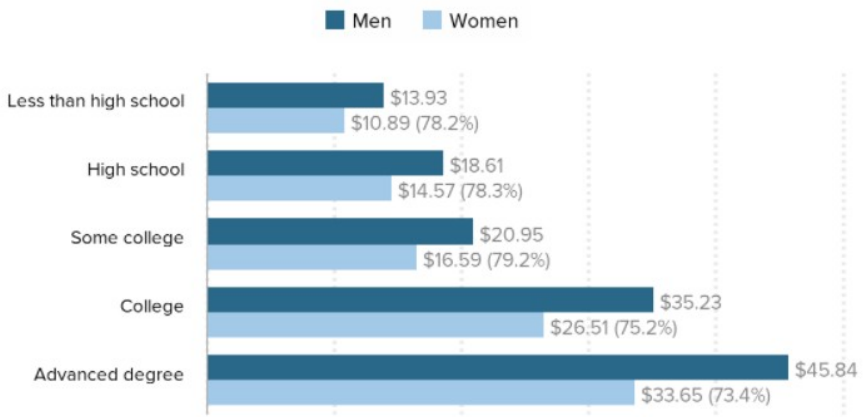


Progress on wage gap

- 1979-1990 women's median hourly earning compared to men's grew substantially (EPI, 2016)
- Women made “disproportionate gains in education and labor force participation” (EPI, 2016)
- Convergence of wage gap has slowed after initial burst
- Average woman loses more than $530,000 from wage gap alone (Women in the States)
- College educated closer to $800,000 (Women in the States)

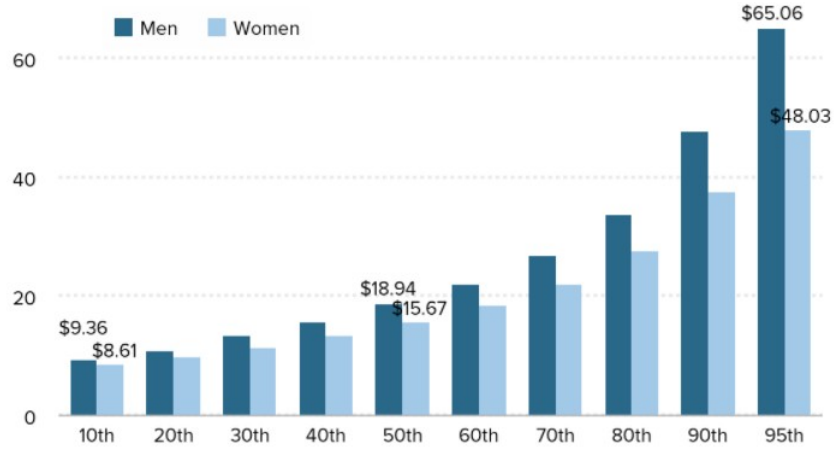
Women earn less than men at every education level

