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Treatment Use and Preference in a Diverse Sample of Women With Mood Disorders

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Abstract

Objectives: To examine differences in treatment use and preference among women with mood disorders based on race, ethnicity, and type of health insurance.

Methods: Women (N = 2,877) with depression, anxiety, and bipolar disorders were surveyed in primary care and specialty clinics affiliated with the National Network of Depression Centers from January 2018 to December 2020. Logistic regression was employed to examine the probabilities of Black, White, and Hispanic women, who varied on public (government-funded) vs private insurance, using and preferring

medication, psychotherapy, or complementary treatments.

Results: Black women had lower odds of receiving medications for treatment of all mood disorders, while White women had higher odds. For example, in treatment of depression, the odds ratio (OR) for Black women was 0.435 (P = .011), while the OR for White women was 2.048 (P=.009). Hispanic women had higher odds of using complementary treatments than other women. For example, in treatment of anxiety, their OR was 2.346 (P=.008). Across mood disorders, governmentfunded (Medicaid/Medicare) coverage was associated with greater use of psychotherapy and complementary treatments (ORs ranging from 1.529 to 5.011) as well as greater medication use

for bipolar disorder (OR = 5.805, P = .027). Psychotherapy was preferred by the majority of all women (55.5%), although preferences for other treatments differed between racial/ethnic groups.

Conclusions: Research is needed regarding the degree to which clinicians are offering varied treatments to diverse women with mood disorders and how clinicians consider women's preferences. Results highlight the necessity for treatment that integrates culturally based values and preferences, along with policies that ensure treatment access for women who are privately insured.

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ood disorders are common, debilitating psychiatric conditions and leading causes of years lived with a disability. Sex differences in mood disorders are well recognized, with women twice as likely to experience depression and anxiety as men² and more susceptible to rapid cycling and antidepressant-induced rapid cycling bipolar disorder. Despite their prevalence and impact among women, mood disorder treatment rates are not optimal. Some evidence suggests that reduced access to and use of treatment may be influenced by race and ethnicity. as well as type of health insurance coverage.

Influence of Race and Ethnicity

The non-Hispanic White community has typically shown higher rates of mental health screening and referrals to subsequent treatment compared to other racial and ethnic groups.¹⁰ For example, the Centers for

Disease Control and Prevention's Pregnancy Risk Assessment Monitoring Survey demonstrated significantly lower mental health treatment access for all racial and ethnic minorities compared with White women. However, White women perceived similar barriers to mental health care access and more frequently reported cost as a barrier to treatment. Still, among women on Medicaid who initiated treatment for postpartum depression, White women were more likely than Black and Hispanic women to receive follow-up care. Regarding preferences for treatment of depression, White individuals have indicated a predilection for medications over talk therapy, although gender differences were not noted in that study.

In contrast to White women, Black women are often screened for mental health conditions at lower rates, are referred for care less often, and experience less evidence-based care. ^{14,15} Barriers to Black women receiving

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Clinical Points

- Little is known about how race, ethnicity, and type of health insurance may influence women's use of and preference for treatment of mood disorders. However, we found these factors to be significant.
- Clinicians may enhance the likelihood that women will use and adhere to treatment if they consider women's views of the pros, cons, and feasibility of various treatment approaches.

services have been identified across system levels, including less disclosure of mental health concerns, fear and skepticism of the health care system, discriminatory mental health screening and treatment, and lack of care accessibility (eg, proximity, transportation, cost). ^{16–20} Black women have frequently noted a preference toward nonpharmacologic treatment for their mental health concerns. ^{18,19}

Compared to non-Hispanic White people, Hispanic individuals often experience significantly lower treatment rates for depression and anxiety and are more likely to receive inadequate care for bipolar disorder.^{21,22} Hispanic women may encounter barriers to accessing and utilizing treatment, including lack of health insurance, language and acculturation challenges, fears associated with immigration and legal systems, discrimination, and mental health stigma in Hispanic communities.^{23–25} A study of Hispanic mothers experiencing depression found they preferred to first rely on their own resources, then formal support systems such as home-visiting nurses, followed by behavioral therapy. Medications were viewed as acceptable only in severe cases.²⁶ However, health care discrimination has been associated with Hispanics' preference for medications over psychotherapy.²⁷

The Influence of Health Insurance

Health care in the US is funded primarily by either private or public (federal or state government) insurance. Private health insurance plans (eg, employer-sponsored or purchased directly from insurance companies) are often viewed as offering more comprehensive coverage of medical services, elective treatments, and specialized care as well as access to a broader network of care providers. However, public health insurance in the US (eg, government-funded Medicaid and Medicare) exists to ensure that every individual has access to health care services, regardless of their financial circumstances.

