

Rates of Major Depressive Disorder and Bipolar Disorder in Black and White Postpartum Women

Taylor N. Burchfield, BA; Amy Yang, MS; Katherine L. Wisner, MD, MS; and Crystal T. Clark, MD, MSc

Abstract

Importance: Little is known about differences between Black and White women with respect to the prevalence of postpartum mood disorders or symptom presentations.

Objective: To determine the prevalence and characteristics of postpartum major mood disorders in Black and White women at 4–6 weeks after birth.

Methods: This is a secondary analysis of a large-scale study designed to screen women for postpartum depression with the Edinburgh Postnatal Depression Scale (EPDS) and collect symptom data. Data were collected at an urban maternity hospital in an academic setting in Pittsburgh, Pennsylvania. Of the 2,019 women who screened positive and accepted a psychiatric diagnostic interview, 163 and 85 Black women

had major depressive and bipolar disorders, respectively, and 508 and 177 White women had major depressive and bipolar disorders, respectively. Those with an EPDS score greater than or equal to 10 were offered a psychiatric assessment (in-person at home or by telephone) with the Structured Clinical Interview for *DSM-IV* using the Structured Interview Guide for the Hamilton Rating Scale for Depression, Atypical Depression Version symptom inventory, a questionnaire related to childhood and adulthood physical and sexual abuse, and the Short Form Survey-12. Participants who self-identified as Black or White were included in this analysis.

Results: Among screen-positive participants, no significant difference in the rate of major depressive disorder (40% Black and 35% White) was observed. However, bipolar disorder significantly

differed between Black (19.2%) and White (11.5%) women. Additionally, symptom profiles differed between Black and White participants with major depressive disorder, and a high rate of traumatic experiences was reported by participants with major depression and bipolar disorder in both racial groups.

Conclusion: An understanding of the different presentations of postpartum mood disorders between Black and White women, as well as trauma-informed care, can optimize postpartum health care through supporting advocacy efforts for resource allocation and health care delivery.

Trial Registration: Dataset from study at ClinicalTrials.gov identifier: NCT00282776.

J Clin Psychiatry 2024;85(4):23m15023

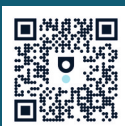
Author affiliations are listed at the end of this article.

Major depressive disorder (MDD) and bipolar disorder (BD) affect 20% of individuals in the first year postpartum, contribute to maternal morbidity and mortality, and adversely affect children and families.^{1–4} Identifying postpartum depression is a public health goal as outlined by the United States Preventive Services Task Force and the American College of Obstetrics and Gynecology.^{5,6}

Studies of racial differences in symptomatology and the rates of postpartum mood disorders are limited. The prevalence of postpartum depression in Black women ranges from 6.8% to 52% and 14%–19.3% in White women.^{7–11} Some studies suggest that Black women

have a higher prevalence of depressive symptoms and suicidal ideation compared to their White counterparts.^{12–14} Variability in assessments, such as the use of postpartum-specific vs general depression scales, a focus on symptoms vs diagnosis, and inconsistent use of diagnostic evaluations contribute to contradictions in findings. Data are limited on the prevalence of BD in the perinatal period, and even less is known about the prevalence of BD among Black women.^{15–17} The Epidemiologic Catchment Area Study showed that the rates of BD were similar across racial groups (0.4%); however, bias has historically led to misdiagnosing people that are Black with

Scan
Now



Cite and Share
this article at
Psychiatrist.com

Editor's Note

We encourage authors to submit papers for consideration as a part of our Focus on Women's Mental Health section. Please contact Marlene P. Freeman, MD, at mfreeman@psychiatrist.com.

Clinical Points

- Little is known about the differences in prevalence, characterization of symptoms, and comorbidities in postpartum major depressive disorder and bipolar disorder in Black and White mothers.
- In this study, Black and White participants did not differ significantly in the rate of major depressive disorder but significantly differed in diagnosis of bipolar disorder (Black 19% and White 11.5%) postpartum.
- The study demonstrates that trauma history has a striking association with bipolar disorder regardless of self-identified race.
- The data support advocacy and allocation of funding and resources toward additional services for the prevention and treatment of postpartum mood disorders in high-risk birthing individuals, with specific attention to Black populations of low socioeconomic status.

schizophrenia instead of BD, which resulted in a lower prevalence of BD among Black people.^{18–20} The difference in the prevalence of BD as determined by standardized interviews among Black and White postpartum women remains underexplored.

In this secondary analysis of a large-scale postpartum depression screening study at a Midwest urban hospital, we determined the rate of diagnosis of MDD and BD among Black and White postpartum women who screened positive on the Edinburgh Postpartum Depression Scale (EPDS). We compared the rate and severity of specific depressive symptoms, comorbid mental disorders, and history of abuse between Black and White participants.

METHODS

Study Design

The original screening study has been described elsewhere.²¹ Briefly, the investigation was conducted in Pittsburgh, Pennsylvania, at an urban maternity hospital in an academic setting. A nurse or social worker visited women in the maternity ward and offered phone screenings at 4–6 weeks after delivery. Women who were non-English speaking, younger than 18 years old, unable to provide consent, or unable to access a telephone were excluded. All birthing people were included although gender identity was not assessed; therefore, we use the term *women* in this manuscript. If the woman was not reached within 3 days, a postcard encouraging her to contact the team was sent. Women who were not reached by week 6 were removed from the list. Participants who had a positive EPDS score (greater than or equal to 10) were offered a psychiatric assessment within 2 weeks of the screen. Those who declined the home visit were interviewed by

telephone. These diagnostic interviews and symptom assessments were conducted by experienced master's level psychiatric social workers trained to reliability by the PI (K.L.W.). The study was approved by the University of Pittsburgh Institutional Review Board.