Average hourly wages, by gender and education, 2015



Women earn less than men at every wage level

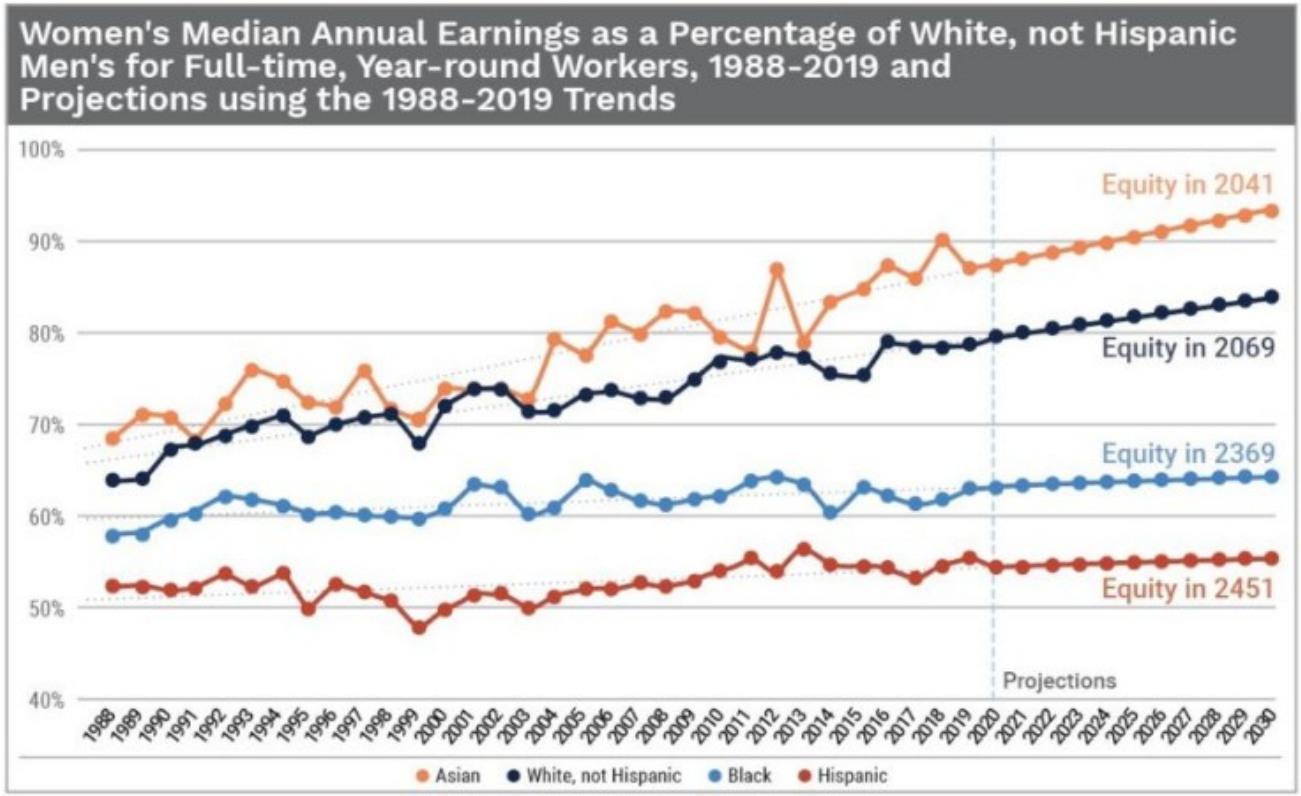
Hourly wages by gender and wage percentile, 2015



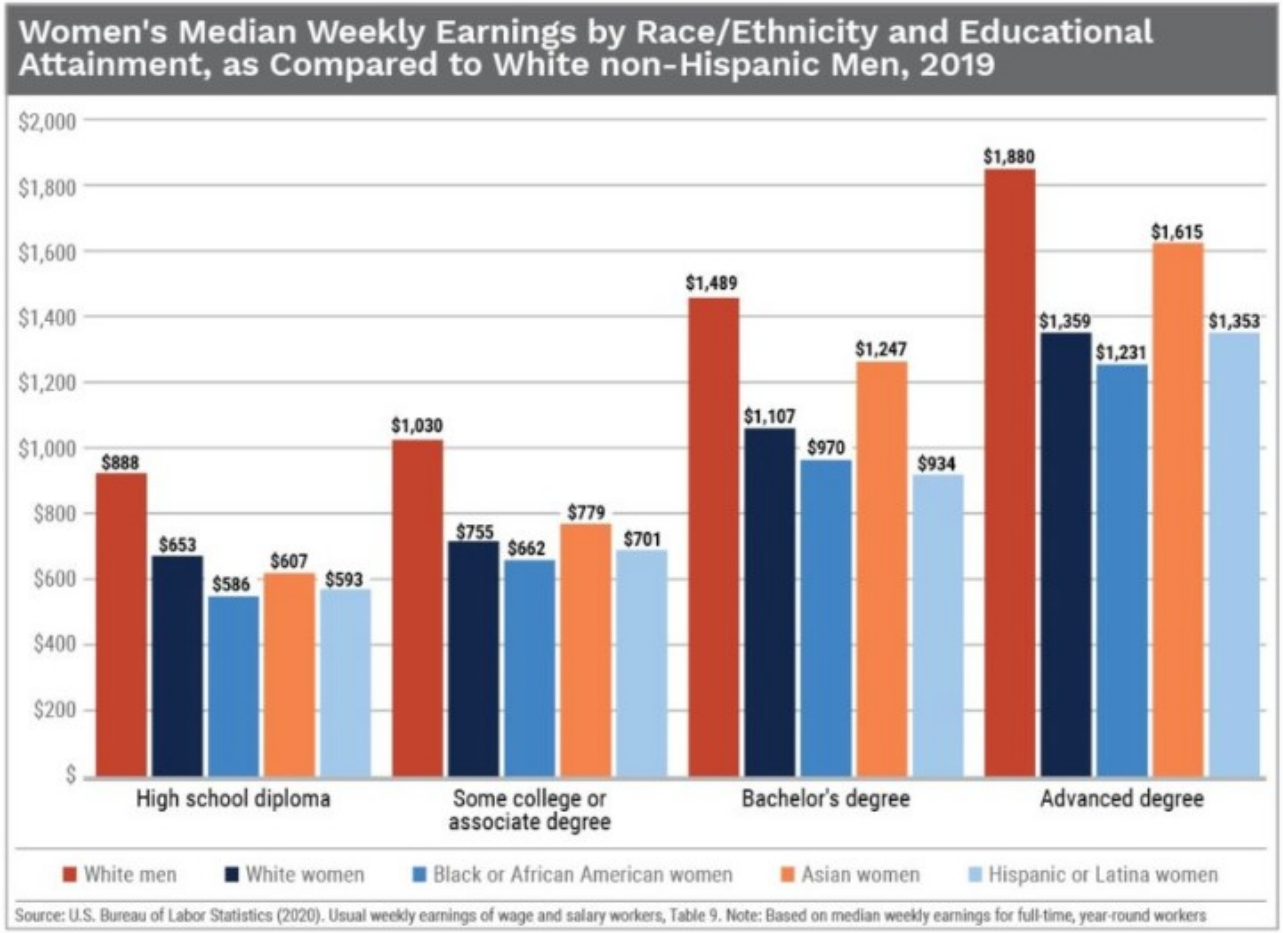
(Both taken from EPI,2016)

