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Original Research

Contraindications to Hormonal Contraception Among Postpartum Women in Texas

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OBJECTIVE: To examine the prevalence of contraindications to hormonal contraception among postpartum women.

METHODS: Low-income postpartum women who planned to delay childbearing for 2 years or longer after delivery were recruited for a prospective cohort study from eight Texas hospitals. Women self-reported health conditions that corresponded to category 3 and 4 contraindications to combined hormonal contraception and progestin-only methods, based on the Centers for Disease Control and Prevention's 2016 Medical Eligibility Criteria for Contraceptive Use. We used mixed-effects Poisson regression models to assess characteristics associated with reporting any contraindication 6 months after delivery. We examined the proportion of women who used a contraindicated method.

RESULTS: Of 1,452 women who completed the 6-month interview, 19.1% reported a category 3 or 4 contraindication to combined hormonal contraception (16.8% category 4) and 5.4% reported a contraindication to depot medroxyprogesterone acetate (0.1% category 4). Only 0.8% had any category 3 or 4 contraindication to progestin-only pills and 0.6% to the implant. Migraine with aura (12.4%) and hypertension (4.8%) were the most common contraindications. The prevalence of any contraindication was higher among women who were 30 years or older (prevalence ratio 1.45 95% CI 1.21–1.73), overweight (prevalence ratio 1.39, 95% CI 1.07–1.80), obese (prevalence ratio 1.55, 95% CI 1.16–2.07), and insured (prevalence ratio 1.34, 95% CI 1.04–1.74). Compared with U.S.-born Latina women, the prevalence of contraindications was higher among Black women (prevalence ratio 1.37, 95% CI 1.14–1.64) and lower among foreign-born Latina women (prevalence ratio 0.71, 95% CI 0.59–0.86). Among women with contraindications, 28 (10.3%) were using combined hormonal contraception; six (8%) were using a contraindicated progestin-only method.

CONCLUSION: Nearly one in five participants had a category 3 or 4 contraindication to combined hormonal contraception. Patients at higher risk for adverse birth outcomes are more likely to have contraindications. Clinicians should counsel on contraception and contraindications prenatally to facilitate the most informed postpartum decision.

(Obstet Gynecol 2021;137:907–15)
DOI: 10.1097/AOG.0000000000004347

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We were funded by the Susan Thompson Buffett Foundation and a center grant from the Eunice Kennedy Shriver *National Institute of Child Health and Human Development (P2CHD042849) awarded to the Population Research Center at the University of Texas at Austin, and (P2CHD066613) awarded to the University of Colorado Population Center. The funders played no role in the design and conduct of the study, interpretation of data, or preparation, review or approval of this manuscript for publication.*

The authors thank the following individuals who served as site investigators: Aida Gonzalez, MSN, RN; Moss Hampton, MD; Ted Held, MD, MPH; Nima Patel-Agarwall, MD; Sireesha Reddy, MD; Ruby Taylor, DNP, RN; and Cristina Wallace, MD. We thank Daniela Kuhn for assistance with data management.

Presented as a poster at the Society of Family Planning's Annual Meeting, held virtually, October 9–10, 2020.

Each author has confirmed compliance with the journal's requirements for authorship.

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Financial Disclosure
The authors did not report any potential conflicts of interest.

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ISSN: 0029-7844/21

Hormonal contraception is an effective way to prevent pregnancy and, for almost all people, is safer than pregnancy.[1] However, some people have

health conditions that may increase the risk of adverse events when using hormonal contraception. In addition, some take medications that may be affected by hormonal contraception or reduce the efficacy of their method.[2,3] Limited prior research has reported that the prevalence of contraindications to combined hormonal contraception is between 2% and 16%[4–7] among the general population, but is higher (39%) in a study of reproductive-aged Latina women in Texas.[8] The prevalence of contraindications to progestin-only methods is low (1.7%).[9]

The postpartum period is typically considered a key moment to identify an appropriate contraceptive method to reduce the health risks associated with short inter-pregnancy intervals (less than 18 months between delivery and conception) for those who plan to delay a subsequent pregnancy.[10] Many patients initiate a hormonal method after delivery,[10–12] yet we know little about contraindications to these methods among postpartum women. People may develop health problems during pregnancy that result in new contraindications, such as hypertension or venous thromboembolism. Additionally, pregnancy-related care provides an opportunity to identify chronic illnesses among people who may have been uninsured before pregnancy and had limited access to health screenings.

