

# **Exploring Barriers in Dental Care and Treatment for Pregnant** Women and Their Associations With Hypertensive Disorders

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- During pregnancy, women are more susceptible to dental disease due to changes in hormone levels and eating behavior, with about 40% of pregnant women experiencing gum disease<sup>1,2</sup>
- Oral health status, attitudes, and practices of women may have an impact on maternal health status, pregnancy outcomes, and child



 Identify major barriers to dental care among pregnant women and to assess their potential associations with hypertensive disorders during pregnancy



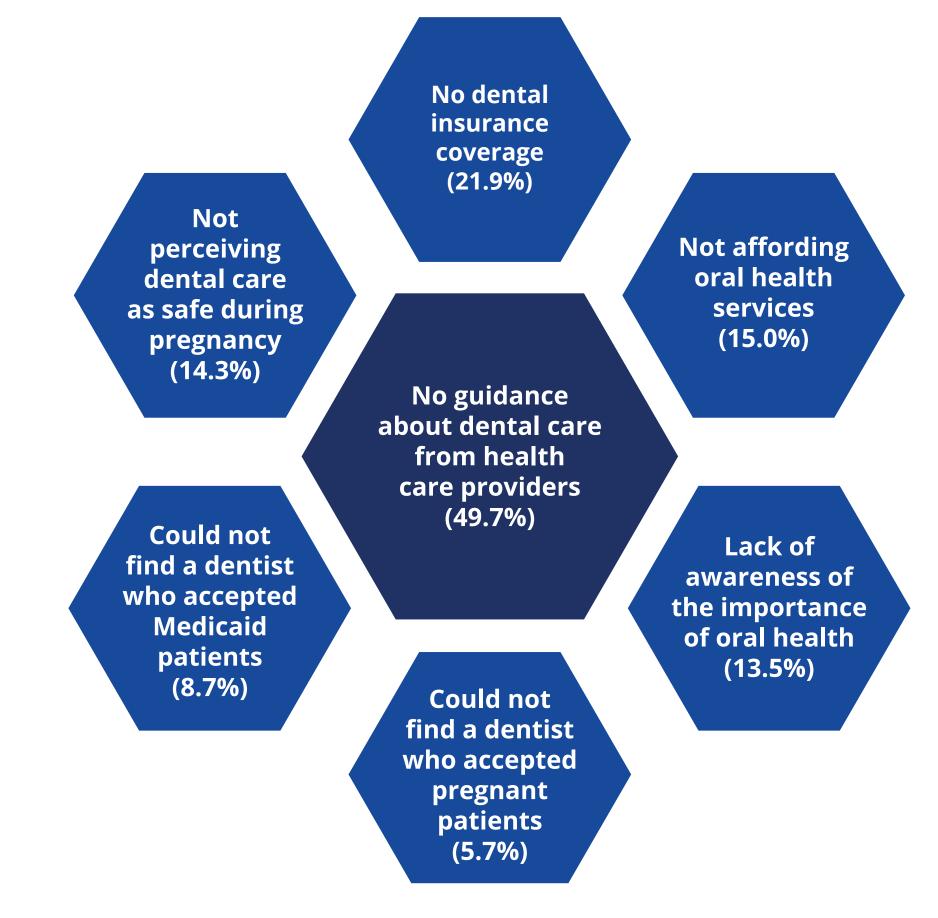
- Cross-sectional study conducted using data from 2016-2020 Pregnancy Risk Assessment Monitoring System (PRAMS)
- PRAMS data account for 81% of all live births in the US, including information on maternal demographics, socioeconomic characteristics, behaviors, and medical conditions
- Study population consisted of 206,080 unweighted and 10,630,861 weighted pregnant women from 45 states, Washington DC, New York City, and Puerto Rico
- Descriptive statistics and multivariable logistic regressions (odds ratio [OR], 95% confidence interval [CI]) were conducted using SAS 9.4
- Outcome: Hypertensive disorders of pregnancy (ie, gestational hypertension, preeclampsia, eclampsia)
- Independent variables of interest: 7 potential barriers to dental care related to:
- Dental insurance
- Cost of dental care
- Oral health literacy
- Providers availability

 Independent variables: Maternal age, race/ethnicity, education attainment, household income, health insurance, special supplemental nutrition program for women, smoking during pregnancy, history of hypertension, plurality, prenatal care, state of residence, and survey year

