Introduction

Race/ethnic differences in prevalence rates of postpartum depression (PPD) have been shown to be inconsistent. PPD rates in African American and Hispanic women have been found to be higher [1], lower [2], or no different [3, 4] compared to Whites. The DSM considers depression and anhedonia as crucial components to the diagnosis of depression. In general, reported depression is often calculated by summing across endorsed symptoms. However, it is possible that the endorsement of specific depression symptoms differs by race/ethnicity. First, the concept of depression differs across various cultural groups. Depressed mood is often considered as higher negative affect whereas loss of interest is often construed as lowered positive affect [5]. Studies have documented cultural differences with respect to levels of negative and positive affect [5, 6]. Although one may have a diagnosis of depression with just anhedonia and other symptoms, clinicians may be less likely to consider anhedonia as a depressive symptom.

Based on this literature, our study comprised of the following aims:

1. To examine rates of depressed mood and anhedonia in Massachusetts women by race/ethnicity.
2. To explore the associations between risk factors and depressed mood and anhedonia by race/ethnicity.

Methods

This study used the MA PRAMS from 2007-2008, a population-based survey data administered to postpartum women from Massachusetts. The goal of PRAMS is to monitor maternal behaviors and experiences of women before, during, and after pregnancies that include live births. The particular dataset used for this study was provided by the Massachusetts Department of Public Health (MDPH).

Participants

• MA mothers at 2-6 month postpartum
• Study sample for analysis included 2,423 women

Method

• Mothers completed surveys and non responders to the survey responded by telephone
• The sample was randomized without replacement and stratified by birth weight
• The final dataset was weighted for stratification, non-selection, and non-response

Analyses

• To account for the stratified and weighted sample, the Complex Samples module of SPSS version 17.0 was used
• Race-stratified logistic regressions incorporated all predictors with sociodemographic variables as covariates

Results

Table 1: Weighted percentage of endorsed depression items among women who completed the MA PRAMS from 2007-2008, by characteristic according to race/ethnicity

| Race/Ethnicity | Depressed Mood | Anhedonia | | | |
|----------------|---------------|-----------|------|------|
| Asian/Pacific | 10.2 | 3.1 | 12.6 | 1.0 |
| Black | 10.6 | 7.4 | 18.6 | 1.6 |
| Hispanic | 10.4 | 6.3 | 16.8 | 1.3 |
| White | 10.8 | 7.4 | 18.0 | 1.4 |

Table 2: Race/ethnicity stratified logistic regression showing adjusted odds of postpartum depression per predictor by race/ethnic group

Table 3: Race/ethnicity stratified logistic regression showing odds of high depressed mood by predictor

Table 4: Race/ethnicity stratified logistic regression showing odds of high loss of interest by predictor

Conclusions

To our knowledge, no other analytic study has examined racial/ethnic differences in the prevalence and predictors of depressed mood or anhedonia. Our prevalence rates of depressed mood is consistent with other studies attributing SES to elevated rates among Blacks and Hispanics [7, 8], although many of these studies do not isolate depressed mood from anhedonia. However, we found a greater prevalence and likelihood for anhedonia among Asian Americans and this is consistent with other studies which find that Asians tend to report lower levels of pleasure and interest but comparable negative affect [5, 6], and greater masking of high arousal positive emotions [9] compared to European Americans. Reports of loss of interest may be more normative for Asian Americans.

We confirmed that the number of stressors is highly associated with endorsement of depressed mood for all groups but that number of stressors was a risk factor for anhedonia only in Whites and Hispanics.

Being non-U.S. born was associated with anhedonia for Whites, Asians, and Blacks. Finally, infant gender was a risk factor for depressed mood that is unique to Asian Americans, and unintended pregnancy was a risk factor for depression only for Whites and Hispanics.

Implications

The meaning of “depressed mood” and “loss of interest” may differ across groups and health care providers should be attuned to the clinical relevance of any endorsements of these items according to the individual’s understanding of the terms.

Prenatal stress appears to be a major risk factor for all racial/ethnic groups studied. Efforts should be made to inquire about prenatal stress and to refer patients to appropriate resources during pregnancy.

References