Study Variables

The primary independent variable was self-identified race (Black or White). Differences in the prevalence of MDD and BD were determined. We acknowledge that race is a social construct that does not infer causation for disparities. Rates of MDD or BD were determined in women who screened positive on the EPDS and completed a Structured Clinical Interview for *DSM-IV* (SCID).²² The developers of the EPDS recommended a cut point of 10 or higher for settings with the capacity to evaluate women with positive screens, as was the case in the original research.²³

The secondary outcomes were psychiatric comorbidities, depressive symptom severity, and trauma. We included the following variables from the original dataset: (1) SCID-established comorbid psychiatric diagnoses; (2) severity of and specific types of depressive symptoms with the 29-item Structured Interview Guide for the Hamilton Rating Scale for Depression, Atypical Depression Version (SIGH-ADS), which includes the 17- and 21-item versions of the Hamilton Scale as well as an 8-item scale for atypical depressive symptoms²⁴; (3) postpartum function using the Short Form Survey-12 (SF-12)²⁵; and (4) physical and sexual abuse experienced as a child or adult, using a 4-item yes/no questionnaire where the number of positive responses was summed to create a variable from 0 to 4 for analytic purposes.

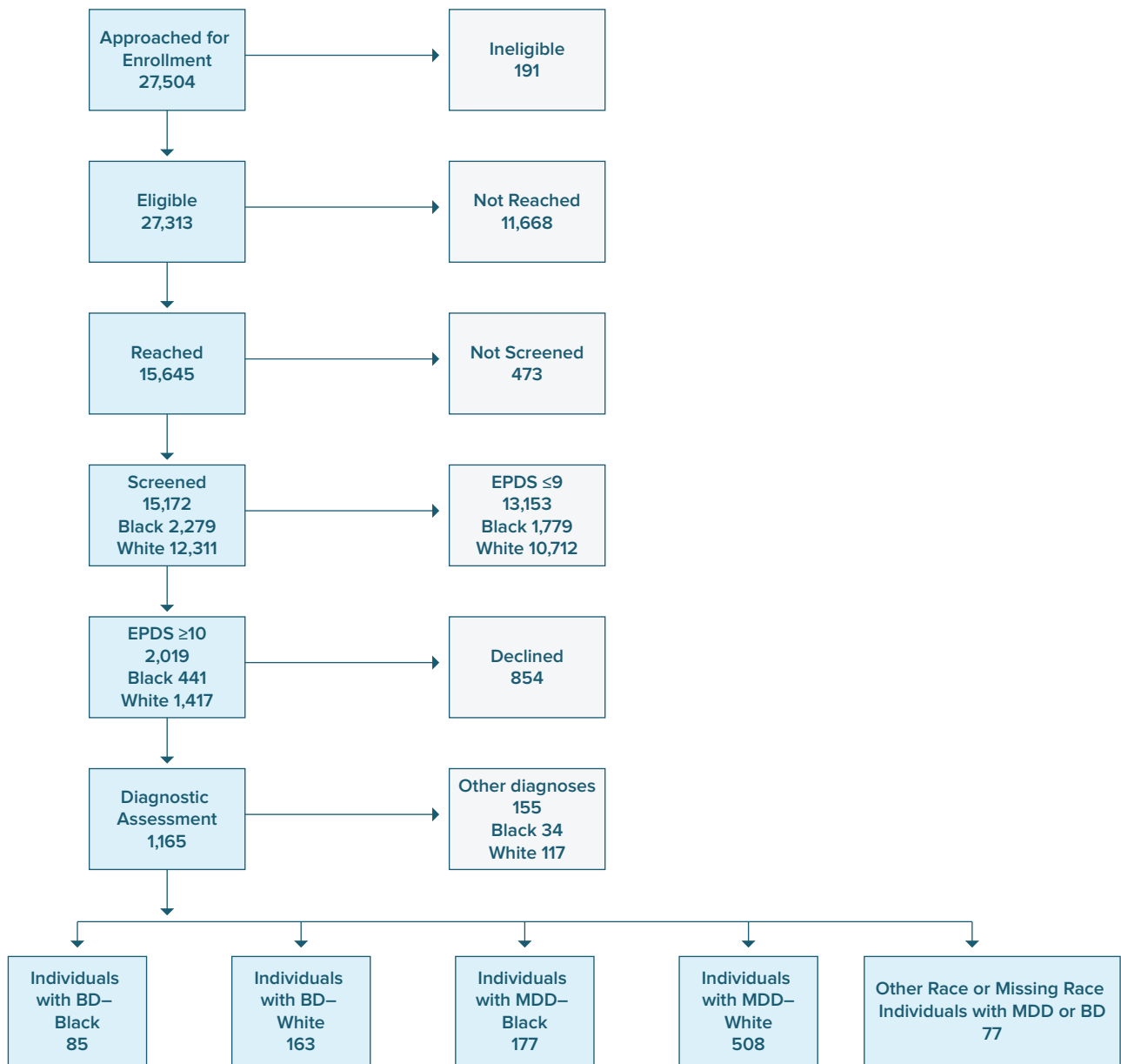
Diagnostic Assessment

The complete SCID was administered by master's-level clinicians. The SCID interviewers were trained by viewing 8 standard videotaped diagnostic modules, passing a written examination, and completing reliability ratings with a trained interviewer. Every assessment was reviewed with a board-certified psychiatrist for diagnostic confirmation.

