American Journal of Preventive Medicine

CORRECTION

Corrigendum to: Sugar-Sweetened Beverage Taxes and Perinatal Health: A Quasi-Experimental Study. Jackson KE, Hamad R, Karasek D, White JS. Am J Prev Med. 2023;65(3):366-376.

The Editorial Office has been notified by the authors of the following corrections:

The reported subgroup analyses were implemented using a Callaway-Sant'Anna difference-in-differences estimator stratified by each population subgroup of interest and adjusted for a large set of covariates: maternal race and ethnicity (NH-Black, NH-White, NH-Asian/NHOPI, Hispanic, NH-other race), maternal age (<25, 25-29, 30-34, 35+), education (some high school, diploma/GED, some college, college degree), parity (nulliparous, primiparous, multiparous), prepregnancy smoking status, and prepregnancy BMI (underweight, normal weight, overweight, obese), and fixed effects for maternal city of residence and quarter of birth.¹ The results of the subgroup analyses, reported in Figure 2 for primary outcomes and Appendix Figure 3 for secondary outcomes, included several outlier estimates and some overly narrow confidence intervals indicating that the estimator was performing poorly. The authors also documented that the parallel trends assumption required for valid inference was violated for several outcomes. Post-publication investigation revealed that the reported subgroup estimates were affected by overadjustment bias induced by adjusting for covariates that were highly correlated with the stratifying variable (e.g., estimating effects by race while also adjusting for education that is highly correlated with race).²

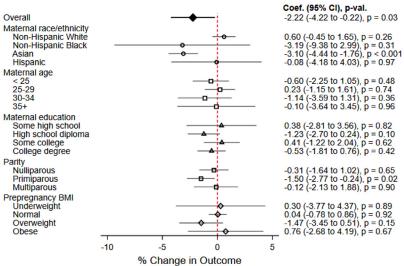
To address a concern of overadjustment bias, the authors re-estimated the subgroup analyses using a "minimal" set of covariates of birthing individuals' age and parity and fixed effects for city of residence and quarter of birth. The estimates did not display the same issues regarding narrow confidence intervals, outlier estimates, and violations of parallel trends. The results from the new subgroup estimates are reported in Figure 1 for the primary outcomes of gestational diabetes mellitus (GDM) and gestational weight gain (GWG) expressed as a *z*-score and Figure 2 for the multiple secondary outcomes.

In the new subgroup estimates (Figure 1), SSB taxation was associated with larger declines in the risk of gestational diabetes among non-Hispanic Black (-3.19 percentage points [pp], 95% CI: -9.38 to 2.99, p=0.31) and Asian pregnant people (-3.10 pp, 95% CI: -4.44 to -1.76, p<0.001). Gestational weight gain decreased among non-Hispanic White (-0.64 SD, 95% CI: -0.76 to -0.53, p<0.001), non-Hispanic Black (-0.49 SD, 95% CI: -1.56 to 0.58, p=0.37), Asian (-0.21 SD, 95% CI: -0.35 to -0.08, p=0.002), and Hispanic pregnant people (-0.22 SD, 95% CI: -0.048 to 0.03, p=0.09), as well as for those over the age of 25, those with at least a high school diploma, and those with normal (-0.48 SD, 95% CI: -0.48 to -0.38, p<0.001) or obese prepregnancy body mass index (BMI; -0.32 SD, 95% CI: -0.56 to -0.08, p=0.01). Notably, Black pregnant people had reduced risk of an infant being born low birthweight (-7.42 pp, 95% CI: -11.21 to -3.62, p<0.001) or preterm (-5.32 pp, 95% CI -8.63 to -2.02, p<0.01; Figure 2). Therefore, SSB taxation was associated with health improvements among some high-risk subgroups, in contrast to the original findings that found worsened GDM among Black people. Taken together, the results suggest that SSB taxes could produce downstream health benefits, including among structurally disadvantaged and high-risk subgroups.

The published paper did not acknowledge grant support that Dr. Hamad had received from the U.S. Centers for Disease Control and Prevention under award number U18 DP006526 and grant support that Dr. White had received from the National Institute of Diabetes and Digestive and Kidney Diseases under award number R01 DK116852.

Am J Prev Med 2024;000(000):1-8





B. Gestational weight gain, z-score

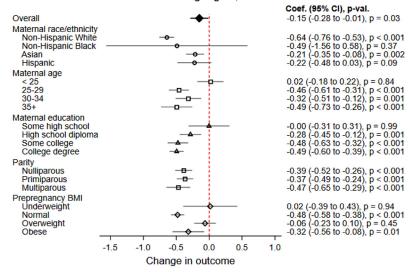


Figure 1. Association between sugar-sweetened beverage taxes and primary outcomes by population subgroup.