Wages, race, gender

- White and non hispanic women are paid 81%, Asian women are paid 89.8% of what non Hispanic white men make(EPI,2016)
- Black and Hispanic women can expect to make 65.3% and 57.5% of what non hispanic white men make (EPI,2016)
- Typical white woman makes $4 less per hour, black women make $7.31 less per hour, and hispanic women make $8.91 less per hour compared to non hispanic white men (EPI,2016)

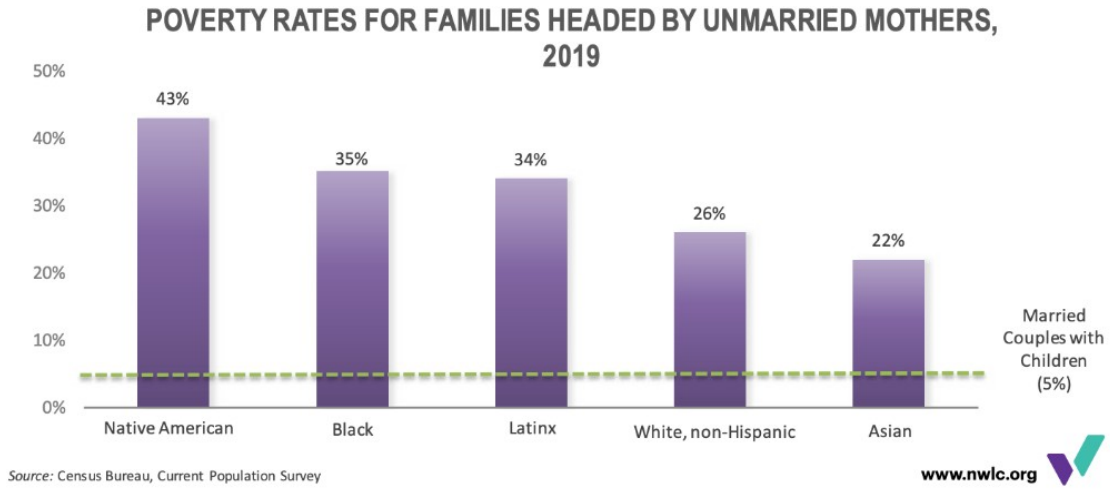


(AAUW Research and Data)