Statistical Analysis

Descriptive statistics were reported as counts and percentages for categorical variables and mean plus SD or median interquartile range (IQR) for continuous normal or continuous skewed variables, respectively. Independent sample *t*-tests were applied to compare the mean differences between Black and White women on SIGH-ADS scores and symptoms. χ^2 or Fisher exact tests were used when the expected cell count was less than 5 to compare the proportional differences between Black and White for all categorical variables. Due to the large number of statistical tests conducted in

Figure 1.

Flow of Postpartum People Approached for Inclusion in a Large-Scale Depression Screening Study by Self-Reported Black or White Status^a

^aThe bolded cells at the bottom depict the sample cohort included in the study analysis.

Abbreviations: BD = bipolar disorder, EPDS = Edinburgh Postnatal Depression Scale, MDD = major depressive disorder.

this study, we applied multiple comparison adjustments using the Benjamini-Hochberg procedure.²⁶ Adjusted *P* values less than .05 were considered statistically significant. This is a relatively conservative method to limit the likelihood of type I error rate inflation (false positives) rather than reporting unadjusted 95% CI for each comparison. We intentionally selected this reporting method and focused our discussion around the most significant differential factors after adjustment. All

analyses were done using R (version 4.0.3, <https://www.R-project.org/>).²⁷

RESULTS

Sample Derivation

Figure 1 depicts the sample derivation from the original dataset. Table 1 depicts a demographic comparison

Table 1.

Demographic Measures Between Declined and Included Participants

	Declined N = 829 ^a	Study sample N = 1,165	P value
Education			<.001
<High school	55 (6.66%)	112 (9.61%)	
High school	162 (19.6%)	277 (23.8%)	
Some college	223 (27.0%)	389 (33.4%)	
College	226 (27.4%)	229 (19.7%)	
Graduate school	160 (19.4%)	158 (13.6%)	
Race			<.001
Black	136 (16.4%)	298 (25.6%)	
Other	83 (10.0%)	77 (6.61%)	
White	610 (73.6%)	790 (67.8%)	
Insurance			<.001
None	6 (0.72%)	17 (1.46%)	
Private	470 (56.7%)	478 (41.0%)	
Public	353 (42.6%)	670 (57.5%)	
Marital status			<.001
Divorced/widowed	16 (1.98%)	29 (2.49%)	
Married	510 (63.0%)	535 (45.9%)	
Single	283 (35.0%)	601 (51.6%)	

^aThis differs from the 854 in Figure 1 who declined due to missing data.

between those who declined interview and those included in the dataset.

Diagnoses

Positive screens were observed in 19.4% of Black compared to 11.5% of White participants ($P < .001$). The majority of Black (87%) and White (83%) participants who screened positive on the EPDS met the criteria for either MDD or BD. The rate of MDD was 40% (177/441) in Black and 36% (508/1417) in White participants (Figure 1). White participants with MDD were significantly more likely to be highly educated, be married, and have private insurance and fewer children than Black participants with MDD (Table 2). Black participants had higher rates of trauma (62.7% and 49%, respectively, Table 2) and comorbid posttraumatic stress disorder (PTSD) (14.7% vs 7.7%, respectively, Table 3) compared to White participants. Generalized anxiety disorder and eating disorders were more common in White than Black participants with MDD (Table 3).

The rate of BD was 19% (85/441) and 11.5% (163/1417) for Black and White participants, respectively ($P < .001$, Figure 1). White participants with BD were older, completed higher levels of education and more likely to have private insurance, be married, and have fewer children than Black participants (Table 2). In contrast to MDD, there were no significant differences with respect to past trauma or comorbidities among Black and White participants with BD, except for PTSD, which was more common in Black (28.2%) than in White (19.6%) participants (Table 3).

Symptoms

Among those with MDD, the mean total score on the SIGH-ADS scale was 2 points higher in Black compared to White individuals (22.5 and 20.5, respectively) (Table 4). Scores on the 8-item atypical symptoms subscale of the SIGH-ADS did not significantly differ. The following symptoms were rated higher in severity in Black compared to White participants with MDD (all at or less than $P = .004$): impairment in work/social activities, decreased appetite, early morning awakening, psychomotor retardation, severity of diurnal variation, paranoid ideation, and social withdrawal (Table 4). Additional symptoms were difficulty with sleep onset ($P = .049$) and carbohydrate craving ($P = .02$). The SF-12 Mental and Physical Scale scores did not significantly differ between groups (Table 4).

Among those diagnosed with BD, Black and White women had similar total and atypical symptom scores on the SIGH-ADS (Table 4). Significantly higher symptom scores in Black compared to White subjects were observed for social withdrawal ($P = .03$) and weight gain ($P = .047$). The SF-12 Mental and Physical Scale scores did not significantly differ (Table 4).