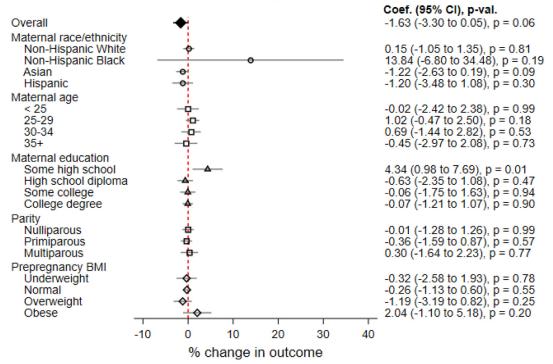
Note: This figure supersedes Figure 2 in the original publication. Each row represents a Callaway-Sant'Anna difference-in-differences estimate from a separate regression, either using the full sample or stratifying by a population subgroup and adjusting for maternal age (<25, 25-29, 30-34, 35+) and parity (nulliparous, primiparous, multiparous), and fixed effects for maternal city of residence and quarter of birth.

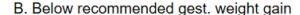
Abbreviations: Body Mass Index (BMI); General Educational Development (GED); Non-Hispanic (NH), Native Hawaiians and Other Pacific Islanders (NHOPI).

<u>ARTICLE IN PRESS</u>

Am J Prev Med 2024;000(000):1-8

A. Gestational hypertension





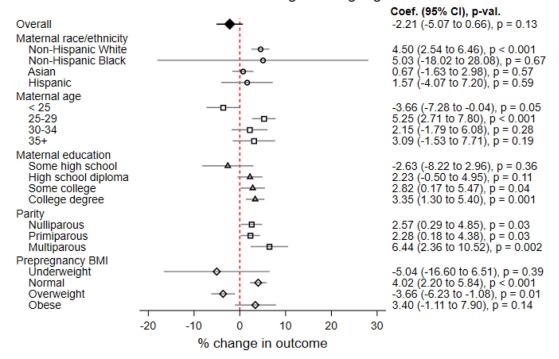
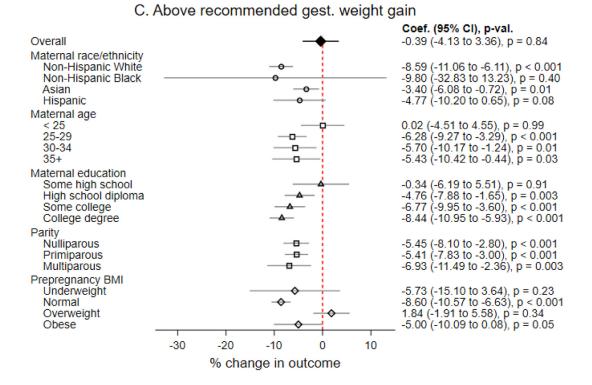


Figure 2. Association between sugar-sweetened beverage taxes and secondary outcomes by population subgroup.

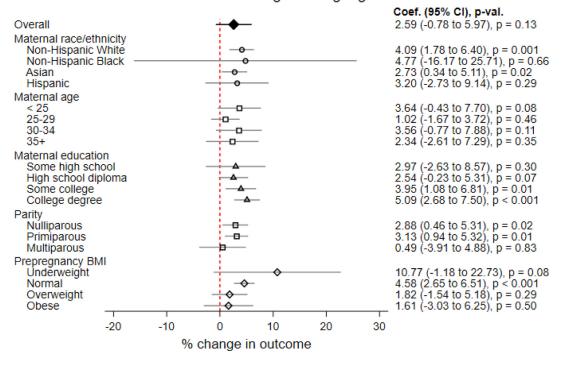
Note: This figure supersedes Appendix Figure 3 in the original publication. Each row represents a Callaway-Sant'Anna difference-in-differences estimate from a separate regression, either using the full sample or stratifying by a population subgroup and adjusting for maternal age (<25, 25-29, 30-34, 35+) and parity (nulliparous, primiparous, multiparous), and fixed effects for maternal city of residence and quarter of birth. Abbreviations: Body Mass Index (BMI); General Educational Development (GED); Non-Hispanic (NH), Native Hawaiians and Other Pacific Islanders

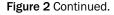
(NHOPI).

