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Authors

Nidey, Nichole Hoyt-Austin, Adrienne Chen, Melissa J <u>et al.</u>

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Racial Inequities in Breastfeeding Counseling Among Pregnant People Who Use Cannabis

Nichole Nidey, PhD¹, Adrienne Hoyt-Austin, DO, MAS², Melissa J. Chen, MD, MPH³, Brandie Bentley, MSW⁴, Karen M. Tabb, PhD, MSW⁴, Chidiogo Anyigbo, MD, MPH⁵, Christine Wilder, MD⁶, Mishka Terplan, MD, MPH⁷, Jennifer M. McAllister, MD, IBCLC⁸, Scott L. Wexelblatt, MD⁸, Aaron Murnan, PhD⁹, Laura R. Kair, MD, MAS²

¹Division of Biostatistics and Epidemiology & Department of Pediatrics, University of Cincinnati College of Medicine, in Cincinnati, Ohio

²Department of Pediatrics, University of California Davis

³Department of Obstetrics and Gynecology, University of California Davis

⁴School of Social Work, University of Illinois at Urbana-Champaign

⁵Department of Pediatrics, University of Cincinnati College of Medicine; Division of General and Community Pediatrics, Cincinnati Children's Hospital Medical Center

⁶Center for Addiction Research, University of Cincinnati College of Medicine, Cincinnati, OH

⁷Friends Research Institute, Baltimore, MD

⁸Department of Pediatrics, University of Cincinnati College of Medicine, Perinatal Institute, Cincinnati Children's Hospital Medical Center

⁹College of Nursing, University of Cincinnati

Abstract

We examined how breastfeeding advice in the context of cannabis use differed by race and ethnicity. Survey data from the 2017–2018 Pregnancy Risk Assessment Monitoring System was used to assess differences in breastfeeding guidance related to cannabis use among 1,213 individuals who self-reported cannabis use three months prior to or during pregnancy. A multivariable logistic regression model was specified to examine the extent to which the odds of receiving prenatal advice against breastfeeding if using cannabis differed by self-reported race and ethnicity. We found that non-Hispanic Black people were four times more likely than non-Hispanic White people to be advised against breastfeeding if using cannabis (aOR 4.1, CI

Corresponding Author: Nichole Nidey, Division of Biostatistics and Epidemiology, Cincinnati Children's Medical Center, Cincinnati, OH.

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2.1, 8.2). Pregnant non-Hispanic Black people were disproportionately advised not to breastfeed if using cannabis.

Précis:

Pregnant non-Hispanic Black people are four times more likely than pregnant non-Hispanic White people to be advised against breastfeeding if using cannabis.

Introduction

The American College of Obstetrics and Gynecologists and other organizations advise against using cannabis while breastfeeding but do not recommend counseling against breastfeeding if using cannabis.^{1–4} It is unclear if the potential harms of cannabis exposure through human milk outweigh the benefits of breastfeeding, as there is insufficient evidence of the risk of cannabis exposure through human milk.⁵ Although studies have examined prenatal breastfeeding guidance and postpartum breastfeeding patterns among people with cannabis use, ⁶ it is unknown how breastfeeding guidance varies by maternal characteristics. Breastfeeding disparities persist in the US, with Black mother-infant dyads experiencing the lowest rates.^{7, 8} The patterns by which societies perpetuate racial discrimination, through systems such as healthcare and education is referred to as structural racism.⁹ In this study, we examined how breastfeeding advice in the context of cannabis use differed by self-reported race, as an indicator of racism in the context of prenatal care.

Methods

The 2017–18 Pregnancy Risk Assessment Monitoring System (PRAMS) survey from 9 states that completed the marijuana and prescription drug use supplement (weighted N= 544,862) was used for this study.¹⁰ These states included Alaska, Illinois, Maine, North Dakota, New Jersey, New Mexico, New York, Pennsylvania, and West Virginia. Participants who reported the use of cannabis three months prior to or during pregnancy were included in this analysis. Prenatal recommendation against breastfeeding was based on the PRAMS survey question: "During any of your prenatal care visits, did a doctor, nurse, or other health care worker do any of the following things…advise me not to breastfeed my baby if I was using marijuana."

Differences in receipt of prenatal guidance not to breastfeed by maternal characteristics were assessed using Rao Scott Chi-square tests. Logistic regression models adjusted for insurance, prenatal tobacco use, age, education ^{11, 12}, state, and year of delivery, were used to estimate the odds of receiving advice against breastfeeding if using cannabis. Analyses included sampling weights to adjust for the PRAMS complex survey design and the domain statement for cannabis use. Analyses were completed in SAS 9.4. This study was deemed exempt by the Cincinnati Children's Medical Center Institutional Review Board due to the deidentified nature of the dataset.