DISCUSSION

We observed a nearly 2-fold rate of positive screens in Black compared to White participants. Among those who screened positive, Black and White women were similarly likely to be diagnosed with MDD, but Black participants were more likely to be diagnosed with BD. Black women diagnosed with MDD or BD were more socioeconomically disadvantaged, had higher levels of clinical symptoms and higher rates of comorbid PTSD than their White counterparts who were more likely to be educated, privately insured, and married, and have higher rates of generalized anxiety disorder (GAD) and eating disorders. Both groups reported a similar quality of life.

Our results are consistent with previous studies showing higher rates of depressive symptoms²⁸, more severe psychological distress, and lower to similar rates of MDD in nonpregnant Black and White populations,²⁹ as well as postpartum Black and White women diagnosed with a clinician-administered assessment.³⁰ Despite having the same rate of postpartum depression and more severe symptoms than White women, Black women are half as likely to receive a diagnosis of MDD during pregnancy which is also consistent with data among the nonpregnant Black US population.³¹

The equivalent rate of MDD between Black and White participants stands in contrast to studies such as the Survey of American Life, which found markedly lower

Table 2.

Clinical Characteristics of Participants With Major Depressive Disorder and Bipolar Disorder

	MDD				BD			
	Black, N = 177	White, N = 508	P value	BH adjusted P value	Black, N = 85	White, N = 163	P value	BH adjusted P value
Education			<.001	<.001			<.001	.001
<High school	31 (17.51%)	18 (3.54%)			17 (20.00%)	24 (14.72%)		
High school	68 (38.42%)	85 (16.73%)			36 (42.35%)	37 (22.70%)		
Some college	62 (35.03%)	167 (32.87%)			30 (35.29%)	70 (42.94%)		
College	12 (6.78%)	131 (25.79%)			2 (2.35%)	19 (11.66%)		
Graduate school	4 (2.26%)	107 (21.06%)			0 (0.00%)	13 (7.98%)		
Age	25.46 (5.67)	29.39 (5.64)	<.001	<.001	24.47 (3.87)	27.17 (5.50)	<.001	<.001
Insurance			<.001	<.001			<.001	<.001
None	1 (0.56%)	5 (0.98%)			2 (2.35%)	7 (4.29%)		
Private	31 (17.51%)	289 (56.89%)			5 (5.88%)	46 (28.22%)		
Public	145 (81.92%)	214 (42.13%)			78 (91.76%)	110 (67.48%)		
Marital status (%)			<.001	<.001			<.001	<.001
Divorced/widowed	2 (1.13%)	15 (2.95%)			1 (1.18%)	11 (6.75%)		
Married	28 (15.82%)	321 (63.19%)			5 (5.88%)	55 (33.74%)		
Single	147 (83.05%)	172 (33.86%)			79 (92.94%)	97 (59.51%)		
Parity			.001	.006			.021	.065
1	44 (24.86%)	198 (38.98%)			21 (24.71%)	67 (41.10%)		
2	72 (40.68%)	194 (38.19%)			24 (28.24%)	47 (28.83%)		
3	36 (20.34%)	79 (15.55%)			23 (27.06%)	33 (20.25%)		
4+	25 (14.12%)	37 (7.28%)			17 (20.00%)	16 (9.82%)		
SIGH-ADS	22.23 (5.99)	20.55 (5.42)	.001	.006	24.45 (6.85)	23.56 (6.89)	.339	.529
SF12 Mental Scale, mean (SD)	32.24 (10.46)	31.13 (9.41)	.367	.562	30.54 (11.10)	30.80 (9.98)	.900	.954
SF12 Physical Scale, mean (SD)	47.78 (9.31)	49.70 (9.48)	.086	.195	48.58 (9.72)	46.41 (10.34)	.267	.471
Physically abused as an adult^a (%)	74 (43.79%)	154 (30.99%)	.003	.015	43 (55.84%)	83 (52.87%)	.772	.867
Physically abused as a child^a (%)	42 (24.85%)	84 (16.90%)	.03	.085	26 (33.77%)	69 (43.95%)	.177	.355
Sexually abused as an adult^a (%)	24 (14.20%)	72 (14.49%)	>.999	>.999	16 (20.78%)	48 (30.57%)	.155	.315
Sexually abused as a child^a (%)	57 (33.73%)	105 (21.13%)	.001	.007	34 (44.16%)	67 (42.68%)	.941	.973
Trauma			.016	.053			.744	.865
0	66 (37.29%)	259 (50.98%)			24 (28.24%)	40 (24.54%)		
1	54 (30.51%)	130 (25.59%)			23 (27.06%)	38 (23.31%)		
2	35 (19.77%)	81 (15.94%)			22 (25.88%)	42 (25.77%)		
3	15 (8.47%)	29 (5.71%)			10 (11.76%)	27 (16.56%)		
4	7 (3.95%)	9 (1.77%)			6 (7.06%)	16 (9.82%)		

^aPercent calculation for these variables includes individuals who contributed data to the variable, which may vary slightly from the total N listed at the top of the column. Abbreviations: BD = bipolar disorder, BH = Benjamini-Hochberg, MDD = major depressive disorder, SF12 = 12-item Short Form Survey, SIGH-ADS = Structured Interview Guide for the Hamilton Depression Rating Scale with Atypical Depression Supplement.

rates of MDD among nonpregnant Black and White Americans (10.4% vs 17.9%).²⁸ Sociodemographic disparities in Black women are associated with increased risk for postpartum mood disorders and may explain the

higher rates of perinatal MDD compared to nonpregnant rates among Black women.^{32–34}

Structured interviews for mood disorders are critical for comparative diagnostic studies to decrease

Table 3.

