

What factors impact maternal mental health outcomes?

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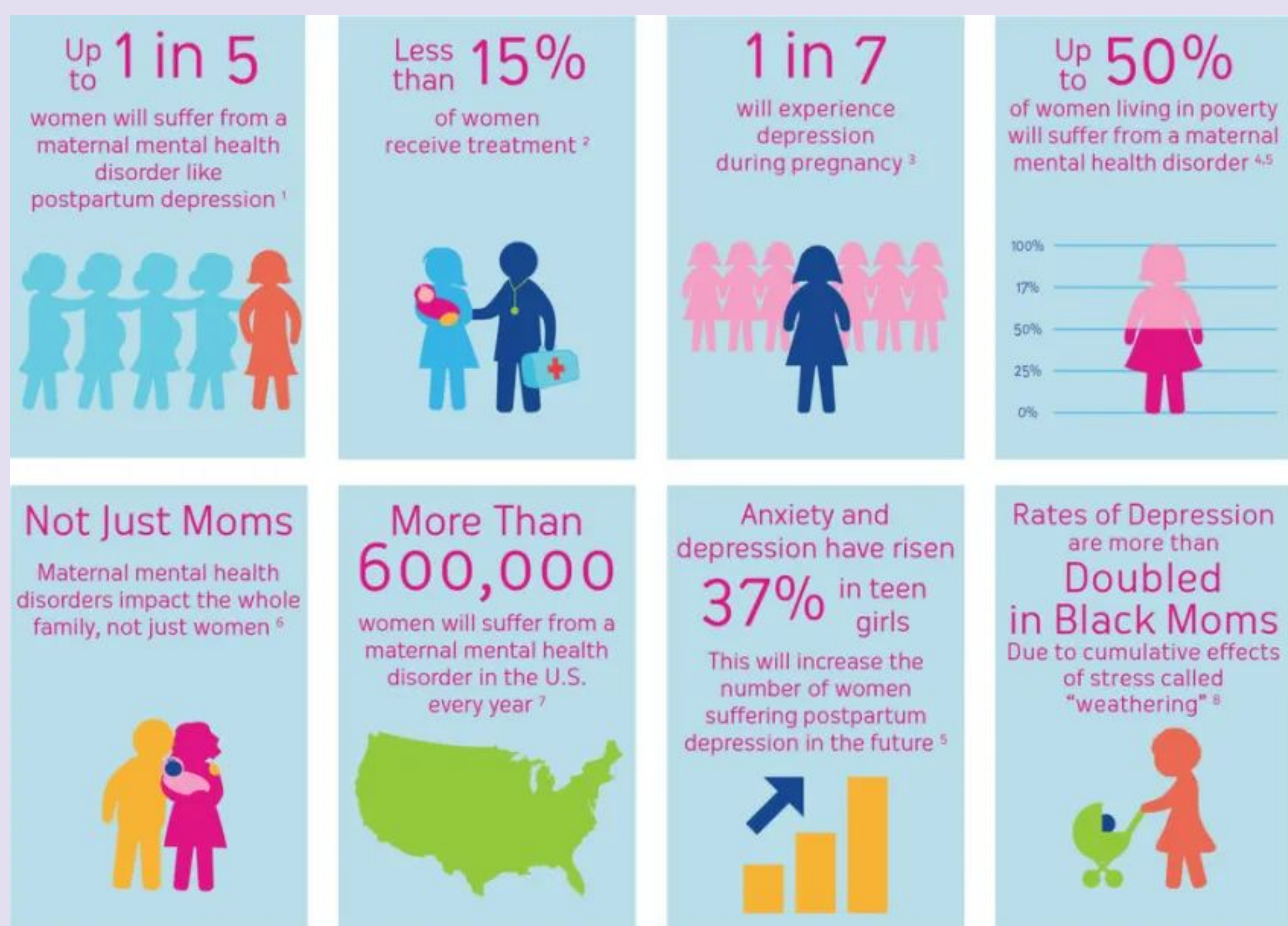


Takeaway

Based on my findings, mothers' physical health, race, nativity, sexual orientation, food security, and access to WIC benefits, health insurance, and medical care are factors that should be considered regarding pregnancy-related anxiety and depression.

Background

Pregnancy-associated mortality (during pregnancy to a year postpartum) has increased in the U.S. from 1987 to 2018. Mental health conditions were the leading cause of these deaths from 2017 to 2019 and U.S. women of reproductive age have the highest rate of mental health needs. To understand causes for the increasing pregnancy-associated mortality rates in the U.S., it is vital to examine factors related to maternal mental health.