Am J Prev Med 2024;000(000):1-8



D. Within recommended gest. weight gain





www.ajpmonline.org

<u>ARTICLE IN PRESS</u>

Am J Prev Med 2024;000(000):1-8

E. Birthweight, in grams

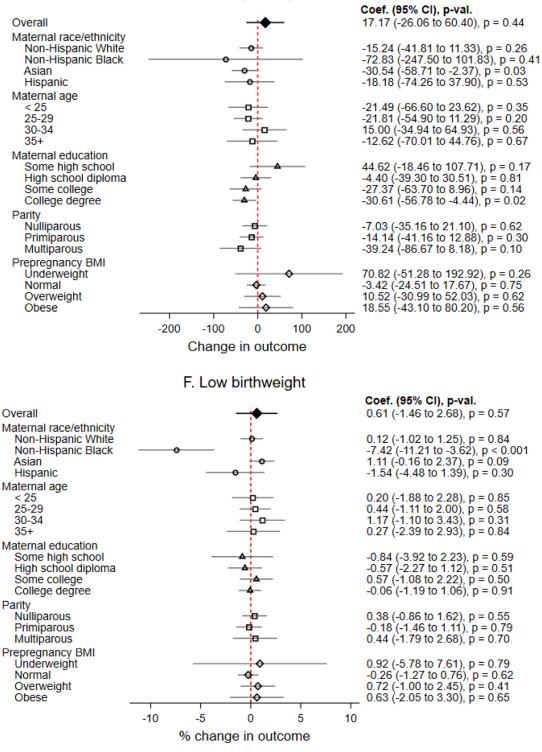


Figure 2 Continued.

6

ARTICLE IN PRESS

Am J Prev Med 2024;000(000):1-8

G. Gestational age, in weeks

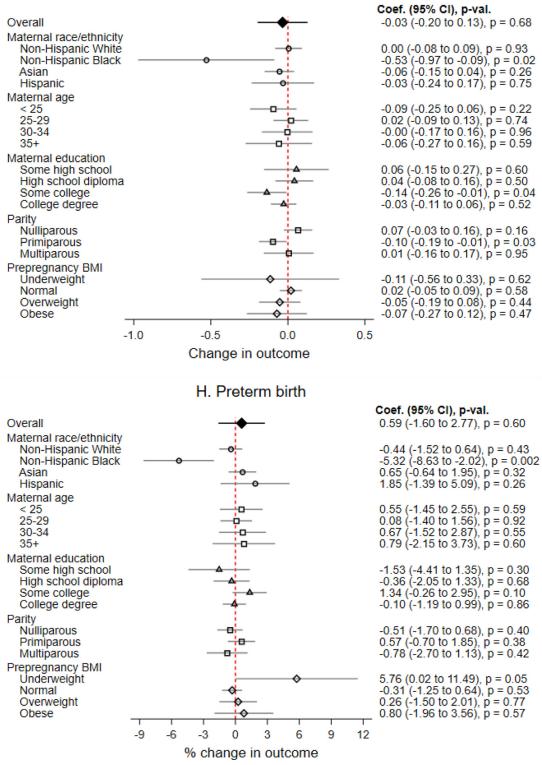
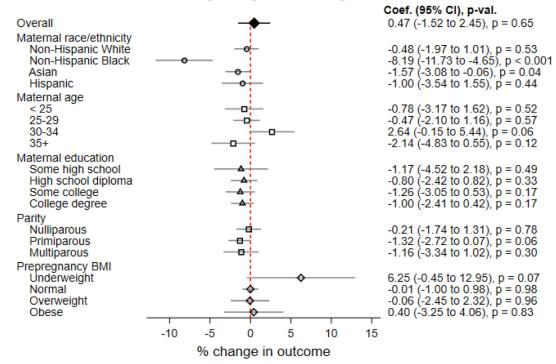


Figure 2 Continued.

Am J Prev Med 2024;000(000):1-8

I. Large for gestational age



J. Small for gestational age

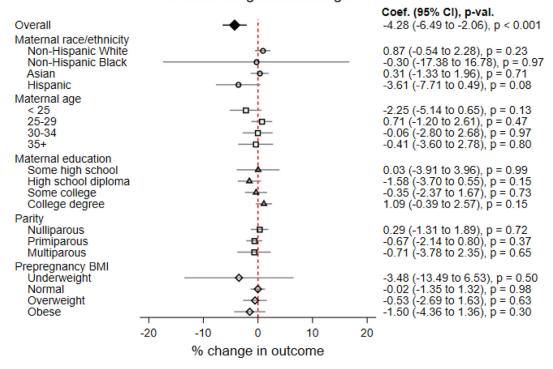


Figure 2 Continued.

Am J Prev Med 2024;000(000):1-8

SUPPLEMENTAL MATERIAL

Supplemental materials associated with this article can be found in the online version at https://doi.org/10.1016/j. amepre.2023.03.016.

REFERENCES

8

- 1. Callaway B, Sant'Anna PHC. Difference-in-Differences with multiple time periods. Journal of Econometrics. 2021;225(2):200–230.
- 2. Schisterman EF, Cole SR, Platt RW. Overadjustment Bias and Unnecessary Adjustment in Epidemiologic Studies. Epidemiology. 2009;20(4):488-495.