Expanding insurance coverage to increase treatment access has been a major policy and research focus.²⁸ As the largest provider of coverage in the country, Medicaid primarily funds health care services to children and adults with limited incomes and resources.²⁹ Medicare is a US government-funded insurance program for

individuals 65 years of age and older, as well as for certain younger people with disabilities.³⁰ Research has shown that both Medicaid and Medicare expansion can improve access to care, diagnosis, and treatment for persons with depression,^{31–33} even in locations where shortages of mental health professionals exist.³⁴ However, expansion of government-funded care has not always enhanced behavioral health treatment.^{35,36}

When comparing private and public insurance, some research indicates that type of coverage has no effect on treatment for young adults who are depressed.³⁷ In other research, individuals who were publicly insured had greater access to mental health specialists than did the privately insured.^{38,39} This finding is supported by data from the National Alliance on Mental Illness, noting that private health plans typically offer fewer mental health services than Medicaid or public health programs (www. nami.org).

Study Purpose

Although treatments commonly used for mood disorders are known, less is understood about how factors such as race, ethnicity, and health insurance coverage influence treatment utilization among women. Women from Hispanic and Black communities, or with limited insurance coverage, may face disparities in treatment for their mood disorders. Further, almost nothing is known about the preferences for type of treatment among women from different racial and ethnic groups. The purpose of this study was to examine treatment use and treatment preferences in a diverse sample of women with mood disorders (depression, bipolar disorder, anxiety) recruited from different primary care and specialty settings. Based on limited research to date, we hypothesized that (1) Black and Hispanic women will report less use of all types of mental health treatment relative to White women, (2) women whose care is covered by government-funded insurance will use more types of all mental health treatment than those with private insurance, and (3) racial and ethnic groups will differ in their preferences for type of mental health treatment.

METHODS

Data Collection

Women 18 years of age and older were recruited from 17 clinics in obstetrics-gynecology (OB/GYN), primary care, and psychiatry that were affiliated with the National Network of Depression Centers (NNDC). Survey collection was approved by the institutional review board (IRB) of each participating institution or given waivers by the IRB if the surveys were anonymous, including no personally identifiable information.

Data used for this analysis were collected as part of a larger study in which participants completed a self-report questionnaire developed by the Women and Mood Disorders Research Group of the NNDC.40 Women did not receive reimbursement for completing the survey. While a few sites used paper questionnaires, most entered data directly from mobile or other devices to a Research Electronic Data Capture (REDCap) platform housed at the University of California, San Francisco Data Coordinating Center.

One set of questions involved demographic information. Available data on race and ethnicity allowed for assessment of Black/African American, White/ European American, and Hispanic/Latina women. Data distinguished women covered by either private insurance or government-supported insurance (Medicare/ Medicaid). A second set of questions identified diagnoses and treatment women received for depression, bipolar depression, and anxiety. Women reported any diagnosis they were given by a health provider for a mental health disorder (eg, major depressive disorder) and selected from a list the specific type(s) of treatment they received for that mental disorder. Options for treatment received were (1) counseling or talk therapy, (2) prescription medications, or (3) complementary/integrative approaches such as support groups, meditation, spiritual/religious counseling, stress reduction, or self-help. The final set of questions acquired data on women's treatment preferences. Participants were asked to identify which type of treatment they preferred from the following options: (1) counseling/talk therapy, (2) medications, (3) video teletherapy, (4) support groups, or (5) complementary/integrative approaches (eg, stress reduction, diet, yoga). Participants were asked to select their first and second preferences. Because many participants selected only 1 type of treatment, their primary preference was used in analysis.

Data Analysis

We employed logistic regression to examine the association of race, ethnicity, and health care insurance coverage to the type of treatment women received. In separate models, receipt (or not) of each type of treatment was the categorical dependent variable, with race, ethnicity, and health insurance being the predictors while adjusting for one another. We also used logistic regression to examine whether race and ethnicity predicted women's preference for each type of treatment. These regressions examined treatment preference overall and were not linked to treatment of a particular disorder. Chi-square tests were also employed to evaluate differences in the frequency with which women of a specific racial or ethnic group preferred each type of treatment in contrast to other women. Age was considered as a potential covariate in our models, but it

Table 1. Characteristics of the Sample (N = 2,877)

Variable	N	Percen
Race/ethnicity ^a		
White/European American	1,875	65.2
Black/African American	426	14.8
Hispanic/Latina	270	9.4
Other ancestry or mixed race	306	10.6
Reproductive status		
Menstruation	1,553	54.0
Pregnancy	288	10.0
Postpartum	115	4.0
Menopause	921	32.0
Relationship status		
Single	691	24.0
Married/partnered	1,611	56.0
Separated/divorced/widowed	575	20.0
Education		
High school or less	529	18.4
Associate degree	472	16.4
Bachelor's degree	938	32.6
Advanced degree	938	32.6
Clinical setting where recruited		
Obstetrics/gynecology	2,296	79.8
Primary care	518	18.0
Psychiatry	63	2.2
Depression (PHQ-9), screened positive	561	19.5
Anxiety (GAD-7), screened positive	768	26.7

^aWhite and Black women are all non-Hispanic.

