

Social Determinants of Health among Black People During Pregnancies Following a Short Interpregnancy Interval

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Introduction

- The Black infant mortality rate (IMR) is higher than all other races and more than twice as high as the White IMR.
- Preterm birth is one of the main causes of infant mortality
- Short interpregnancy interval (IPI) contributes to preterm birth disparately among different races.

Figure 1. Drivers of Infant Mortality

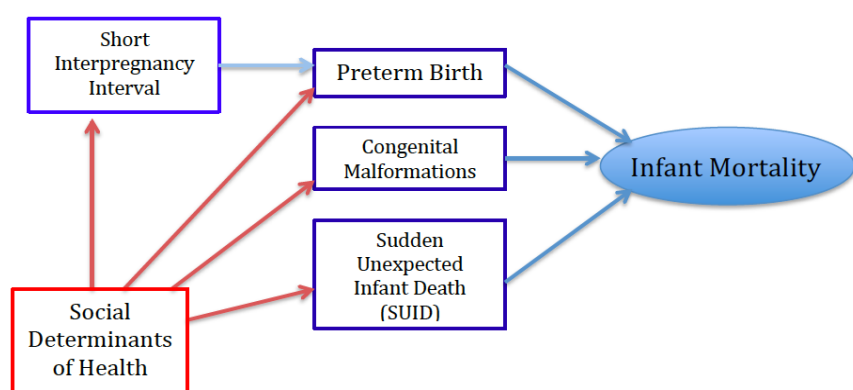
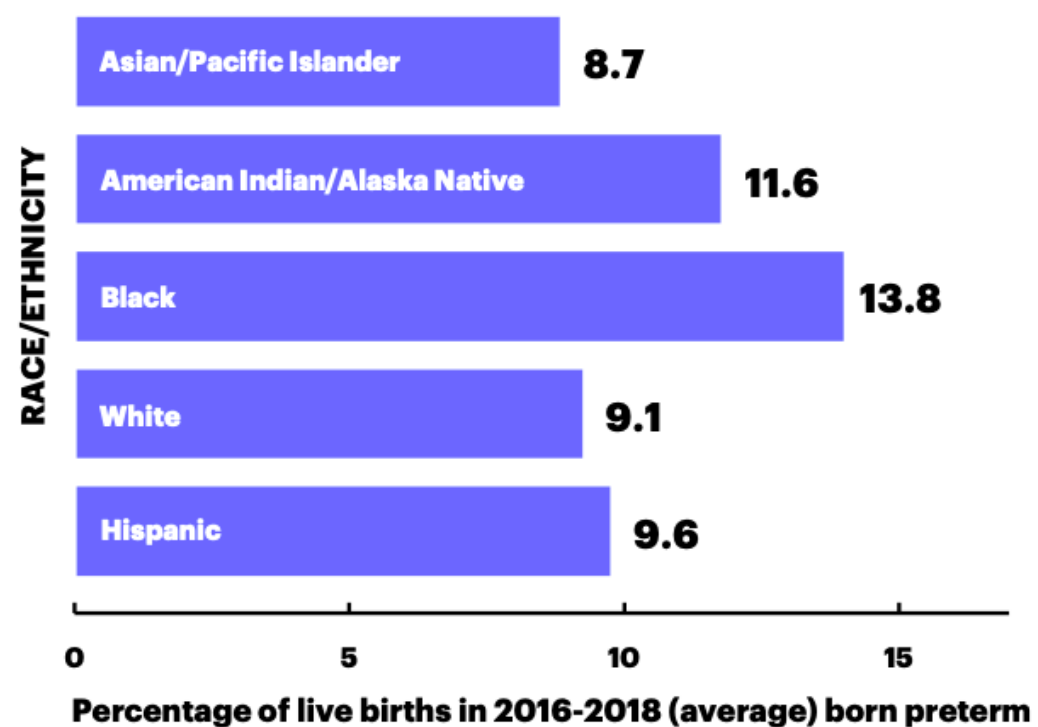


Figure 2: Percent preterm birth by race averaged from 2016-2018



Objective

Examine the differences in social determinants of health among non-Hispanic Black participants with and without short interpregnancy interval (IPI).

Methods:

- Nested case-control study from a prospective cohort analyzing SDH in 576 postpartum patients from 2011-2021.
- Participants were consented, enrolled, and administered questionnaires
- Sociodemographic, pregnancy, and maternal characteristic data were collected from participants' medical records.
- Structured interviews measured participants' social determinants of health

Results

- Over one third non-Hispanic Black study participants had short IPI (<18 months), 38.9%
- Non-Hispanic Black short IPI group was more likely to have a preterm birth, 24.1% versus 12.9% of the referent group (p<0.04)
- Non-Hispanic Black short IPI group was more likely to be younger, mean age 25.9 compared to 27.8 mean age of referent group (p<0.008)
- Non-Hispanic Black short IPI group was more likely to receive WIC during their pregnancy, 81% of the pregnancies versus 63.7% of the referent IPI group (p<0.008)
- Non-Hispanic Black participants with short IPI were also significantly more likely to have negative feelings towards the pregnancy, not have received prenatal care as early as desired, reported reason for late prenatal care as early as desired due to consideration of pregnancy termination, and choose not to breastfeed because they "don't like it".
- However, non-Hispanic Black participants with short IPI reported higher perceived social support, (OR 0.3)