Results

9,616 participants were administered the marijuana supplement, of whom 9.5% reported cannabis use. Therefore, the final dataset included 1,213 people (weighted n=51,793). Over one-third (37%, CI 32.0, 41.4) of the study population were advised not to breastfeed if using cannabis. Guidance against breastfeeding if using cannabis varied by maternal characteristics (Table 1). Among non-Hispanic Black pregnant people, 62.7% were advised not to breastfeed, compared to 28.8% of non-Hispanic White people (p<.001). Further, non-Hispanic Black people were four times more likely than non-Hispanic White people (OR 4.1, CI 2.1, 8.2) to be advised against breastfeeding if using cannabis (Table 2).

Discussion

Results demonstrate non-Hispanic Black people were disproportionately advised against breastfeeding, a non-evidenced based recommendation. The use of population-based data is a strength of our study. However, our study has several limitations. PRAMS does not include data that specifically identifies the health care professional type, health care professional cultural background or place where prenatal breastfeeding guidance was given. Additionally, cannabis use and breastfeeding guidance were based on self-reported data; therefore, there is potential for recall bias. Based on our findings and prior studies demonstrating structural and interpersonal racism in the context of breastfeeding support, ^{13–16} efforts are needed to improve care equity for non-Hispanic Black birthing people. Specifically, maternal-child health researchers have highlighted the need to address the effects of structural racism on breastfeeding outcomes.^{13–15, 17, 18} Finally, policies and accountability practices are needed to prevent inequitable access to appropriate breastfeeding advice and support, especially for Black people in the US, as there remains a need for federal policies to directly address breastfeeding equity. ¹⁹

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1:

Association of Maternal Characteristics and Advice Not to Breastfeed if using Cannabis

Maternal Characteristics	Total Weighted Sample %: (95% CI)	Advised Not to Breastfeed: Row % (95% CI)	Advised Not to Breastfeed: Column % (95% CI)	Chi- Square P Value
Race/Ethnicity				<.001
Hispanic	13.3 (9.4–17.2)	41.1 (25.5–56.7)	14.9 (8.4–21.4)	
NH American Indian	2.0 (1.1–2.9)	42.6 (21.0–64.2)	2.4 (0.8–3.9)	
NH Asian	0.8 (0.1–1.4)	9.5 (0.0–23.8)	0.2 (0.0–0.5)	
NH Black	16.2 (12.2–20.1)	62.7 (50.2–75.2)	27.6 (19.5–35.7)	
NH Mixed	3.2 (1.4–5.0)	52.3 (23.8-80.8)	4.6 (1.0-8.2)	
NH White	64.2 (59.3–69.1)	28.8 (23.8–33.8)	50.3 (42.1–58.5)	
NH, none of the above	0.3 (0.0-0.7)	9.4 (0.0–32.1)	0.1 (0.0–0.2)	
Prenatal Smoking				0.01
Yes	26.7 (22.3–31.1)	47.1 (37.3–56.8)	34.3 (26.5–42.1)	
No	73.3 (68.9–77.8)	32.8 (27.6–38.2)	65.7 (57.9–73.5)	
Maternal Age at Delivery				0.001
<20	7.6 (4.9–10.2)	52.9 (34.8–71.0)	10.9 (5.3–16.5)	
20–29	56.9 (52.0-61.7)	42.0 (35.6–48.5)	65.2 (57.6–72.7)	
30–39	33.3 (28.8–37.9)	24.3 (17.7–30.8)	22.1 (16.0–28.1)	
40+	2.2 (0.4–4.1)	30.5 (0.0-61.6)	1.9 (0.1–3.6)	
Maternal Education				0.001
Less than High School	14.6 (10.9–18.3)	46.4 (32.9–59.9)	18.4 (12.6–24.3)	
High School	31.0 (26.6–35.4)	47.8 (39.3–56.2)	40.2 (32.3–48.2)	
More than High School	54.4 (49.6–59.3)	27.9 (21.8–34.1)	41.3 (33.2–49.5)	
Insurance During Pregnancy				<.001
Medicaid	44.3 (39.4–49.1)	51.1 (43.8–58.4)	61.0 (53.0-68.9)	
None	8.6 (6.3–11.0)	42.2 (28.8–55.6)	9.8 (5.9–13.7)	
Other	5.1 (2.8–7.5)	35.2 (13.1–57.3)	4.9 (1.3-8.4)	
Private	42.0 (37.1–46.8)	21.5 (14.9–28.1)	24.3 (17.0–31.6)	
State				0.8
Alaska	1.7 (1.2–2.1)	38.3 (25.9–50.6)	1.7 (1.0–2.5)	
Illinois	32.4 (27.8–37.1)	37.7 (29.2–46.2)	33.3 (25.6–41.0)	
Maine	5.9 (4.8-6.9)	40.7 (32.9–48.6)	6.5 (4.7-8.3)	
North Dakota	3.5 (2.7–4.3)	32.6 (22.2-43.0)	3.1 (1.8–4.4)	
New Jersey	8.0 (5.7–10.3)	38.2 (24.0–52.4)	8.3 (4.5–12.2)	
New Mexico	6.7 (5.5–7.8)	41.5 (34.0-49.1)	7.6 (5.5–9.6)	
New York	15.5 (10.8–20.2)	27.9 (11.7-44.2)	11.8 (4.3–19.4)	
Pennsylvania	22.7 (18.3–27.0)	38.1 (27.1–49.0)	23.6 (16.1–31.0)	
West Virginia	3.6 (2.7–4.6)	40.3 (27.7–53.0)	4.0 (2.3–5.7)	
Year of Delivery				0.99
2017	61.1 (56.5–65.7)	36.7 (30.2–43.1)	61.2 (53.7–68.7)	
2018	38.9 (34.3-43.5)	36.6 (30.2–43.3)	38.8 (31.3-46.3)	

