

Investigating the Impact of Sickle Cell Disease (SCD) on the Antenatal Experiences of Women in the United States

- 100,000 people are affected by **Sickle Cell Disease** in the United States (CDC, 2020)
 - Occurs among 1 out of every 365 African American/Black births (CDC, 2020)
- 1 in 13 African American/Black babies are born with **Sickle Cell Trait** (CDC, 2020)



<https://www.courant.com/opinion/op-ed/hc-op-rainford-black-maternal-health-coronavirus-0531-20200531-kz4kbjkoeb6vd3nlwdy437ziu-story.html>

TYPES OF SICKLE CELL DISEASE

Hemoglobin SS Sickle Cell Anemia	Most common type of sickle cell disease (SCD). Inherit one sickle gene from each parent. Regarded as a severe form of SCD.
Hemoglobin SC Sickle C Disease <small>@SickleCell101</small>	Inherit one sickle cell gene from one parent and one 'C' gene from the other parent. Similar symptoms to type SS, less anemia.
Hemoglobin SB + Sickle Beta Thalassemia	The sickle gene produces crescent shaped red blood cells (RBCs) that break down, while thalassemia produces smaller RBCs.
Hemoglobin SB 0 Sickle Beta Zero Thalassemia	There are two types of beta thalassemias. Sickle beta plus that is mild, while sickle beta zero that is a severe form of SCD.
Hemoglobin SD, SE, SO Sickle D, E or O Disease	Inherit one sickle cell gene and another abnormal hemoglobin gene (D, E, O, etc.) More rare; the severity of these SCD varies.

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<https://twitter.com/sicklecell101/status/1004086489053974528?lang=da>

- Women with SCD are at greater risk of experiencing antenatal complications than women without SCD
 - Increased vaso-occlusive crises, gestational hypertension, preeclampsia, eclampsia, stroke, preterm labor, miscarriage, and maternal death (Jain et al., 2019)
 - Lack of research and discrepancies in medical recommendations for SCD treatment during pregnancy may contribute

HYPOTHESES

- Women diagnosed with SCD will be significantly more likely to report antenatal complications compared to African American/ Black women without a history of hematologic disorders
- Women diagnosed with SCD will be significantly more likely to report anxiety and depression throughout their pregnancy compared to African American/ Black women without SCD
- Women diagnosed with SCD will be significantly more likely to report lower quality of prenatal care compared to African American/ Black women without SCD



<https://www.sandiegouniontribune.com/news/health/sdut-sickle-cell-anemia-patients-2015sep22-story.html>