Comorbidities in Participants With Major Depressive Disorder and Bipolar Disorder by Self-Reported Race

	MDD				BD			
	Black, N = 177	White, N = 508	P value	BH adjusted P value	Black, N = 85	White, N = 163	P value	BH adjusted P value
GAD and anxiety disorder NOS (%)	58 (32.77)	251 (49.41)	<.001	.001	33 (38.82)	71 (43.56)	.561	.706
Panic disorder (%)	13 (7.34)	68 (13.39)	.045	.113	23 (27.06)	47 (28.83)	.884	.945
PTSD (%)	26 (14.69)	39 (7.68)	.01	.037	24 (28.24)	32 (19.63)	.168	.357
Substance use (%)	13 (7.34)	41 (8.07)	.883	.954	13 (15.29)	18 (11.04)	.448	.637
Obsessive-compulsive disorder (%)	22 (12.43)	53 (10.43)	.553	.698	18 (21.18)	38 (23.31)	.824	.901
Eating disorder (%)	1 (0.56)	27 (5.31)	.011	.043	0 (0.00)	6 (3.68)	.097	.229

Abbreviations: AA = African-American, BD = bipolar disorder, BH = Benjamini-Hochberg, GAD = generalized anxiety disorder, MDD = major depressive disorder, NOS = not otherwise specified, PTSD = posttraumatic stress disorder.

Table 4.

Symptom Expression in Participants With Major Depressive Disorder and Bipolar Disorder by Self-Reported Race

	MDD				BD			
	Black N = 177	White N = 508	P value	BH adjusted P value	Black N = 83	White N = 161	P value	BH adjusted P value
SIGH-ADS 29-item total	22.23 (5.99)	20.55 (5.42)	.001	.006	24.45 (6.85)	23.56 (6.89)	.339	.529
HRD21	16.60 (4.73)	15.39 (4.42)	.003	.015	18.90 (5.44)	17.67 (5.55)	.097	.215
SIGH-ADS Atypical Item total	5.63 (2.63)	5.15 (2.34)	.033	.089	5.54 (2.72)	5.88 (2.81)	.371	.562
Depressed mood	1.42 (0.60)	1.36 (0.58)	.282	.49	1.60 (0.56)	1.55 (0.57)	.516	.667
Work and activities	1.62 (0.66)	1.40 (0.70)	<.001	.001	1.57 (0.75)	1.49 (0.70)	.448	.629
Genital symptom	1.19 (0.83)	1.10 (0.83)	.224	.417	1.24 (0.84)	1.09 (0.90)	.185	.362
Somatic gastrointestinal	0.84 (0.63)	0.68 (0.60)	.004	.016	1.05 (0.71)	0.89 (0.75)	.105	.227
Weight loss: history	0.39 (0.58)	0.33 (0.53)	.246	.45	0.46 (0.59)	0.27 (0.50)	.018	.057
Weight loss: actual	1.67 (0.58)	1.00 (0.82)	.262	.47	2.00 (0.00)	1.00 (1.41)	.5	.654
Carbohydrate craving or eating since pregnancy or last visit	0.61 (0.49)	0.55 (0.50)	.188	.362	0.61 (0.49)	0.65 (0.48)	.566	.706
Insomnia early (sleep onset insomnia)	0.79 (0.88)	0.64 (0.82)	.049	.122	1.18 (0.90)	0.95 (0.93)	.062	.15
Insomnia middle (sleep maintenance insomnia)	1.40 (0.74)	1.45 (0.70)	.401	.598	1.36 (0.82)	1.47 (0.74)	.305	.512
Insomnia late (early awakening)	0.73 (0.80)	0.49 (0.72)	.001	.004	0.82 (0.89)	0.58 (0.79)	.044	.112
Somatic symptoms general	1.14 (0.68)	1.18 (0.64)	.497	.654	1.18 (0.70)	1.28 (0.69)	.296	.506
Feeling of guilt	1.20 (0.75)	1.18 (0.64)	.678	.808	1.28 (0.80)	1.33 (0.72)	.62	.755
Suicide	0.15 (0.44)	0.08 (0.34)	.079	.182	0.34 (0.69)	0.21 (0.51)	.141	.294
Anxiety psychic	1.65 (0.60)	1.63 (0.62)	.738	.865	1.70 (0.58)	1.76 (0.65)	.471	.64
Anxiety somatic	1.37 (0.74)	1.33 (0.71)	.488	.654	1.36 (0.76)	1.44 (0.77)	.44	.629
Hypochondriasis	0.49 (0.61)	0.50 (0.65)	.934	.973	0.54 (0.63)	0.55 (0.77)	.962	.98
Insight	0.06 (0.24)	0.06 (0.23)	.809	.893	0.04 (0.19)	0.02 (0.14)	.452	.629
Retardation	0.41 (0.55)	0.19 (0.42)	<.001	<.001	0.46 (0.61)	0.29 (0.49)	.028	.082
Agitation	0.28 (0.58)	0.23 (0.55)	.338	.529	0.65 (0.92)	0.58 (0.86)	.549	.698
Severity of variation	0.66 (0.75)	0.94 (0.79)	<.001	<.001	0.59 (0.77)	0.81 (0.82)	.037	.098
Depersonalization and derealization	0.34 (0.57)	0.29 (0.53)	.312	.516	0.54 (0.69)	0.38 (0.59)	.067	.158
Paranoid symptoms	0.25 (0.44)	0.10 (0.31)	<.001	<.001	0.48 (0.61)	0.27 (0.46)	.006	.024
Obsessional and compulsive symptoms	0.20 (0.46)	0.24 (0.50)	.422	.621	0.43 (0.63)	0.42 (0.61)	.892	.954
Social withdrawal	1.39 (0.75)	1.16 (0.87)	.001	.004	1.57 (0.75)	1.28 (0.84)	.007	.03
Weight gain	0.11 (0.33)	0.08 (0.27)	.194	.367	0.05 (0.27)	0.16 (0.40)	.013	.047
Appetite increase	0.24 (0.71)	0.22 (0.59)	.777	.867	0.23 (0.61)	0.30 (0.74)	.437	.629
Increased eating	0.23 (0.65)	0.26 (0.58)	.587	.724	0.30 (0.69)	0.33 (0.71)	.767	.867
Carbohydrate craving or eating	0.89 (0.87)	0.72 (0.75)	.022	.067	0.81 (0.77)	0.86 (0.76)	.631	.76
Hypersomnia	0.17 (0.65)	0.09 (0.40)	.141	.294	0.19 (0.71)	0.19 (0.66)	.945	.973
Fatigability	1.99 (0.93)	1.97 (0.95)	.751	.865	1.81 (0.96)	1.93 (0.90)	.328	.529
Diurnal variation type B	0.61 (0.75)	0.66 (0.77)	.457	.629	0.59 (0.70)	0.84 (0.87)	.017	.056