Using data from a prospective cohort study of low-income postpartum women, we examined the prevalence of contraindications to combined hormonal contraception and progestin-only methods using the Centers for Disease Control and Prevention's (CDC) 2016 Medical Eligibility Criteria for Contraceptive Use,[3] factors associated with having a contraindication, and the proportion of women using a contraindicated method 6 months after delivery.

METHODS

We used data from the Texas Postpartum Contraception Study (2014–2018), a 2-year prospective cohort of 1,700 women recruited after delivery at eight Texas hospitals. After obtaining informed consent, baseline interviews were conducted in person before hospital discharge, and follow-up telephone interviews were conducted at 3, 6, 12, 18, and 24 months after delivery. Participants were between the ages of 18 and 44 years, lived in Texas, spoke English or Spanish, delivered a healthy singleton neonate, were covered by public insurance or had no insurance at delivery, and wished to delay childbearing for 2 years or longer. In this analysis, we include data from the baseline and 6-month interviews. Full study procedures are reported elsewhere.[12] The authors' and hospitals' institutional review boards approved the study.

In the baseline interview, participants self-reported their age, race and ethnicity, country of birth, education, and number of living children. At the 6-month interview, we asked participants whether they had attended a postpartum visit and what type of health insurance they had, if any, and they self-reported their height and weight, which we used to calculate body mass index (BMI, calculated as weight in kilograms divided by height in meters squared). We asked about the method of contraception participants were using at the time of the 6-month interview: 1) combined hormonal contraception (pill, patch, or ring), 2) depot medroxyprogesterone acetate (DMPA), 3) implant, 4) levonorgestrel intrauterine device (IUD), 5) copper IUD, 6) male or female sterilization, 7) less effective methods (condoms, withdrawal, fertility awareness–rhythm methods, spermicide, emergency contraception, and abstinence), or no method. We were unable to differentiate between combined hormonal and progestin-only pills, so we categorized all pills as combined hormonal contraception. Participants who were pregnant at the 6-month interview were not asked about current contraceptive use and are missing on this variable.

We asked participants about 19 medical conditions associated with category 3 or 4 contraindications to hormonal contraception and asked them to list all medications they were currently taking (Table 1). Contraindications were primarily assessed at the 6-month interview, except for migraine headaches and cancer, which we assessed at the 3-month interview, and hypertension, which we assessed at the 3- and 6-month interviews. If participants did not complete the interview where a question was asked, we assessed the condition at the subsequent completed interview.

We classified each medical condition and drug interaction according the CDC Medical Eligibility Criteria[3] for combined hormonal contraception and progestin-only methods. These instances are noted in Table 1. When the CDC Medical Eligibility Criteria[3] differed among combined hormonal contraceptive methods, we identified contraindications to oral contraceptive pills because they are the most commonly used combined hormonal contraceptives.

Our primary outcomes were having a contraindication to a combined hormonal contraceptive method and having a contraindication to a progestin-only method. We categorized participants as having no contraindication to each method class, having a category 3 contraindication, defined as "a condition for which the theoretical or proven risks

Table 1. U.S. Medical Eligibility Criteria for Contraceptive Use and Corresponding Measures in the Texas Postpartum Contraception Study