Abbreviations: GAD-7 = Generalized Anxiety Disorder-7, PHQ-9 = Patient Health Questionnaire-9

had no association to type of treatment used (odds ratios [ORs] = 0.97-1.00) or preference for any treatment (ORs = 0.99-1.00). We used IBM SPSS Statistics (Version 29) for analyses and evaluated all tests of significance with a 2-sided α of 0.05.

RESULTS

Sample Characteristics

Table 1 shows demographic and clinical characteristics for our sample of 2,877 women, recruited from 3 clinical settings (OB/GYN, primary care, and psychiatry) across 17 sites. 79.8 percent were enrolled from obstetrics and gynecology, 18% from primary care, and 2.2% from psychiatry. Women had a mean age of 39.44 years (14.16), with a range from 18 to 90 years. 65.2% of the sample was White/European American, 14.8% was Black/African American, and 9.4% was Hispanic/Latina. 56% of the women were married or in a committed relationship. 65.2% of the participants had a bachelor's degree or higher. The health care of 78.8% (n = 2,267) of women was covered by private insurance while the remaining 21.2% (n = 610) were covered by Medicare or Medicaid.

Table 2.

Odds of Receiving Psychotherapy for Treatment of Mood

Disorders by Race/Ethnicity and Type of Health Care Coverage

	В	SE	OR	P value	95% CI
Depression					
Black	-0.178	0.49	0.837	.719	0.317-2.209
Hispanic	0.467	0.50	1.596	.351	0.598-4.257
White	0.326	0.40	1.386	.422	0.625-3.071
Medicaid/Medicare (vs private insurance)	0.986	0.33	2.679	.003	1.402-5.120
Bipolar disorder					
Black	-1.574	0.74	0.207	.034	0.048-0.889
Hispanic	-0.131	0.77	0.877	.866	0.192-4.002
White	1.135	0.58	3.111	.050	1.100-9.689
Medicaid/Medicare (vs private insurance)	1.612	0.71	5.011	.024	1.240-10.250
Anxiety					
Black	-0.269	0.56	0.764	.635	0.252-2.319
Hispanic	0.153	0.43	1.166	.722	0.501-2.714
White	-0.068	0.46	0.934	.884	0.375-2.326
Medicaid/Medicare (vs private insurance)	0.671	0.30	1.957	.027	1.080-3.545

The mean depression score for women on the Patient Health Questionnaire-9 was 5.39 (5.59), indicating mild depression on average. However, 19.5% met the cutoff of 10 for clinically significant depression, and 7.3% were in the range indicating moderately severe or severe depression. The mean score on the Generalized Anxiety Disorder Scale-7 was 5.36 (5.37), reflecting mild anxiety on average. 26.7% of women met the cutoff for clinically significant anxiety, with 9% scoring in the range of severe anxiety.

Treatment by Race and Ethnicity

Table 2 shows data for reported use of psychotherapy by women of different racial and ethnic groups. Black women in treatment for bipolar disorder had an approximately 80% decrease in their odds of undergoing psychotherapy than other women (OR=0.207). In contrast, White women with bipolar disorder had 3 times greater odds of being in psychotherapy (OR=3.11). Race and ethnicity were not associated with the probability of psychotherapy use in treatment of depression or anxiety.

However, as shown in Table 3, Black women had significantly decreased odds of using medications than other women for depression (OR = 0.435), bipolar disorder (OR = 0.134), and anxiety (OR = 0.379). White women had the opposite effect, with increased odds of using medication for all 3 disorders, ranging from 2.05 (OR = 2.048) times greater odds for depression to 3.89 greater odds (OR = 3.885) of medication use for bipolar disorder than other women.

For complementary/alternative approaches, effects were found specifically for Hispanic women (Table 4). They had significantly greater odds of using these approaches for treatment of both depression

(OR = 1.66) and anxiety (OR = 2.34) than other women.

Treatment by Health Care Coverage

Across mood disorders, women whose care was covered by Medicare or Medicaid had increased odds of engaging in various treatments than women with private insurance. The effects were especially strong for bipolar disorder where women with government-supported insurance (Medicare/Medicaid) had 5.01 times greater odds of psychotherapy (Table 2) and 5.80 times greater odds of medication use (Table 3) than women with private insurance. Women supported by government health insurance also had greater odds of using psychotherapy and complementary/alternative approaches for both depression and anxiety than women covered by private insurance. As shown in Tables 2 and 4, their odds were 2.68 and 2.16 times greater for depression and 1.96 and 1.53 greater for anxiety.