Abbreviations: AA = African-American, BD = bipolar disorder, BH = Benjamini-Hochberg, GAD = generalized anxiety disorder, HRD21 = Hamilton Rating Scale for Depression, 21-Item Version, MDD = major depressive disorder, NOS = not otherwise specified, PTSD = posttraumatic stress disorder, SIGH-ADS = Structured Interview Guide for the Hamilton Depression Rating Scale with Atypical Depression Supplement.

racial bias.³⁰ Our finding that 40% of Black women who had a positive depression screen had a diagnosis of MDD is strengthened by the sample size and use of structured interviews but contrasts with studies that report less or higher rates of MDD in small sample sizes (ranging from 8 to 162 Black participants).⁷⁻⁹

Higher rates of BD in Black perinatal people, found in this study, differ from reports that Black and White nonperinatal people have a similar prevalence of BD when diagnosed by standardized assessment.²⁸ Because BD is a severe mental illness that increases the risk of poor pregnancy and birth outcomes when under-recognized and under-diagnosed, we aim to increase awareness of postpartum BD across racial groups. Black patients with BD have historically been mis- and under-

diagnosed. Timely and accurate diagnosis of BD is necessary to prevent inappropriate treatment (ie, unopposed antidepressants), and disparities in prevalence may reflect a need for more focused assessment as well as prevention and intervention strategies among Black perinatal patients.¹⁵

Some investigators have suggested that optimal cutoffs for perinatal depressive screening should be lower than the standard cutoffs when assessing Black perinatal individuals of low socioeconomic status.⁸ It is possible that Black participants with negative screens would have been diagnosed with MDD if they were assessed with a diagnostic examination. Few studies have investigated the sensitivity and specificity metrics of the EPDS in the Black population. Without validation,

the optimal cut point for a positive EPDS in the Black perinatal population is unclear.

The clinical characteristics that differed between groups are important for intervention planning. We found that a history of trauma as well as comorbid PTSD was common among those diagnosed with a mood disorder.^{35,36} The rates of MDD in both groups in our sample are higher than the general US population.³⁷ Black participants with MDD were disproportionately affected by abuse. Women with BD of both races had strikingly similar and high rates of abuse. In an evaluation of the relationship between childhood maltreatment and depressive symptom severity, clinical symptoms of MDD were significantly associated with depression scores and childhood trauma.³⁸ Symptoms associated with maltreatment were anxiety, psychomotor retardation, diurnal variation, and disordered sleep,³⁸ with the latter 3 being included in the set of symptoms we identified as more common in Black compared to White individuals with MDD.

Perhaps most importantly, childhood trauma also was associated with the presentation and severity of BD, including suicidality, level of functioning between episodes, earlier onset of disease, rapid cycling, and comorbid substance abuse.³⁹ An important environmental risk factor for postpartum BD may be trauma history, which warrants consideration of interventions for perinatal women with a trauma history.

Limitations

The groups of Black and White participants in this study cannot be assumed to be generalizable to all populations of perinatal individuals of these races. Although demographic data were included for the participants who underwent the diagnostic interview, the initial study was not designed to measure parameters of social or structural determinants of health. Additionally, screened individuals did not complete diagnostic assessments if they scored less than 10 on the EPDS and/or declined the diagnostic interview.

We acknowledge that using White women as a comparison population can appear to equate “White” with “standard.” Our intent is to demonstrate that certain differences in the presentation of postpartum mood disorders exist between populations and may be useful to further investigate to establish culturally appropriate and strategic interventions.