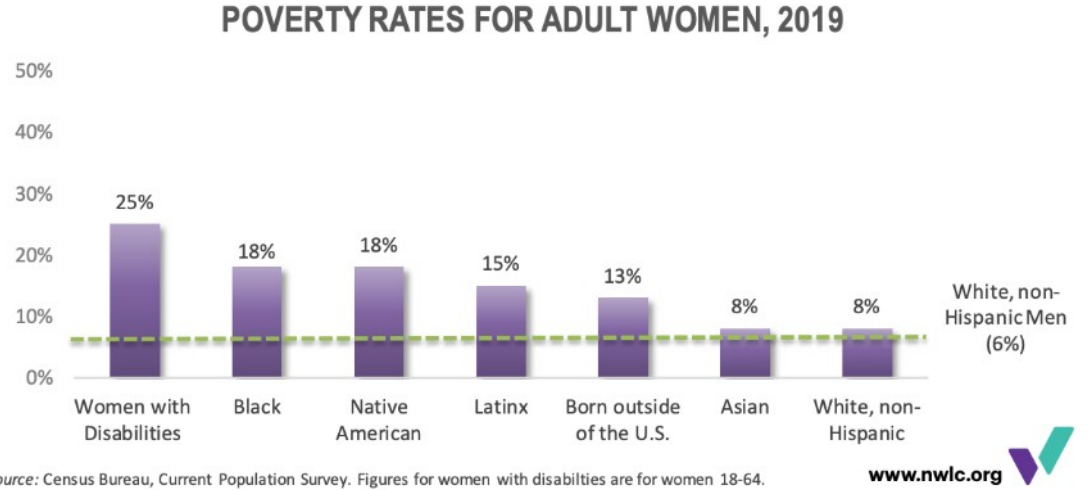

Women's Median Weekly Earnings by Race/Ethnicity and Educational Attainment, as Compared to White non-Hispanic Men, 2019
$2,000
$1,800
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$
$888
$653
$586
$607
$593
$1,030
$755
$662
$779
$701
$1,489
$1,107
$970
$1,247
$934
$1,880
$1,359
$1,231
$1,615
$1,353
High school diploma
Some college or associate degree
Bachelor's degree
Advanced degree
White men
White women
Black or African American women
Asian women
Hispanic or Latina women
Source: U.S. Bureau of Labor Statistics (2020). Usual weekly earnings of wage and salary workers, Table 9. Note: Based on median weekly earnings for full-time, year-round workers

Effects of Poverty on Prenatal and Maternal Health

- Nearly 1 in 9 women lived in poverty in 2019, with more than 2 in 5 of these women living in extreme poverty.
  - Women were 35% more likely to live in poverty than men (Fins, 2020)
- Poverty is often associated with limited access to health necessities, inadequate environmental conditions, absence of appropriate nutritional intake, and poor health guideline compliance due to lack of financial and social support (Strully et al., 2010)
- A major contributing factor for the lack of proper prenatal care is maternal poverty and lack of financial support/resources. (Strully et al., 2010)
- Exposure to poverty and negative environments during critical stages of early life can negatively affect children's future developmental trajectories (e.g., cognitive and physical development), which may have lasting negative effects on educational attainment and adult earnings. (Strully et al., 2010)
- Delayed care provision can result in missed opportunities for the diagnosis of gestational hypertension, gestational diabetes, or sexually transmitted diseases as well as a significantly higher risk of severe complications associated with pregnancy (Hajizadeh et al., 2015)