Condition	Corresponding Measure(s) in the Texas Postpartum Contraception Study	Contraindications (Category 3 and 4)							
		CHC		DMPA		Progestin-Only Pill		Implant	
		3	4	3	4	3	4	3	4
Bariatric surgery (malabsorptive type)*	"Have you ever had…weight loss surgery?" "What type of weight loss surgery did you have?"	X				X			
Gallbladder disease†	"Have you ever had…painful gall stones?" "Have you had your gall bladder removed?"	X							
Smoker aged 35 y or older									
Fewer than 15 cigarettes/d	"What is your date of birth?" "Do you smoke cigarettes?" "How many cigarettes do you smoke a day?"	X							
15 or more cigarettes/d	"What is your date of birth?" "Do you smoke cigarettes?" "How many cigarettes do you smoke a day?"		X						
DVT or pulmonary embolism‡	"Have you ever had…a blood clot in your leg or your lung?"		X						
Peripartum cardiomyopathy§	"Have you ever had…heart disease?" "What type of heart disease do you or did you have?"		X						
Migraine headaches with aura‖	"Do you have migraine headaches?" "Which of these describe your migraines…do you have numbness, weakness or difficulty seeing things?"		X						
Solid organ transplant (complicated)	"Have you ever had…an organ transplant?" "Have you had complications related to your transplant, such as graft failure, rejection, or heart complications?"		X						
Thrombogenic mutations	"Have you ever been told you have a genetic condition such as factor V Leiden; prothrombin mutation; or protein S, protein C, or antithrombin deficiency?"		X						
Hypertension¶	"Do you have high blood pressure?" "Do you take medicine for high blood pressure?"		X	X					
Ischemic heart disease	"What type of heart disease do you or did you have?"		X	X		X		X	
Stroke#	"Have you ever had…a heart attack or stroke?"		X	X		X		X	
Diabetes complications	"Did you have diabetes while you were pregnant with your new baby?" "Did you have diabetes before you got pregnant with your new baby?" "Have you been checked since your pregnancy to see if you still have diabetes?" "Do you still have diabetes?"								
Nephropathy, retinopathy, or neuropathy**	"Do you have problems with your kidneys, eyes, or nerves related to your diabetes?"		X	X					
Vascular disease**	"Have you been told that you have problems with your arteries or veins related to your diabetes?"		X	X					
Diabetes longer than 20 y duration**	"Have you had diabetes for more than 20 years?"		X	X					
Lupus with positive antiphospholipid antibodies	"Have you ever been told you had antiphospholipid antibodies related to your lupus?"		X	X		X		X	
Cirrhosis (severe, decompensated)	"Have you ever had severe liver disease, like hepatitis or cirrhosis?"		X	X		X		X	
Liver tumors	"Have you ever had any type of cancer?" "What type of cancer have you had: liver cancer?"		X	X		X		X	

(*continued*)

Table 1. U.S. Medical Eligibility Criteria for Contraceptive Use and Corresponding Measures in the Texas Postpartum Contraception Study (*continued*)

Condition	Corresponding Measure(s) in the Texas Postpartum Contraception Study	Contraindications (Category 3 and 4)			
		CHC	DMPA	Progestin-Only Pill	Implant
Breast cancer[‖††]	"Have you ever had any type of cancer?" "What type of cancer have you had: breast cancer?"	X	X	X	X
Other cancer[‖]	"Have you ever had any type of cancer?" "What type of cancer have you had: other?"	Varies			
Drug interactions[‡‡]	"What medications are you taking?"	Varies			

CHC, combined hormonal contraception; DMPA, depot medroxyprogesterone acetate; DVT, deep vein thrombosis.

* Bariatric surgery (malabsorptive type) is a contraindication for oral contraceptive pills (combined hormonal or progestin-only). It is not a contraindication for other combined hormonal methods.

† Includes respondents with lifetime history of painful gallstones who have not had gallbladder removed (including three respondents who did not know whether their gallbladder had been removed.) Information about current symptoms was not captured.

‡ Deep vein thrombosis or pulmonary embolism may be a category 3 or a category 4 contraindication for CHC depending on risk category for recurrent DVT or pulmonary embolism.

§ Type of cardiomyopathy, severity, and timing was not captured.

‖ Assessed 3 months postpartum.

¶ Assessed at 3 and 6 months postpartum. Exact blood pressure or whether high blood pressure is controlled was not captured.

Measure captures history of "stroke or heart attack." (Because no respondents reported ischemic heart disease, affirmative responses to this question likely indicate a history of stroke.)