Self-report measures, and even standardized clinician-administered assessments, are inherently subjective. Though the EPDS is designed to be patient-sensitive in phrasing questions and eliciting responses, thresholds for positive responses may differ between individuals and between groups. We also acknowledge that many individuals identify with several or no racial

groups. An attempt was made to include LatinX ethnicity as a third group, but the number of participants was insufficient for analysis. Thus, the complexities of racial and ethnic identity may have been lost as it relates to postpartum mental health.

The inclusion criteria for the original screening protocol were broad and inclusive since the objective was to characterize a population of women defined by the delivery of a live infant. This was a population defined by obstetrical delivery and not by any psychiatric variable. No data were collected on whether the participants were receiving psychiatric treatment; however, it is likely that successfully treated women did not screen positive at the initial telephone contact. Some data were not collected or stratified based on treatment status, so we cannot speculate as to the influence of prior treatment on diagnosis or presentation in the postpartum setting.

CONCLUSION

These results compel advocacy for the allocation of resources and services for the prevention and treatment of postpartum mood disorders, with specific attention to Black populations of low socioeconomic status. Such efforts could reduce morbidity and mortality for peripartum women, their children, and their families. Due to the high rates of trauma in this population, investigations to explore the integration of trauma-informed care are needed to improve outcomes. Research strategies to define the rate and characteristics of postpartum major mood disorders in populations matched for sociodemographic characteristics and social determinants of health between Black and White populations would elucidate the drivers of the differences observed here.

Article Information

Published Online: November 20, 2024. <https://doi.org/10.4088/JCP.23m15023>
© 2024 Physicians Postgraduate Press, Inc.

Submitted: July 17, 2023; accepted August 23, 2024.

To Cite: Burchfield TN, Yang A, Wisner KL, et al. Rates of major depressive disorder and bipolar disorder in Black and White postpartum women. *J Clin Psychiatry*. 2024; 85(4):23m15023.

Author Affiliations: Northwestern University Feinberg School of Medicine, Asher Center for the Study and Treatment of Depressive Disorders, Chicago, Illinois (Burchfield, Yang, Wisner, Clark); University of Toronto, Women's College Hospital, Toronto, Ontario, Canada (Clark).

Corresponding Author: Crystal T. Clark, MD, MSc, Crystal T. Clark, MD, MSc, Department of Psychiatry, Women's College Hospital, 76 Grenville St, 7th Floor Toronto, ON M5S 1B2, Canada (crystal.clark@wchospital.ca).

Relevant Financial Relationships: Dr Clark serves as a mental health consultant for 7 Starling and has served on the advisory boards for Biogen and 6 Sense Strategy group, for which she has received honoraria. Dr Wisner, Mss Burchfield, and Yang have no financial relationships to disclose.

Funding/Support: This research was supported by funding by the National Institute of Child Health and Human Development (R01 MH071825, Identification and Therapy of Postpartum Depression; PI, Wisner) and the Asher Center for the Study and Treatment of Depressive Disorders.

Role of the Sponsor: The sponsors had no role in the design, management, analysis, or interpretation of the data and did not aid in the creation of the manuscript.

Previous Presentation: These data were presented at the International Society for Bipolar Disorders conference; June 23, 2023; Chicago, Illinois.

Acknowledgments: We thank Karlene Cunningham, PhD, at East Carolina University, and Sheehan Fisher, PhD, at Northwestern University, for their contributions to the manuscript regarding inclusive language and reporting. Dr Fisher is on an advisory board for Woebot Health; is a consultant for Mavida Health and Nurtur; had received grant/research support from the National Institute of Mental Health and the National Institute on Minority Health and Health Disparities. Dr Cunningham has no relevant financial relationships to disclose.