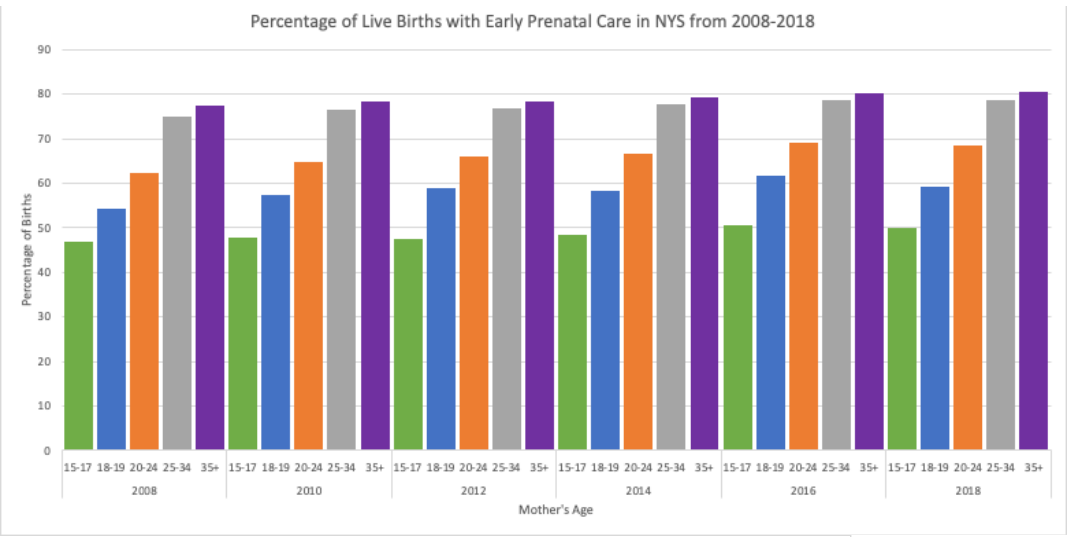
(Fins, 2020)



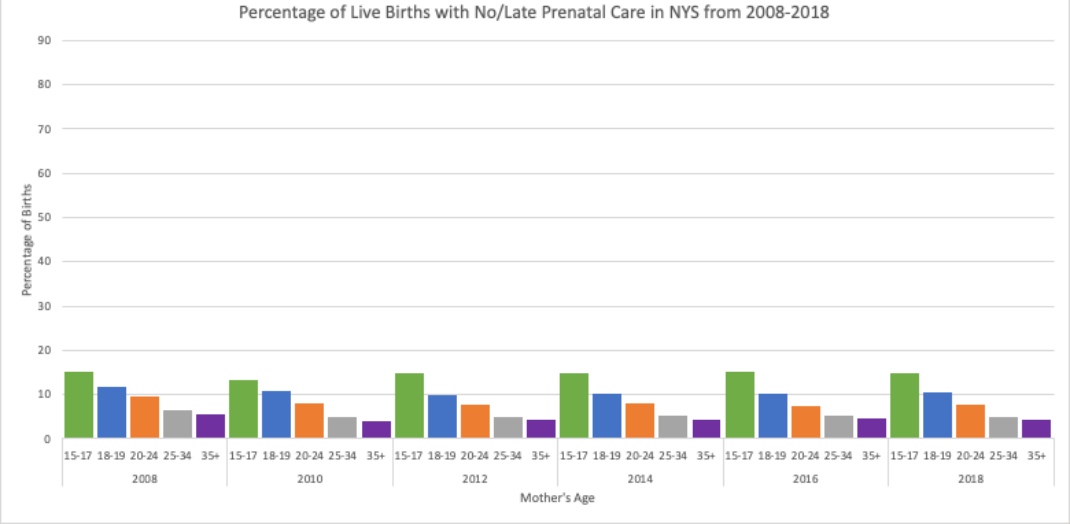
(Fins, 2020)

Effects of Poverty on Prenatal and Maternal Health

- Maternal poverty during prenatal development is directly related to low birth weight due to:
  - inadequate nutritional intake for both the mother and child
  - Increase in both exposure and vulnerability to psychosocial stressors environmental stressors (living in disadvantaged communities, crime, and domestic violence) which is noted to lead to slower fetal growth rates and preterm delivery due to hormonal disruptions from stress-related pathways. (Strully et al., 2010)
- Many poor adults were born into poverty, therefore, poor pregnant women are disproportionately more likely to have experienced poverty-related stressors during prenatal/early-life (Strully et al., 2010)
- Having four or fewer prenatal visits increases maternal mortality, and this phenomenon disproportionately affects black women. Consequently, poor follow-up with prenatal care is associated with adverse maternal behaviors, which are associated with risk factors such as smoking, alcohol use, insufficient weight gain, and other problematic behaviors. (Gadson et al., 2017)