Preference for Treatments by Race and Ethnicity

As shown in Figure 1, the preferred choice for treatment of their mood-related problems was psychotherapy across all racial and ethnic groups (N = 1,597; 55.5% of women overall). Hispanic women indicated a slightly greater preference for psychotherapy (64.1%) than other women, although this differential effect by ethnicity was not significant. White women (27%) had 2.13 times greater odds of preferring medication than other women (B = 0.79, OR = 2.13, P = .006; see Table 5). Chi-square analysis reinforced this finding, indicating that the frequency with which White women preferred medication as a treatment was significantly higher than for other women ($\chi^2 = 16.40$,

Table 3.

Odds of Receiving Medications for Treatment of Mood Disorders by Race/Ethnicity and Type of Health Care Coverage

	В	SE	OR	P value	95% CI
Depression					_
Black	-0.832	0.33	0.435	.011	0.229-0.827
Hispanic	0.308	0.46	1.361	.506	0.548-3.379
White	0.717	0.27	2.048	.009	1.200-3.495
Medicaid/Medicare (vs private insurance)	0.322	0.27	1.380	.243	0.803-2.371
Bipolar disorder					
Black	-2.009	0.71	0.134	.005	0.033-0.543
Hispanic	1.374	1.11	3.951	.217	0.447-14.947
White	1.357	0.59	3.885	.021	1.224-12.335
Medicaid/Medicare (vs private insurance)	1.759	0.81	5.805	.027	1.191–18.282
Anxiety					
Black	-0.970	0.36	0.379	.007	0.188-0.764
Hispanic	-0.052	0.40	0.950	.898	0.430-2.099
White	0.958	0.28	2.605	.001	1.486-4.568
Medicaid/Medicare (vs private insurance)	0.586	0.31	1.797	.057	0.982–3.290

Table 4.

Odds of Using Complementary or Alternative Approaches for Treatment of Mood Disorders by Race/Ethnicity and Type of Health Care Coverage

	В	SE	OR	P value	95% CI
Depression					
Black	0.145	0.32	1.156	.655	0.611-2.186
Hispanic	0.508	0.26	1.661	.049	1.043-2.772
White	-0.196	0.26	0.822	.449	0.496-1.365
Medicaid/Medicare (vs private insurance)	0.770	0.16	2.159	.001	1.583-2.944
Bipolar disorder					
Black	0.795	0.86	2.215	.356	0.408-12.013
Hispanic	0.613	0.63	1.845	.332	0.536-6.356
White	0.502	0.71	1.651	.478	0.413-6.609
Medicaid/Medicare (vs private insurance)	0.682	0.39	1.977	.079	0.923-4.235
Anxiety					
Black	0.064	0.42	1.066	.879	0.470-2.419
Hispanic	0.853	0.32	2.346	.008	1.251-4.398
White	-0.117	0.33	0.889	.727	0.461-1.715
Medicaid/Medicare (vs private insurance)	0.424	0.18	1.529	.021	1.066-2.193

P=.001). In addition, although not one of their strongest preferences as a group (favored by 5.8%), Black women had 3.62 times greater odds of preferring support groups than other women (B = 1.29, OR = 3.62, P = .006). Chisquare results also showed that Black women had a significantly higher frequency of preferring support groups than did other women (χ^2 = 7.903, P = .005). Likewise, although selected by a small percent overall (4.3%), Hispanic women had approximately 3½ times greater odds of preferring teletherapy than did Black and White women (B = 1.25, OR = 3.48, P = .027). Chisquare analysis affirmed that Hispanic women more frequently selected teletherapy as their preference than did other women (χ^2 = 3.699, P = .05).

DISCUSSION

Across mood disorders, Black women were less likely to have used medication, while White women were more likely to have used it. Black women were also less likely to have been in psychotherapy for bipolar disorder in contrast to White women. Hispanic women reported significantly greater use of complementary approaches for depression and anxiety than other women. In contrast to women with private insurance, women covered by Medicare or Medicaid had increased odds of using psychotherapy for all mood disorders, complementary approaches for depression and anxiety, and medications for bipolar disorder. While all groups of

Figure 1.

Percent of Women From Different Racial and Ethnic Groups Who Reported Various Types of Treatment as Their Preferred Choice

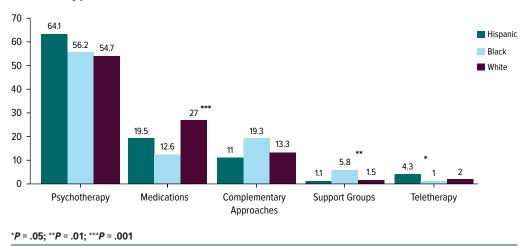


Table 5.