References

- Henshaw C. Mood disturbance in the early puerperium: a review. *Arch Womens Ment Health*. 2003;6(suppl 2):S33–S42.
- Lubotzky-Gete S, Ornoy A, Grotto I, et al. Postpartum depression and infant development up to 24 months: a nationwide population-based study. *J Affect Disord*. 2021;285:136–143.
- Gavin NI, Gaynes BN, Lohr KN, et al. Perinatal depression: a systematic review of prevalence and incidence. *Obstet Gynecol*. 2005;106(5 Pt 1):1071–1083.
- Merrill L, Mittal L, Nicoloro J, et al. Screening for bipolar disorder during pregnancy. *Arch Women's Ment Health*. 2015;18(4):579–583.
- Siu AL, Bibbins-Domingo K, Grossman DC, et al; US Preventive Services Task Force USPSTF. Screening for depression in adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2016;315(4):380–387.
- ACOG Committee Opinion no. 757: screening for perinatal depression. *Obstet Gynecol*. 2018;132(5):e208–e212.
- El-Ibary SY, Hamilton SP, Abel R, et al. A pilot study evaluating genetic and environmental factors for postpartum depression. *Innov Clin Neurosci*. 2013; 10(9–10):15–22.
- Tandon SD, Cluxton-Keller F, Leis J, et al. A comparison of three screening tools to identify perinatal depression among low-income African American women. *J Affect Disord*. 2012;136(1–2):155–162.
- Yonkers KA, Ramin SM, Rush AJ, et al. Onset and persistence of postpartum depression in an inner-city maternal health clinic system. *Am J Psychiatry*. 2001; 158(11):1856–1863.
- Pearlstein T, Howard M, Salisbury A, et al. Postpartum depression. *Am J Obstet Gynecol*. 2009;200(4):357–364.
- Goodman SH, Tully EC. Recurrence of depression during pregnancy: psychosocial and personal functioning correlates. *Depress Anxiety*. 2009;26(6): 557–567.
- Howell EA, Mora PA, Horowitz CR, et al. Racial and ethnic differences in factors associated with early postpartum depressive symptoms. *Obstet Gynecol*. 2005; 105(6):1442–1450.
- Tabb KM, Hsieh WJ, Gavin AR, et al. Racial differences in immediate postpartum depression and suicidal ideation among women in a Midwestern delivery hospital. *J Affect Disord Rep*. 2020;1:100008.
- Hutto HF, Kim-Godwin Y, Pollard D, et al. Postpartum depression among White, African American, and Hispanic low-income mothers in rural southeastern North Carolina. *J Community Health Nurs*. 2011;28(1):41–53.
- Sharma V, Doobay M, Baczynski C. Bipolar postpartum depression: an update and recommendations. *J Affect Disord*. 2017;219:105–111.
- Sit DK, Wisner KL. Identification of postpartum depression. *Clin Obstet Gynecol*. 2009;52(3):456–468.
- Munk-Olsen T, Laursen TM, Pedersen CB, et al. New parents and mental disorders: a population-based register study. *JAMA Psychiatry*. 2006;296(21): 2582–2589.
- Regier DA, Myers JK, Kramer M, et al. The NIMH Epidemiologic Catchment Area program: historical context, major objectives, and study population characteristics. *Arch Gen Psychiatry*. 1984;41:934–941.
- Barnes A. Race and hospital diagnoses of schizophrenia and mood disorders. *Soc Work*. 2008;53(1):77–83.
- Neighbors HW, Trierweiler SJ, Ford BC, et al. Racial differences in DSM diagnosis using a semi-structured instrument: the importance of clinical judgment in the diagnosis of African Americans. *J Health Soc Behav*. 2003;44(3):237–256.
- Wisner KL, Sit DKY, McShea MC, et al. Onset timing, thoughts of self-harm, and diagnoses in postpartum women with screen-positive depression findings. *JAMA Psychiatry*. 2013;70(5):490–498.
- First MB, Gibbon M. The structured clinical interview for DSM-IV Axis I Disorders (SCID-I) and the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II). *Compr Handb Psychol Assess*. 2004;2:134–143.
- Cox J, Holden J. *Perinatal Mental Health: A Guide to the Edinburgh Postnatal Depression Screening Scale*. Bell & Bain Ltd; 2003.
- Hamilton M. A rating scale for depression. *J Neurol Neurosurg Psychiatry*. 1960; 23(1):56–62.
- Ware J Jr., Kosinski M, Keller SD. A 12-Item Short-Form Health Survey: construction of scales and preliminary tests of reliability and validity. *Med Care*. 1996;34(3):220–233.
- Benjamini Y, Hochberg Y. Controlling the false discovery rate: a practical and powerful approach to multiple testing. *J R Stat Soc Ser B Methodol*. 1995;57(1):289–300.
- R Core Team. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing; 2020. Accessed February 26, 2024. <https://www.R-project.org>.
- Jackson JS, Torres M, Caldwell CH, et al. The National Survey of American Life: a study of racial, ethnic and cultural influences on mental disorders and mental. *Int J Methods Psychiatr Res*. 2006;13(4):196–207.
- Walton QL, Shepard Payne J. Missing the mark: cultural expressions of depressive symptoms among African-American women and men. *Soc Work Ment Health*. 2016;14(6):637–657.
- Stevens NR, Heath NM, Lillis TA, et al. Examining the effectiveness of a coordinated perinatal mental health care model using an intersectional-feminist perspective. *J Behav Med*. 2018;41(5):627–640.
- Sidebottom AC, Vacquier M, LaRusso E, et al. Prenatal and postpartum depression diagnosis in a large health system: prevalence and disparities. *Ann Med*. 2023;55(2):2281507.
- Guintivano J, Manuck T, Meltzer-Brody S. Predictors of postpartum depression: a comprehensive review of the last decade of evidence. *Clin Obstet Gynecol*. 2018; 61(3):591–603.
- Agrawal I, Mehendale AM, Malhotra R. Risk factors of postpartum depression. *Cureus*. 2022;14(10):e30898.
- Zhao XH, Zhang ZH. Risk factors for postpartum depression: an evidence-based systematic review of systematic reviews and meta-analyses. *Asian J Psychiatry*. 2020;53:102353.
- Finkelhor D, Shattuck A, Turner HA, et al. The lifetime prevalence of child sexual abuse and sexual assault assessed in late adolescence. *J Adolesc Health*. 2014; 55(3):329–333.
- Schoedl AF, Costa MCP, Mari JJ, et al. The clinical correlates of reported childhood sexual abuse: an association between age at trauma onset and severity of depression and PTSD in adults. *J Child Sex Abus*. 2010;19(2):156–170.
- NIMH. Major depression. *National Institute of Mental Health*. U.S. Department of Health and Human Services; 2023.
- Wang Q, He C, Fan D, et al. Neural effects of childhood maltreatment on dynamic large-scale brain networks in major depressive disorder. *Psychiatry Res*. 2022;317: 114870.
- Leverich GS, Post RM. Course of bipolar illness after history of childhood trauma. *Lancet*. 2006;367(9516):1040–1042.