Maternal Characteristics	Total Weighted Sample %: (95% CI)	Advised Not to Breastfeed: Row % (95% CI)	Advised Not to Breastfeed: Column % (95% CI)	Chi- Square P Value
Breastfeeding Outcomes				0.04
Initiated breastfeeding	84.0 (80.4–87.5)	34.1 (28.9–39.3)	79.1 (72.7–85.5)	
Did not initiate breastfeeding	16.0 (12.5–19.6)	47.2 (35.2–59.3)	20.9 (14.5–27.3)	

Total Weighted Sample Size n=51,793, Actual Sample Size n = 1,213

Table 2:

Odds of Receiving Prenatal Advice Not to Breastfeed When Using Cannabis Among Pregnant People with Self-Reported Prenatal Cannabis Use by Self-reported Race & Ethnicity

	Unadjusted OR (95% CI) (n = 1213, weighted n = 51,257)	Adjusted ^{\dagger} OR (95% CI) (n = 1129, weighted n = 49,717)
Maternal Race & Ethnicity		
American Indian	1.8 (0.7, 4.6)	1.3 (0.6, 3.0)
Asian	0.3 (0.1, 1.4)	0.4 (0.1 2.6)
Black	4.2 (2.3, 7.5) ***	4.1 (2.1, 8.2) ***
Hispanic	1.7 (0.9, 3.4)	2.0 (1.0, 4.1)
Mixed	2.7 (0.9, 8.7)	2.6 (0.8, 8.2)
White	REF	REF
None of the above	0.3 (0.0, 3.7)	0.20 (0.0, 2.0)
Maternal Insurance		
Medicaid		2.3 (1.31, 3.9) *
No Insurance		1.8 (0.9, 3.6)
Other		1.1 (0.4, 3.0)
Private		REF
Maternal Education		
Less than high school		REF
High school		1.0 (0.5, 2.0)
More than high school		0.7 (0.4, 1.5)
Maternal age		
Less than 20		1.6 (0.7, 3.9)
20–29		REF
30–39		0.7 (0.4, 1.2)
40		1.5 (0.4, 5.1)
Prenatal Smoking		
No		REF
Yes		1.8 (1.1, 3.1) *
State of Residence		
Alaska		1.1 (0.4, 3.4)
Illinois		REF
Maine		1.8 (0.8, 3.7)
New Jersey		1.5 (0.6, 3.5)
New Mexico		1.6 (0.8, 3.1)
New York		0.8 (0.3, 2.1)
North Dakota		1.0 (0.5, 2.2)
Pennsylvania		1.2 (0.6, 2.7)
West Virginia		1.2 (0.5, 2.7)
Year of delivery		

	Unadjusted OR (95% CI) (n = 1213, weighted n = 51,257)	Adjusted [†] OR (95% CI) (n = 1129, weighted n = 49,717)
2017		1.2 (0.7, 2.1)
2018		REF
*=p <.05		
** = p <.01		
*** =p <.001		

 † model adjusted for insurance type, state of residence, year of delivery, prenatal smoking, maternal education, maternal age