Odds of Women From Different Racial and Ethnic Backgrounds Preferring Medications for Treatment of Mood Disorders

	В	SE	OR	P value	95% CI
Black	-0.389	0.37	0.681	.294	0.327-1.402
Hispanic	-0.189	0.28	0.830	.494	0.482-1.422
White	0.757	0.28	2.13	.006	1.229-3.702

women preferred psychotherapy over other options, each racial/ethnic group had unique preferences for other treatments.

Treatments Used

In concert with our results, other research has shown that Whites are more likely to receive medication than Blacks for treatment of psychiatric disorders, including mood disorders. 41,42 Considering the value of medication in preventing adverse outcomes such as suicide in bipolar disorder, our finding may reflect less adequate treatment for this disorder among Black women.⁴³ In contrast to our findings, previous studies indicate that Black individuals are more likely than Whites to receive psychotherapy for bipolar disorder.41,42 Our results may differ for 2 reasons: (1) the types of health care settings reflected in our study (ie, more OB/GYN and primary care clinics) were unlike those in previous research, and (2) our sample was exclusively women, while both male and female participants were included in prior studies. Our findings do raise concern about potential disparities in treatments provided to Black women for bipolar disorder. Such disparities have garnered concern

previously, along with a call for action to address this issue.⁴⁴

Our research supports prior findings that use of complementary therapies such as herbal remedies and prayer are higher among Hispanic than White women. 45 Further, Rhee et al 46 found that Hispanics were more likely than other groups to use traditional healers to manage psychological distress. The belief that Hispanic women should be the spiritual pillars of the family has been associated with greater use of home remedies, herbs, or folk healers in lieu of conventional health care. 47,48 However, it is noteworthy that Hispanic women reported less preference for complementary approaches to treat their mood disorders than did other women. Research is needed to understand the degree to which they use these approaches because of familial and cultural expectations rather than a personal predilection for their use.

Irrespective of racial/ethnic background, women with Medicare/Medicaid coverage were more likely to engage in all types of treatment than those with private insurance. This finding is somewhat unexpected considering the belief that privately funded care provides more comprehensive health coverage than publicly funded care. However, increased coverage by private insurance may not actually be the case for mental health care. Dieleman et al49 found in their analysis of US health care spending that 53.4% of depression care was covered by public insurance in contrast to only 37.7% by private insurance, with the remainder of costs assumed by patients themselves ("out-of-pocket"). They discovered an even greater disparity for treatment of individuals having bipolar disorder, with 73.6% of care funded by public insurance in contrast to 21.6% by private insurance. Although we do not know the specific reasons for these disparities, some private health insurance plans impose limitations on preexisting conditions, restricting

availability of treatment for individuals with more severe and chronic mood disorders. Furthermore, individuals may not be able to pay their insurance deductible, required copay, or portion of the costs not covered by private insurance reimbursements. ⁵⁰ These requirements for increased cost sharing by patients can have a negative impact on treatment engagement and resource use.

Our results reinforce previous findings that individuals who are publicly insured have greater access to options and specialists for their mental health care than do the privately insured.^{38,39} Individuals with private insurance often experience a lack of available mental health providers in their networks, long wait times for appointments, higher out-of-pocket spending for mental health care, and restrictions that limit access to specific mental health services.^{38,51}

Treatment Preference

Our finding that, regardless of race or ethnicity, women prefer psychotherapy as a treatment is supported by a previous meta-analysis⁵² as well as a study of patients receiving depression treatment in primary care.⁵³ Women's comfort with and perceived benefit from talking about their feelings with others as well as potential concerns about side effects of medications may underlie their preference for psychotherapy. However, reasons for this inclination need further study.

Previous research also supports our findings regarding the preference of White women for medications, indicating that, regardless of gender, White individuals appear more comfortable with medications as a treatment modality than Black or Hispanic persons.54 In fact, Sonik et al¹³ reported that Whites preferred medication over talk therapy. This preference may reflect its perceived convenience over other forms of treatment. In addition, the lower interest among other racial/ethnic groups in pharmacotherapy may reflect a distrust of its use by the medical system, less access to information about this option, or cultural beliefs about drugs that are not held by White women. Racial/ethnic groups are typically underrepresented in clinical trials research which can also contribute to perceived suitability, treatment utilization, and preference.55

Our finding that Black women prefer support groups more than other women further supports their preference for nonpharmacologic treatments. Neal-Barnett et al⁵⁶ have shown the effectiveness of "Sister Circles," or groups of mutually supportive Black women, in the treatment of anxiety. Support groups with women of similar racial/ethnic backgrounds can provide an avenue to discuss gendered racism and other stressors that Black women may experience.⁵⁰ Research indicates they view support groups as providing information and knowledge sharing, emotional or psychological support, instrumental support, and coaching.⁵⁷

Lastly, previous research supports our finding that Hispanics view teletherapy and telehealth positively, including Mexican American women experiencing perinatal depression³¹ and individuals from underserved Hispanic border communities.⁵⁸ Preference for teletherapy may stem from its convenience, less need for arranging childcare or time off work, travel-related cost savings, or reduced anxiety when talking about distressing feelings in one's own home.