New York State Department of Health, 2018b



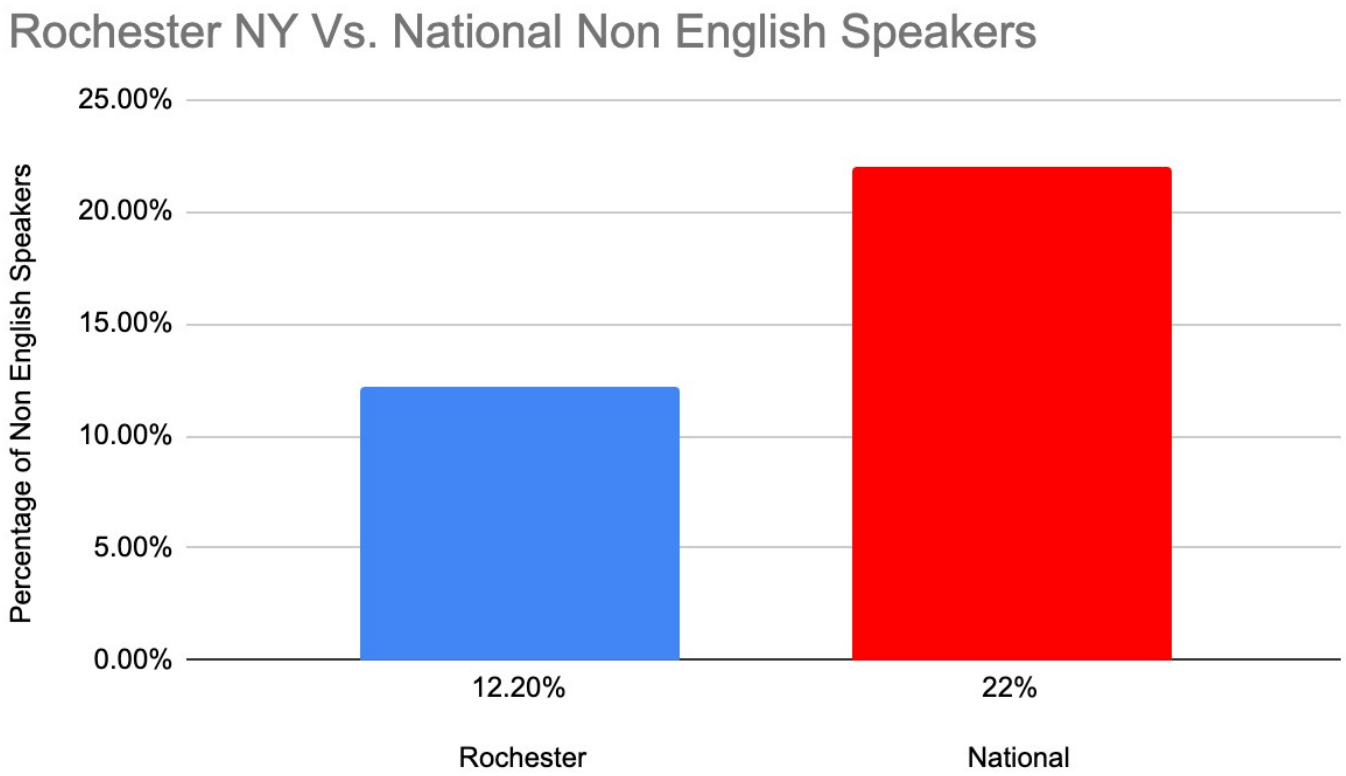
New York State Department of Health, 2018a

Single mothers and Young Mothers

- Single mothers for example are more likely to face structural disadvantages due to their lower socioeconomic status and less time together with children (Agnafors et al., 2019).
- Young mothers and single material status have been reported to increase the risk for mother and children adverse outcomes (Agnafors et al., 2019).
- In 2020, there is an estimated 15.31 million single mothers in households (Statista Research Department, 2021).
- In the U.S. today about 4 out of 10 children are born to unwed mothers (Single Mothers Statistics, 2021).