** Diabetes complications may be a category 3 or a category 4 contraindication for CHC depending on the severity of symptoms (not captured). One woman who answered "don't know" regarding nephropathy, retinopathy, or neuropathy is coded as not having these complications.

†† Current breast cancer is a category 4 contraindication; past cancer with no active disease for 5 or more years is a category 3 contraindication. Measure captures lifetime history of breast cancer but not the timing.

‡‡ Reported drugs include carbamazepine (n=1), phenytoin (n=1), and lamotrigine (n=2). Carbamazepine and phenytoin are category 3 contraindications for CHC and progestin-only pills. Lamotrigine is a category 3 contraindication for combined oral contraception.

usually outweigh the advantages of using the method,"[3] or having a category 4 contraindication, defined as "a condition that represents an unacceptable health risk if the contraceptive method is used."[3] Participants who reported hypertension at either the 3- or 6-month interview were considered to have hypertension. For participants who were pregnant at the 6-month interview, we did not consider pregnancy as a contraindication and, instead, assessed whether they had any contraindication other than pregnancy. Although classification of certain medical conditions depends on the severity of symptoms, we did not capture information about severity in our data. Therefore, we treated these conditions as category 4 contraindications. We also created an indicator for having any category 3 or 4 contraindication to a hormonal contraceptive method.

As a first step in the analysis, we calculated the number and percentage of participants with each medical condition. We then calculated the percentage of participants with a category 3 contraindication only, any category 4 contraindication, and any category 3 or 4 contraindication to combined hormonal contraception and DMPA, progestin-only pills, and the implant separately and combined. Next, we examined factors associated with having any contraindication to hormonal contraception. Because maternal morbidity and mortality[13,14] and contraceptive access vary by race, ethnicity, and nativity,[12,15] we used self-identified race and ethnicity and nativity to create a composite variable, combining White and other races (ie, Asian American, Native American, or self-identified "other") due to small sample sizes. We included a category for missing BMI for the 111 (7.6%) participants with missing BMI data. Participants with missing BMI were more likely than those without missing information to be older, have more children, have no health insurance, be foreign-born Hispanic, and have less education.

We used mixed-effects Poisson regression models to account for clustering by hospital. Models controlled for age (18–24, 25–29, 30 or older), race, ethnicity and nativity (Hispanic U.S.-born, Hispanic foreign-born, Black, and White or other), education (less than high school, high school diploma, more than high school), number of living children (one, two, three or more), BMI (underweight or normal weight [lower than 25], overweight [25–29.9], obese [30 or higher], missing), having any health insurance

Table 2. Prevalence of Contraindications to Hormonal Contraception 6 Months After Delivery (N=1,452)

Condition	n (%)	95% CI (%)*
Bariatric surgery (malabsorptive)	3 (0.2)	0.1–0.6
Gallbladder disease	25 (1.7)	1.2–2.5
Smoker age 35 y or older		
Fewer than 15 cigarettes/d	13 (0.9)	0.5–1.5
15 or more cigarettes/d	1 (0.1)	0.0–0.5
DVT or pulmonary embolism	8 (0.6)	0.3–1.1
Peripartum cardiomyopathy	2 (0.1)	0.0–0.5
Migraines with aura	180 (12.4)	10.8–14.2
Solid organ transplant (complicated)	0 (0.0)	—
Thrombogenic mutations	3 (0.2)	0.1–0.6
Hypertension	69 (4.8)	3.8–6.0
Ischemic heart disease	0 (0.0)	—
Stroke	8 (0.6)	0.3–1.1
Diabetes complications		
Nephropathy, retinopathy, or neuropathy	5 (0.3)	0.1–0.8
Other vascular disease	0 (0.0)	—
Diabetes duration longer than 20 y	0 (0.0)	—
Lupus with positive antiphospholipid antibodies	0 (0.0)	—
Cirrhosis	0 (0.0)	—
Liver tumors	0 (0.0)	—
Breast cancer	1 (0.1)	0.0–0.5
Cervical cancer awaiting treatment	0 (0.0)	—
Endometrial cancer	0 (0.0)	—
Other cancer: neuroendocrine carcinoma	1 (0.1)	0.0–0.5
Drug interactions	4 (0.3)	0.1–0.7
Contraindications to CHC		
Category 3 only	34 (2.3)	1.7–3.3
Any category 4	244 (16.8)	15.0–18.8
Any category 3 or 4	278 (19.1)	17.2–21.3
Contraindications to DMPA		
Category 3 only	77 (5.3)	4.3–6.6
Any category 4	1 (0.1)	0.0–0.5
Any category 3 or 4	78 (5.4)	4.3–6.7
Contraindications to progestin-only pills		
Category 3 only	10 (0.7)	0.4–1.3
Any category 4	1 (0.1)	0.0–0.5
Any category 3 or 4	11 (0.8)	0.4–1.4
Contraindications to implant		
Category 3 only	8 (0.6)	0.3–1.1
Any category 4	1 (0.1)	0.0–0.5
Any category 3 or 4	9 (0.6)	0.3–1.2
Any contraindication to CHC, DMPA, progestin-only pills, or implant		
Category 3 only	34 (2.3)	1.7–3.3
Any category 4	244 (16.8)	15.0–18.8
Any category 3 or 4	278 (19.1)	17.2–21.3