Strengths and Limitations

Study strengths include a large sample of women across the lifespan from varied health settings and geographical areas. Three mood disorders were represented, and treatments were examined beyond the most widely established practices of psychotherapy and medication.

However, some populations (eg, Asian Americans) were not represented, and no data were available regarding gender identification. Specific details were not available about the nature of treatments, when they were received, or their frequency or duration. Data were based on self-report, with potential for recall bias or misinterpretation by women regarding their treatment. Findings are not necessarily generalizable to settings or patient populations not reflected in the sample. Participation of women and sites was voluntary, and this may limit generalizability. Also, findings related to health care insurance may not apply to countries with health care systems having features such as universal health care that differ from the US.

CONCLUSIONS AND IMPLICATIONS

We cannot know from our data whether Black women were offered fewer options for their treatment (eg. medication or psychotherapy for their bipolar disorder) or declined options that were offered. Further research is needed to understand how preferences of women are taken into account in treatment decisions and if providers are routinely discussing the availability and advantages of varied approaches with women. This is especially important for Black and Hispanic women who frequently experience barriers to treatment access and culturally competent care. Inequities in treatment discussions can create eventual disparities in mood outcomes for women. Future research should identify how to best integrate culturally based values and preferences into individualized treatment of women's mood disorders. Working directly with patient advocacy groups to enhance research designs and treatment modalities is one potential approach. The alignment of patient care preferences with the availability of a robust mental health workforce may be a key component of accessing and sustaining care, both within specialty and primary health settings. Offering women the opportunity to work with clinicians of similar race and gender may also be important. Understanding engagement patterns and variation in women's experiences of the care they receive is essential for enhanced quality of care. This knowledge can inform clinicians regarding culturally competent strategies for engagement and participation of women in care.

Findings from this study reaffirm the importance of integrating mental health care within primary care and other nonpsychiatric settings to promote timely, evidence-based treatment, particularly among women who may encounter disproportionate barriers to specialty mental health care. Moreover, results indicate the importance of government funding for mental health care, considering the greater engagement in treatment among women covered by Medicaid and Medicare than among women who were privately insured. Policies that ensure access to treatment and sustained funding for assessment and treatment of a broad spectrum of women with depression, anxiety, and bipolar disorder are critical, including an infrastructure that supports mental health care across the lifespan. Such policies are particularly essential at a time when women's mood disorders and their adverse outcomes (such as suicide and life-threatening substance abuse) are increasingly prevalent.

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References

- 1. GBD 2019 Mental Disorders Collaborators. Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet Psychiatry. 2022;
- 2. Seney ML, Sibille E. Sex differences in mood disorders: perspectives from humans and rodent models. Biol Sex Differ. 2014;5:17-10.
- 3. Rubinow DR, Schmidt PJ. Sex differences and the neurobiology of affective disorders. Neuropsychopharmacology. 2019;44(1):111-128.
- 4. Villamil Grest C, Siantz E, Cederbaum J. Behavioral health services use among racial and ethnic groups: results from the California Health Interview Survey (CHIS). J Immigr Minor Health. 2022;24(1):118-124.
- 5. Ertel KA, Rich-Edwards JW, Koenen KC. Maternal depression in the United States: nationally representative rates and risks. J Womens Health. 2011;20(11): 1609-1617
- 6. Boyd RC, Joe S, Michalopoulos L, et al. Prevalence of mood disorders and service use among US mothers by race and ethnicity: results from the National Survey of American Life. J Clin Psychiatry. 2011;72(11):1538-1545.
- 7. Dagher RK, Pérez-Stable EJ, James RS. Socioeconomic and racial/ethnic disparities in postpartum consultation for mental health concerns among US mothers. Arch Womens Ment Health. 2021;24(5):781-791.
- 8. Walker ER, Cummings JR, Hockenberry JM, et al. Insurance status, use of mental health services, and unmet need for mental health care in the United States. Psychiatr Serv. 2015;66(6):578-584.
- 9. Wharam JF, Busch AB, Madden J, et al. Effect of high-deductible insurance on health care use in bipolar disorder. Am J Manag Care. 2020;26(6):
- 10. Terlizzi EP, Zablotsky B. Mental health treatment among adults: United States, 2019. NCHS Data Brief. 2020(380):1-8.
- Haight SC, Daw JR, Martin CL, et al. Racial and ethnic inequities in postpartum depressive symptoms, diagnosis, and care in 7 US jurisdictions: study examines racial and ethnic inequities in postpartum depressive symptoms, diagnosis, and care. Health Aff. 2024;43(4):486-495
- 12. Kozhimannil KB, Trinacty CM, Busch AB, et al. Racial and ethnic disparities in postpartum depression care among low-income women. Psychiatr Serv. 2011; 62(6):619-625.
- 13. Sonik RA, Creedon TB, Progovac AM, et al. Depression treatment preferences by race/ethnicity and gender and associations between past healthcare discrimination experiences and present preferences in a nationally representative sample. Soc Sci Med. 2020;253:112939.
- 14. Hansen MED, Tobón AL, Haider UK, et al. The Role of Perinatal Psychiatry Access Programs in Advancing Mental Health Equity. Elsevier; 2023.
- 15. Hahm HC, Cook BL, Ault-Brutus A, et al. Intersection of race-ethnicity and gender in depression care: screening, access, and minimally adequate treatment. Psychiatr Serv. 2015;66(3):258-264.
- 16. Copeland VC, Snyder K. Barriers to mental health treatment services for lowincome African American women whose children receive behavioral health services: an ethnographic investigation. Soc Work Public Health. 2011;26(1):
- 17. Gaston GB, Earl TR, Nisanci A, et al. Perception of mental health services among Black Americans, Soc Work Ment Health, 2016:14(6):676-695.
- Leis JA, Mendelson T, Perry DF, et al. Perceptions of mental health services among low-income, perinatal African-American women. Women's Health Issues. 2011;21(4):314-319.
- 19. Nelson T, Shahid NN, Cardemil EV. Do I really need to go and see somebody? Black women's perceptions of help-seeking for depression. J Black Psychol. 2020; 46(4):263-286.
- 20. Nicolaidis C, Timmons V, Thomas MJ, et al. "You don't go tell white people nothing": African American women's perspectives on the influence of violence and race on depression and depression care. Am J Public Health. 2010;100(8): 1470-1476.