Data

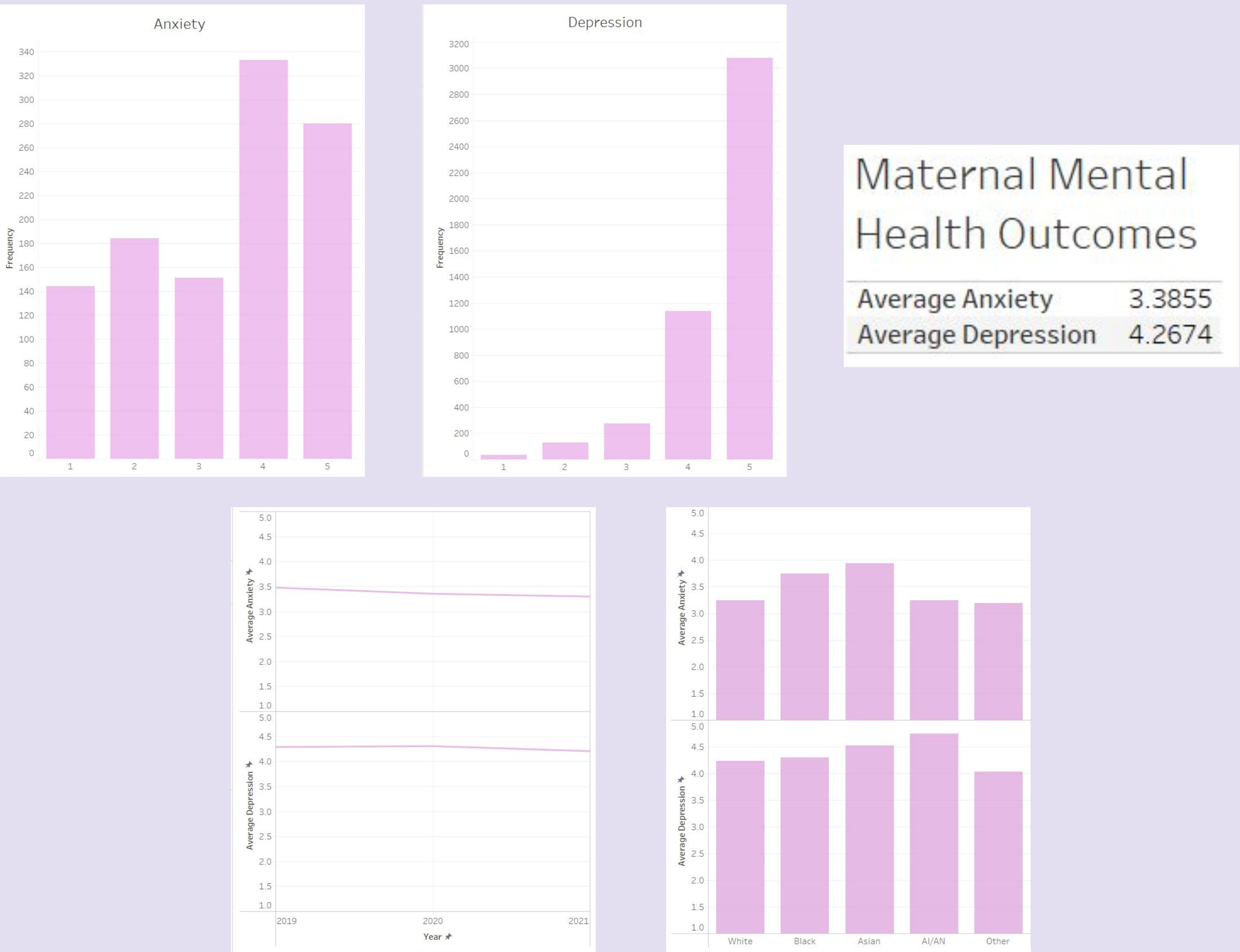
National Health Interview Survey (NHIS) 2019-2021

Source:

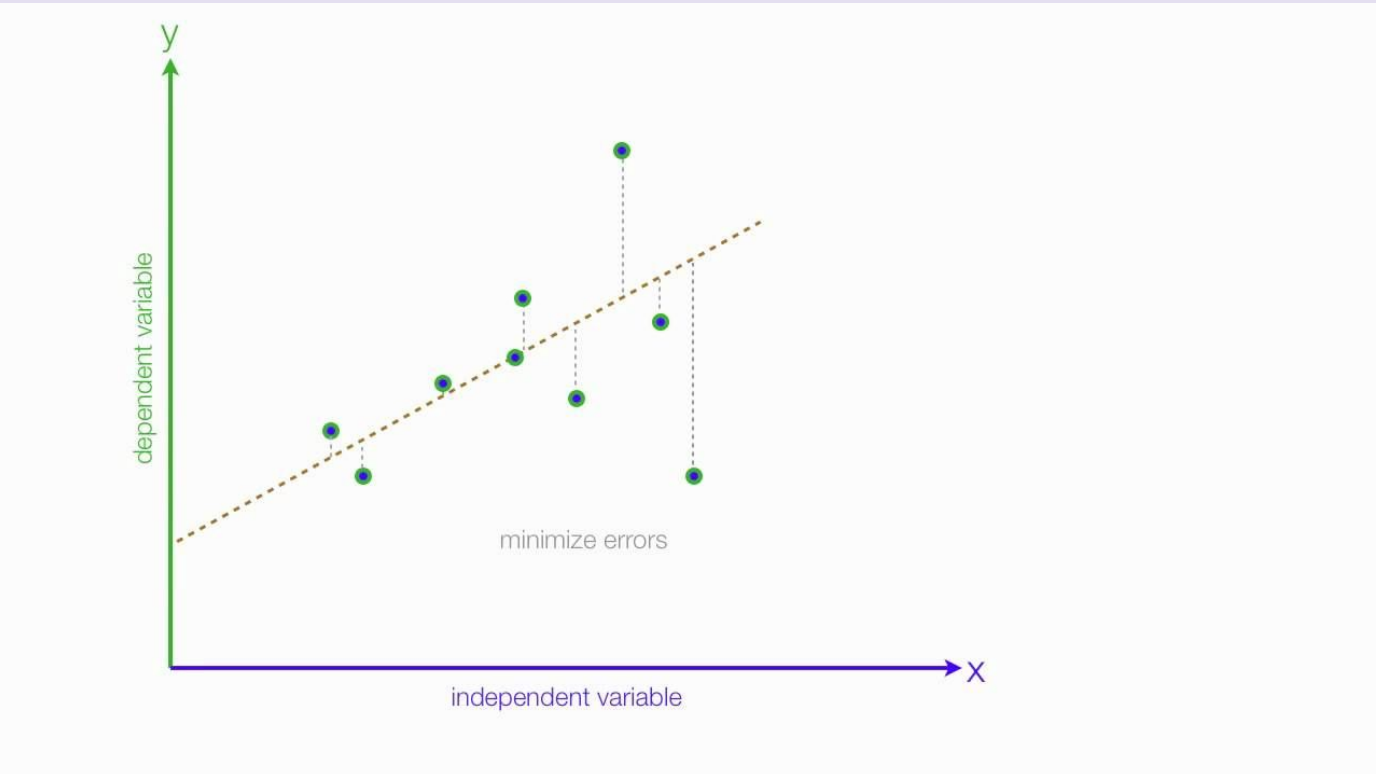
<https://www.cdc.gov/nchs/nhis/data-questionnaires-documentation.htm>
Data collected from interviews conducted every year since 1957 by the U.S. Census Bureau. The NHIS was redesigned in 2019.

SAMPLE ADULT QUESTIONNAIRE <small>Administered to one randomly selected adult in each household</small>								
	2019	2020	2021	2022	2023	2024	2025	2026
ANNUAL CORE	Chronic Conditions: Hypertension, High cholesterol, Cardiovascular conditions, Asthma, Cancer, Diabetes, Other chronic conditions, Height and weight Functioning and Disability: Vision, Hearing, Mobility, Communication, Cognition, Self-care and upper-body limitations, Anxiety, Depression, Social functioning Health Insurance: Coverage status, Sources of coverage, Characteristics of coverage, Continuity of coverage, Reasons for no health insurance Health Care Access and Use: Primary and urgent care, Financial barriers to care, Prescription medication, Flu and pneumonia immunization, Mental health care Health-related Behaviors: Cigarettes and E-cigarettes Demographics: Race and Hispanic origin, Marital status, Sexual orientation, Veterans status, Nativity, Schooling, Employment, Family income, Food-related program participation, Housing, Telephone use							

Exploratory Data Analysis



Model



To discover statistically significant predictors of maternal anxiety and depression, we built ordinary least squares multivariate regression models.

Findings

	Multiple regression with maternal anxiety as the outcome variable (N = 927)	Multiple regression with maternal depression as the outcome variable (N = 927)
Predictor variables	Coefficient	Coefficient
Year	-.14**	-.07
WIC benefits	-.17	-.23**
Age	.01	.01
Income-poverty ratio	-.01	.01
Physical health	-.30***	-.21***
BMI	.06	-.05
Education	-.04	.02
Race	.38**	.16
Marital status	-.20	-.12
US born	-.44***	-.16
Health insurance	-.06	-.32*
Sexual orientation	-.34	-.51**
Received needed medical care	-.26	-.42**
Currently pregnant	.18	.25
Food security	-.44***	-.27**
* p < .05, ** p < .01, *** p < .001	R ² = .12 F(911, 15) = 8.35***	R ² = .16 F(911, 15) = 11.33***

Conclusions

The models showed that average maternal anxiety decreased over time and as physical health and food security declined, while it was greater on average for non-white and foreign-born mothers. Also, average maternal depression increased as physical health and food security decreased, while it was greater on average for mothers who did not receive WIC benefits, required medical care, or have health insurance in the last 12 months and those who identified as heterosexual.