DVT, deep vein thrombosis; CHC, combined hormonal contraception; DMPA, depot medroxyprogesterone acetate.
* Omitted for contraindications where n=0.

at 6 months postpartum, and attended a postpartum visit. Finally, we calculated the proportion of women using a contraindicated method at 6 months after delivery among those with a contraindication to combined hormonal contraceptive methods and progestin-only methods. Missing data (less than 1% for all variables other than BMI) were addressed using list-wise deletion. We used Stata 15 for data analysis.

RESULTS

Of the 1,700 women enrolled in the study, 1,452 (85.4%) completed the 6-month survey and were included in these analyses. The most commonly reported contraindications included migraine with aura (12.4%), hypertension (4.8%), and gall bladder disease (1.7%); all other contraindications were reported by less than 1.0% of the sample (Table 2).

Table 3. Characteristics Associated With Any Contraindication to Hormonal Contraception Among Postpartum Study Participants (n=1,444)

Covariate	n	Prevalence of Any Contraindication	PR* (95% CI)
Age range (y)			
18–24	645	108 (16.7)	1 (ref)
25–29	387	73 (18.9)	1.09 (0.88–1.35)
30 or older	412	97 (23.5)	**1.45 (1.21–1.73)**
Race, ethnicity, and nativity			
Hispanic, U.S.-born	498	95 (19.1)	1 (ref)
Hispanic, foreign-born	666	107 (16.1)	**0.71 (0.59–0.86)**
Black	198	54 (27.3)	**1.37 (1.14–1.64)**
White or other†	82	22 (26.8)	1.32 (0.94–1.87)
Education			
Less than high school	504	106 (21.0)	1 (ref)
High school diploma	573	94 (16.4)	**0.77 (0.64–0.94)**
More than high school	367	78 (21.3)	0.89 (0.78–1.03)
No. of living children			
1	360	56 (15.6)	1 (ref)
2	460	90 (19.6)	1.20 (0.94–1.52)
3 or more	624	132 (21.2)	1.17 (0.97–1.40)
BMI category (kg/m^2)			
Underweight or normal weight (lower than 25.0)	371	51 (13.8)	1 (ref)
Overweight (25.0–29.9)	435	82 (18.9)	**1.39 (1.07–1.80)**
Obese (higher than 30.0)	528	121 (22.9)	**1.55 (1.16–2.07)**
BMI missing	110	24 (21.8)	**1.72 (1.12–2.65)**
Any health insurance 6 mo after delivery			
No	1,112	193 (17.4)	1 (ref)
Yes	332	85 (25.6)	**1.34 (1.04–1.74)**
Had a postpartum visit			
No	224	55 (22.5)	1 (ref)
Yes	1,200	223(18.6)	**0.79 (0.65–0.98)**

PR, prevalence ratio, ref, referent.
Data are n or n (%) unless otherwise specified.
Bold indicates statistically significant ($P<.05$) PRs and CIs.
* Prevalence ratios obtained from multivariable mixed-effects Poisson regression.
† Combined due to small sample size. Includes White, Asian-American, Native American, and other race or ethnicity.