## (III) RESULTS

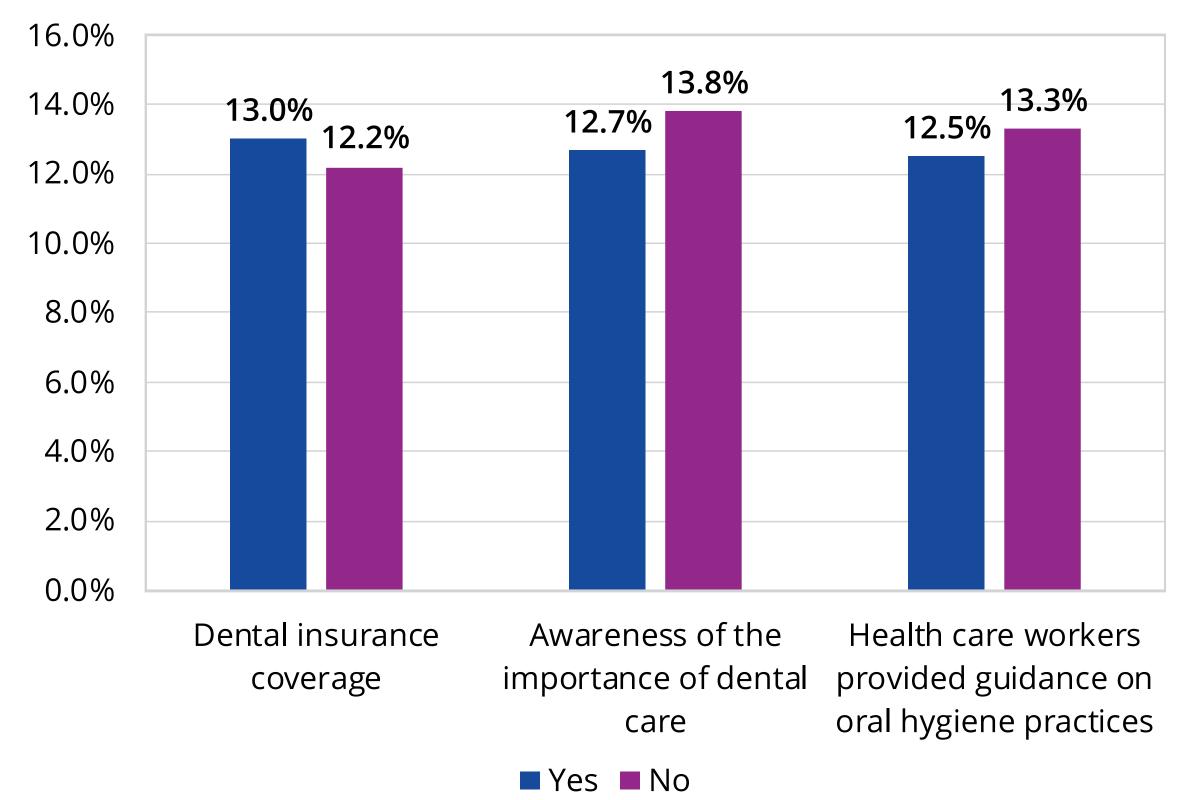
- Between 2016 and 2020, 13.3% of respondents experienced hypertensive disorders during their pregnancy
- Some pregnant women faced barriers to accessing oral health services, including lack of guidance from health care providers, no dental insurance, and high costs

1. Self-Reported Barriers to Dental Care During Pregnancy



 Pregnant women who reported lack of awareness of the importance of dental care and lack of guidance on oral hygiene practices from health care providers had a statistically significant higher prevalence of hypertensive disorders during pregnancy than pregnant women who did not experience these barriers to care (Figure 2A)

FIGURE 2A. Barriers to Dental Care Among Women With Hypertensive Disorders of Pregnancy



Disparities in dental care access among pregnant women were associated with hypertensive