Figure 3. Flow diagram of study population

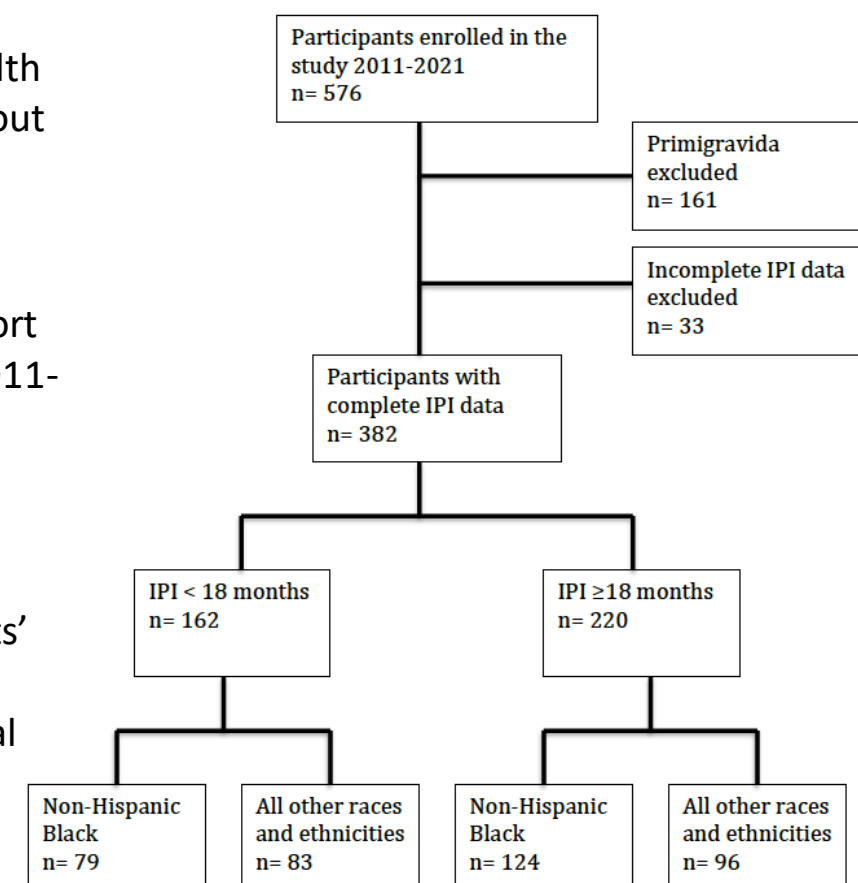


Table. Determinants of health regarding social environment by interpregnancy interval in Non-Hispanic Black participants.

	IPI <18 M N=79	IPI ≥ 18 M N=124	OR (95% CI)
SOCIAL ENVIRONMENT FACTORS			
Income < \$20,000	58 (78.4)	85 (71.4)	1.5 (0.7-3.1)
Received WIC during this pregnancy	64 (81.0)	79 (63.7)	2.4 (1.2-5.1)
Food insecurity ^a	14 (17.7)	32 (25.8)	0.6 (0.3-1.3)
Unintended Pregnancy	69 (89.6)	98 (80.3)	2.1 (0.9-5.8)
Perceived lack of access to contraception	7 (10.0)	4 (3.6)	3.0 (0.7-14.3)
More than 3 lapses of birth control use	4 (21.1)	1 (4.0)	6.4 (0.5-328)
Did not get prenatal care as early as desired due to consideration of abortion	29 (37.7)	18 (15.0)	3.4 (1.6-7.2)
Negative feelings toward this pregnancy ^b	28 (36.4)	23 (19.2)	2.4 (1.2-4.9)
Not planning to breastfeed	31 (40.3)	44 (36.4)	1.2 (0.6-2.2)
because they don't like it	7 (8.9)	1 (<1.0)	12.0 (1.5-543.1)
Planning to have another baby	27 (37.5)	28 (23.9)	1.9 (1.0-3.8)
Low perceived social support ^c	6 (7.9)	27 (22.5)	0.3 (0.1-0.8)
Low happiness over past year	5 (6.6)	15 (12.4)	0.5 (0.1-1.5)
Physical abuse during pregnancy	3 (3.85)	2 (1.68)	2.3 (0.3-28.5)
Lives in perceived dangerous neighborhood	7(9.0)	5 (4.2)	2.2 (0.6-9.2)
Perceived discrimination based on gender	13 (18.6)	14 (12.4)	1.6 (0.7-4.0)

Note: Data are reported as number, % unless otherwise specified. OR, odds ratio; 95% CI, 95% confidence interval. Participants who had IPI ≥18 weeks were the referent group. Bolded text indicates factors with statistical significance at p<.05. ^a Food insecurity is defined as answering "often" or "sometimes" to two of the following three questions: How often do you feel that the food you buy doesn't last and you cannot afford to get more? How often do you feel that you cannot afford to eat balanced meals? How often do you cut the size of your meals or skip meals because there isn't enough money? ^b Negative feelings toward pregnancy were defined as answering "Very unhappy" or "Somewhat unhappy", to the question: "How did you feel when you found out you were pregnant?". ^c Low perceived social support was defined as answering "Sometimes", "Rarely", or "Never" to the question "How often do you get the social and emotional support you need?".

Conclusions

Social determinants that differed between participants with short IPI and those with IPI ≥ 18 months were indicators of social support, joy and resilience, breastfeeding intent, and government assistance. Prior studies examining infant mortality risk factors compared Non-Hispanic Black people to Non-Hispanic White people. Our study focuses specifically on understanding the lives of Black pregnant people so that future public health initiatives focused on social determinants may attenuate the racial disparity of infant mortality in the US.

Acknowledgements

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