Among participants, 19.1% (278/1,452) had any category 3 or 4 contraindication to combined hormonal contraception (2.3% [34/1,452] category 3 only), and 5.4% (78/1,452) had any category 3 or 4 contraindication to DMPA (5.3% [77/1,452] category 3 only). Only 0.8% (11/1,452) of the sample had any category 3 or 4 contraindication to progestin-only pills and 0.6% (9/1,452) to the implant. A total of 19.1% (278/1,452) of the sample had any contraindication to hormonal contraception (2.3% [34/1,452] category 3 only).

The prevalence of any contraindication was higher among participants aged 30 years or older than among women aged 18–24 (prevalence ratio 1.45, 95% CI 1.21–1.73), was higher among participants who were overweight (prevalence ratio 1.39, 95% CI 1.07–1.80) or obese (prevalence ratio 1.55, 95% CI 1.16–2.07) compared with women who were underweight or of normal weight, and was higher among participants who were insured (prevalence ratio 1.34, 95% CI 1.04–1.74) compared with those who were uninsured (Table 3). Compared with U.S.-born Latina women, the prevalence of contraindications was higher among Black women (prevalence ratio 1.37, 95% CI 1.14–1.64) and was lower among foreign-born Latina women (prevalence ratio 0.71, 95% CI 0.59–0.86). The prevalence of contraindications was lower among participants who attended a postpartum visit than those who did not (prevalence ratio 0.79, 95% CI 0.65–0.98).

Of the 272 women with a contraindication to hormonal contraception, 28 (10.3%) were using combined hormonal contraception at the 6-month interview, and 115 (42.2%) were using a less effective

Table 4. Contraceptive Method Use at 6 Months After Delivery, by Contraindication Type

Current Method	All Participants (n=1,418)*	Participants With Contraindications	
		CHC (n=272)	DMPA (n=75)
CHC	147 (10.4)	**28 (10.3)**[†]	8 (10.7)
DMPA	103 (7.3)	21 (7.7)	**6 (8.0)**[‡]
Implant	171 (12.1)	30 (11.0)	8 (10.7)
Levonorgestrel IUD	83 (5.9)	17 (6.3)	4 (5.3)
Copper IUD	58 (4.1)	4 (1.5)	1 (1.3)
Male or female sterilization	242 (17.1)	57 (21.0)	18 (24.0)
Less effective methods[§]	593 (41.8)	110 (40.4)	29 (38.7)
None	21 (1.5)	5 (1.8)	1 (1.3)

CHC, combined hormonal contraception; DMPA, depot medroxyprogesterone acetate; IUD, intrauterine device.
Data are n (%).
Cells in boldface indicate use of contraindicated methods.
* Sample includes nonpregnant participants who did not have missing contraceptive use data at the 6-month interview.
† Specific contraindications include migraines with aura (n=17), hypertension (n=8), gallstones (n=3), and diabetes complications (n=1). One respondent reported two contraindications against CHC: migraines with aura and gallstones.
‡ Users were contraindicated due to hypertension (n=6).
§ Includes condoms, withdrawal, fertility awareness–rhythm methods, lactational amenorrhea, spermicide, emergency contraception, and abstinence.

method or no method (Table 4). Of the 75 women with a DMPA contraindication, six (8%) were using the method, and 30 (40%) were using a less effective method or no method. Among participants using combined hormonal contraception, 26 of 147 (17.7%) had a category 4, and 2 of 147 (1.4%) had a category 3 contraindication (not shown). Among the 24 participants with a combined hormonal contraception contraindication and were using pills, none had a contraindication to progestin-only pills, so it is possible that they were using progestin-only pills. Finally, none of the participants with a contraindication to progestin-only pills were using pills; one participant with an implant contraindication (category 3) was using the implant (not shown).