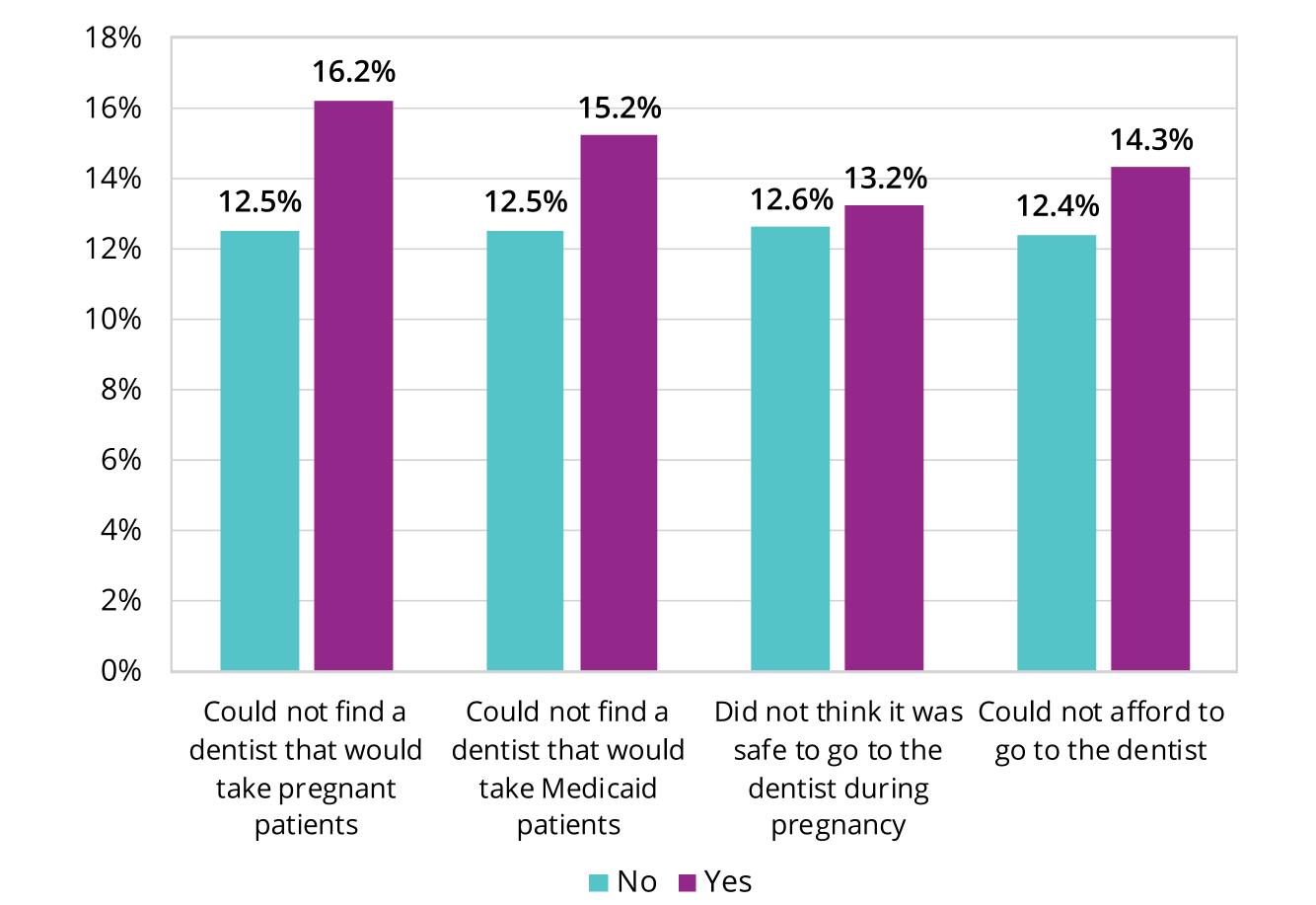
disorders during

pregnancy.

# RESULTS

 Pregnant women who reported difficulties in finding a dentist that would take pregnant women and/or Medicaid patients and could not afford to go to a dentist had a statistically significant higher prevalence of hypertensive disorders during pregnancy than pregnant women who did not experience these barriers (Figure 2B)