- 21. Collado A, Lim AC, MacPherson L. A systematic review of depression psychotherapies among Latinos. *Clin Psychol Rev.* 2016;45:193–209.
- Salcedo S, McMaster KJ, Johnson SL. Disparities in treatment and service utilization among Hispanics and non-Hispanic whites with bipolar disorder. J Racial Ethn Health Disparities. 2017;4(3):354–363.
- Lara-Cinisomo S, Clark CT, Wood J. Increasing diagnosis and treatment of perinatal depression in Latinas and African American women: addressing stigma is not enough. Women's Health Issues. 2018;28(3):201–204.
- Lara-Cinisomo S, Fujimoto EM, Oksas C, et al. Pilot study exploring migration experiences and perinatal depressive and anxiety symptoms in immigrant Latinas. *Matern Child Health J.* 2019;23(12):1627–1647.
- Soto Mas F, Jacobson HE. Advancing health literacy among Hispanic immigrants: the intersection between education and health. Health Promot Pract. 2019;20(2): 251–257.
- Lara-Cinisomo S, Wisner KL, Burns RM, et al. Perinatal depression treatment preferences among Latina mothers. *Qual Health Res.* 2014; 24(2):232–241.
- 27. Cook BLPA, Cortés DE, McCormick D, et al. Comparing Preferences for Depression and Diabetes Treatment among Adults of Different Racial and Ethnic Groups Who Reported Discrimination in Health Care. 2021. Accessed August 6, 2024. https://www.pcori.org/research-results/2016/comparing-preferencesdepression-and-diabetes-treatment-among-adults-different-racial-and-ethnicgroups-who-reported-discrimination-health-care
- Guth M, Garfield R, Rudowitz R. The effects of Medicaid expansion under the ACA: updated findings from a literature review. *Kaiser Family Foundation*. 2020; 37(6):944–950.
- Donohue J, Cole ES, James CV, et al. The US Medicaid program: coverage, financing, reforms, and implications for health equity. *JAMA*. 2022;328(11): 1085–1099.
- El-Nahal W. An overview of Medicare for clinicians. J Gen Intern Med. 2020; 35(12):3702–3706.
- Baker-Ericzén MJ, Connelly CD, Hazen AL, et al. A collaborative care telemedicine intervention to overcome treatment barriers for Latina women with depression during the perinatal period. Fam Syst Health. 2012;30(3):224.
- Mahajan S, Caraballo C, Lu Y, et al. Trends in differences in health status and health care access and affordability by race and ethnicity in the United States, 1999–2018. JAMA. 2021;326(7):637–648.
- 33. Jun H, Mattke S, Chen A, et al. The value of Medicare coverage on depressive symptoms among older immigrants. *Gerontologist*. 2024;64(2):gnad070.
- Fry CE, Sommers BD. Effect of Medicaid expansion on health insurance coverage and access to care among adults with depression. Psychiatr Serv. 2018;69(11):1146–1152.
- Zuvekas SH, McClellan CB, Ali MM, et al. Medicaid expansion and health insurance coverage and treatment utilization among individuals with a mental health condition. J Ment Health Pol Econ. 2020;23(3):151–182.
- Hockenberry J, Wen H, Druss BG, et al. No improvement in mental health treatment or patient-reported outcomes at Medicare ACOs For Depression And Anxiety Disorders. Health Aff. 2023;42(11):1478–1487.
- Gliske K, Berry KR, Ballard J, et al. Mental health outcomes for youths with public versus private health insurance attending a telehealth intensive outpatient program: quality improvement analysis. *JMIR Form Res.* 2022;6(11):e41721.
- Busch SH, Kyanko K. Assessment of perceptions of mental health vs medical health plan networks among US adults with private insurance. *JAMA Netw Open*. 2021;4(10):e2130770–e2130770.
- Rowan K, McAlpine DD, Blewett LA. Access and cost barriers to mental health care, by insurance status, 1999–2010. Health Aff. 2013;32(10):1723–1730.