DISCUSSION

Using updated medical eligibility criteria in a sample of low-income, postpartum women, we found that one in five reported a contraindication to combined hormonal contraception, and the prevalence of contraindications to progestin-only methods was considerably lower (1/20 for DMPA and less than 1/100 for progestin-only pills). Consistent with other studies,[4,6–8] migraine with aura and hypertension were the most frequently reported contraindications.

The prevalence of contraindications to hormonal contraception in our study is lower than that reported in another study of low-income Latina women in Texas, which included a larger share of women older than age 30 years.[4,8,9] Compared with other studies conducted among reproductive-aged U.S. women,[5,7] the prevalence of contraindications in our sample is somewhat higher. However, those studies did not assess migraine with aura and lack information on other contraindications.

The proportion of postpartum women with a contraindication is concerning given increasing rates of maternal morbidity and mortality; Texas has among the highest rates in the United States.[13,16] In addition to age and obesity, factors associated with having a contraindication,[4,5,7,8] our multivariable analysis demonstrated that the prevalence of contraindications was higher among Black women, who already have the highest rates of adverse outcomes for mothers and infants.[13,14,17] This underscores the importance of clinician screening for contraindications postpartum to ensure pregnancy-related or chronic conditions are well-managed.

In contrast to prior research that found either no association[4] or a negative association[5] between health insurance and contraindications, the prevalence of contraindications was higher among insured participants in our sample, perhaps because access to health care resulted in diagnosis of medical conditions associated with contraindications or because participants with medical conditions paid out-of-pocket for insurance. Contraindications were more common among participants who did not have a postpartum visit. Although the reason for this is unclear, this is a missed opportunity to address health needs of those most at risk for adverse outcomes. Further research is needed to validate and further explore this association. Moreover, expanded eligibility criteria for Medicaid,[15] by income and immigration status is needed to support maternal health.

Few women were using a contraindicated contraceptive method, and a large proportion were relying on less effective methods. Prior research from Texas suggests many of these women prefer to be using more effective contraception.[11,12] In addition to cost barriers, some women report that clinicians discouraged or refused to provide their preferred method due to misclassification of contraindications, such as use of progestin-only methods while breastfeeding.[18] Efforts are needed to educate clinicians about contraindications to ensure evidence-based provision of contraception.[19]

Clinicians should counsel on contraindications during prenatal care because many contraindications are diagnosed before or during pregnancy. Having multiple discussions about contraception over a longer period can allow patients to make a more informed decision about contraception after delivery. This may be particularly important for Black patients, immigrants, and other people of color who may experience pressure from clinicians to use contraception[20] and report poorer quality of counseling.[20–22]

Prenatal contraceptive counseling is also important because low-income patients who lose health insurance before their postpartum visit[18] may choose to begin contraception immediately after delivery if they are aware of contraindications before delivery. But people should not have to modify their preferred timing of contraceptive initiation due to health insurance limitations. Health care coverage that includes the full range of methods can ensure people can access their preferred method when they want to start it. Future research could assess whether patients were informed about contraindications prenatally and how counseling and contraindications informed their method preference, particularly in contexts of constrained contraceptive access.

We assessed contraindications by self-report. Although there is high concordance between self-report and clinician-identified contraindications,[8,23] we had limited details on the type, timing, and severity of certain conditions. By considering these conditions as category 4, we may have underestimated category 3 relative to category 4. Additionally, we were unable to capture contraindications to IUDs or differentiate between combined hormonal or progestin-only pills. Given 19% of people using oral contraceptives within 1 year of delivery use progestin-only pills, the proportion of women using contraindicated combined hormonal contraception is likely inflated.[24] Finally, our sample is not generalizable to all people after delivery, and additional research is needed to assess the prevalence of contraindications among other populations.

Clinicians who are caring for similar populations should be aware that one in five postpartum patients may have a contraindication and that the prevalence may be higher among patients already at higher risk for adverse birth outcomes. Thus, clinicians should screen for contraindications during prenatal and postpartum visits.

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PEER REVIEW HISTORY

Received November 13, 2020. Received in revised form January 13, 2021. Accepted January 21, 2021. Peer reviews and author correspondence are available at http://links.lww.com/AOG/C257.

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rev 8/2019