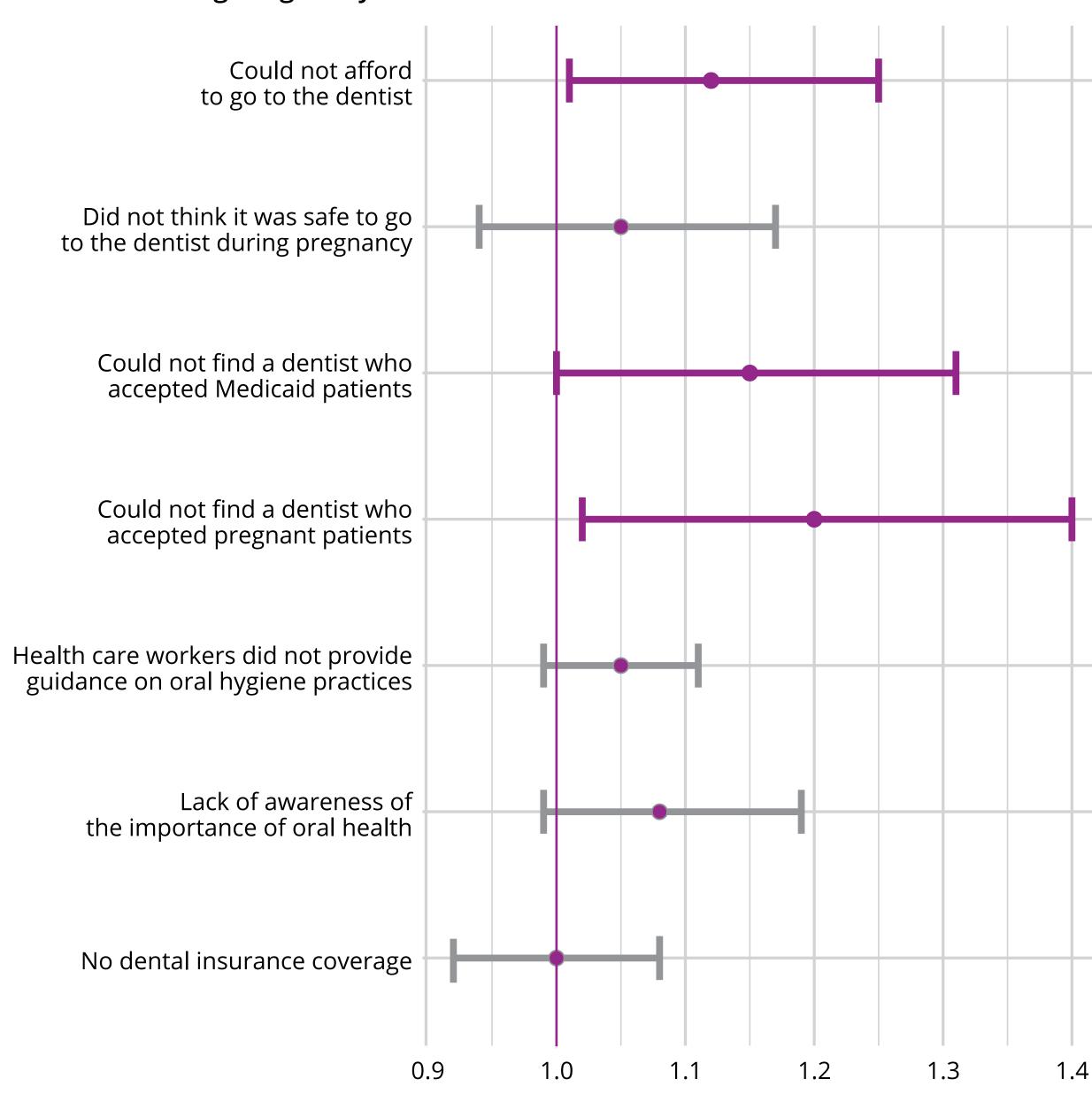
FIGURE 2B. Barriers to Dental Care Among Women With Hypertensive Disorders of Pregnancy



## (III) RESULTS

- Risks of hypertensive disorders of pregnancy were significantly higher for respondents who (Figure 3):
- Could not afford dental care (OR=1.15, 95% CI=1.03-1.27; *P*=0.012)
- Were unable to find a dentist accepting Medicaid patients (OR=1.15, 95% CI=1.01-1.31; *P*=0.036)
- Were unable to find a dentist accepting pregnant patients (OR=1.29, 95% CI=1.10-1.51; *P*=0.001)

FIGURE 3. Adjusted Associations Between Barriers to Dental Care and Hypertensive Disorders During Pregnancy<sup>a</sup>



ethnicity, education attainment, household income, health insurance, Special Supplemental Nutrition Program for Women, smoking during pregnancy, history of hypertension, plurality, prenatal care, state of residence, and survey

## CONCLUSIONS

- Barriers to dental care, such as the inability to find a dentist who accepts pregnant or Medicaid-insured patients and financial difficulties, were associated with increased risks of hypertensive disorders during pregnancy
- Lack of knowledge about the importance of dental care during pregnancy and insufficient guidance on oral hygiene practices during pregnancy from health care professionals may also contribute to increased risks of hypertensive disorders during pregnancy
- It is important to improve access to dental care for pregnant women by addressing barriers such as affordability, safety concerns, and challenges in finding dentists, while supporting patient education and provider communication to promote oral and overall maternal health

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