- Weiss SJ, Flynn H, Christian L, et al. Symptom profiles of women at risk of mood disorders: a latent class analysis. J Affect Disord. 2021;295:139–147.
- Coleman KJ, Stewart C, Waitzfelder BE, et al. Racial-ethnic differences in psychiatric diagnoses and treatment across 11 health care systems in the mental health research network. *Psychiatr Serv.* 2016;67(7):749–757.
- McGregor B, Li C, Baltrus P, et al. Racial and ethnic disparities in treatment and treatment type for depression in a national sample of Medicaid recipients. *Psychiatr Serv.* 2020;71(7):663–669.
- Johnson KR, Johnson SL. Inadequate treatment of Black Americans with bipolar disorder. Psychiatr Serv. 2014;65(2):255–258.
- Akinhanmi MO, Biernacka JM, Strakowski SM, et al. Racial disparities in bipolar disorder treatment and research: a call to action. *Bipolar Disord*. 2018;20(6): 506–514.
- Green RR, Santoro N, Allshouse AA, et al. Prevalence of complementary and alternative medicine and herbal remedy use in Hispanic and non-Hispanic white women: results from the study of women's health across the nation. J Altern Complement Med. 2017;23(10):805–811.
- Rhee TG, Evans RL, McAlpine DD, et al. Racial/Ethnic differences in the use of complementary and alternative medicine in US adults with moderate mental distress: results from the 2012 National Health Interview Survey. J Prim Care Community Health. 2017;8(2):43–54.
- Dillon FR, Ertl MM, Corp DA, et al. Latina young adults' use of health care during initial months in the United States. Health Care Women Int. 2018;39(3):343–359.
- Wallace PM, Torres S, Beltran J, et al. Views of mammography screening among US Black and Hispanic immigrant women and their providers. Health Care Women Int. 2014;35(10):1181–1200.
- Dieleman J, Cao J, Chapin A, et al. US health care spending by payer and health condition, 1996-2016. JAMA. 2020;323(9):863–884.
- Fusco N, Sils B, Graff JS, et al. Cost-sharing and adherence, clinical outcomes, health care utilization, and costs: a systematic literature review. J Manag Care Spec Pharm. 2023;29(1):4–16.
- Presskreischer R, Barry CL, Lawrence AK, et al. Factors affecting statelevel enforcement of the Federal Mental Health Parity and Addiction Equity Act: a cross-case analysis of four states. *J Health Polit Policy Law*. 2023; 48(1):1–34.
- McHugh RK, Whitton SW, Peckham AD, et al. Patient preference for psychological vs pharmacologic treatment of psychiatric disorders: a meta-analytic review. J Clin Psychiatry. 2013;74(6):595–602.
- Dorow M, Löbner M, Pabst A, et al. Preferences for depression treatment including internet-based interventions: results from a large sample of primary care patients. Front Psychiatry. 2018;9:181.
- Givens JL, Houston TK, Van Voorhees BW, et al. Ethnicity and preferences for depression treatment. Gen Hosp Psychiatry. 2007;29(3):182–191.
- National Academies of Sciences Engineering, and Medicine. Improving representation in clinical trials and research: building research equity for women and underrepresented groups. 2022.
- Neal-Barnett A, Stadulis R, Murray M, et al. Sister circles as a culturally relevant intervention for anxious African American women. *Clin Psychol*. 2011;18(3): 266–273.
- Fongwa MN, dela Cruz FA, Hays RD. African American women's perceptions of the meaning of support groups for improving adherence to hypertension treatment: a conceptual model. *Nurs Open*. 2019;6(3):860–870.
- Ghaddar S, Vatcheva KP, Alvarado SG, et al. Understanding the intention to use telehealth services in underserved Hispanic border communities: cross-sectional study. J Med Internet Res. 2020;22(9):e21012.