Language Barriers for Limited or Non-English speakers

- There is a substantial amount of health disparities associated with a lack of English proficiency (Sentell et al., 2015).
- non-English speakers are two times more likely to have complications including obstetric trauma during a vaginal birth(Sentell et al., 2015).
- have higher rates for high-risk deliveries potentially (Sentell et al., 2015).
- Women describe negative experiences with interpreters' service due to either lack of access or poor quality interpretation service (Rayment-Jones et al., 2021).
- It is important to take this into account due to the fact that it puts women who need interpreters not on a level playing field when compared to women who do not need interpreters (Rayment-Jones et al., 2021).



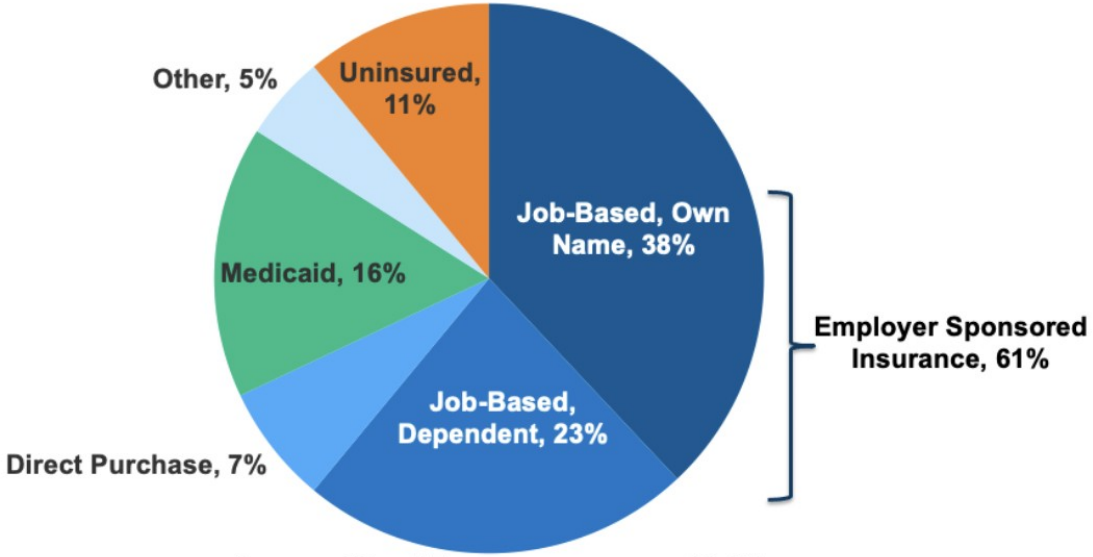
(Data USA, 2021)

Gender Gap in Health Disparities: Maternal Health

- Women are found to be largely enrolled in the Medicaid program due to having lower incomes, being single moms, or even being pregnant (kff.org, 2021).
- Statistically, in 2020, 13% of men between the age of 19-64 were uninsured, in comparison to 11% of women, almost 10.4 million women between the age of 19-64 being uninsured (kff.org, 2021).
- 21% of women with low income are uninsured compared to 7% of uninsured women who have a steady income (kff.org, 2021). In minorities, 22% of Hispanic women, 23% of Native American women, and 13% of single mothers, are uninsured as of 2020(kff.org, 2021).
- According to 2020 statistics, in the United States 77.7% live births delivered were to women who received early paternal care, 16.1% of women began care at their second trimester, and 6.2% of women received late or no paternal care throughout their pregnancy (Kotelchuck, 2021).

Figure 1

Women's Health Insurance Coverage, 2020



KFF

NOTES: "Other" includes those covered under the military or Veterans Administration as well as nonelderly Medicare enrollees. Percentages may not add to 100% due to rounding.
SOURCE: KFF estimates based on the Census Bureau's March Current Population Survey (CPS: Annual Social and Economic Supplements), 2021.

Conclusion

Although the World Health Organization has made significant gains in terms of maternal morbidity and mortality, we continue to see gaps in care and outcomes among different classes of women. When looking at the concerning statistics presented, we are forced to take a deeper dive into the causes of the widening gap in these statistics. Data has demonstrated that there are significant gaps in care, resulting in significant gaps in health outcomes. We see the social determinants influencing these health outcomes, including income, education, and access to healthcare. We are seeing these staggering statistics in our own backyard in Rochester, NY. Using this information, we are forced to take a stand. A stand on social determinants in order to work towards equitable care and better health outcomes for all.

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