

The relationship between diet quality and depressive symptoms in postpartum African American women

AnnaBeth Daley; Erin Ferranti, PhD, MPH, RN, FAHA
Nell Hodgson Woodruff School of Nursing, Emory University, Atlanta, GA



EMORY
NELL HODGSON
WOODRUFF
SCHOOL OF
NURSING

Background

- Postpartum depression (PPD) affects as many as 1 in 7 women in America
- PPD impairs maternal-child attachment and influences the child's development long-term
- Known risk factors for PPD include low income, low social support and high incidence of stressful life events
- African American women are at an increased risk for both depressive symptoms and poor diet quality
- Lower diet quality is associated with depressive symptoms in non-postpartum adults
- The relationship between diet quality and depressive symptoms has not yet been examined in postpartum African American women

Purpose

- To examine the relationship of diet quality and depressive symptoms in postpartum African American women



Methods

- Secondary analysis of a parent study exploring the relationship between biometric markers and cardiometabolic risk factors
- Women were recruited from prenatal clinics in the Atlanta-Metro Area
- Data collection occurred between 8 and 10 months postpartum

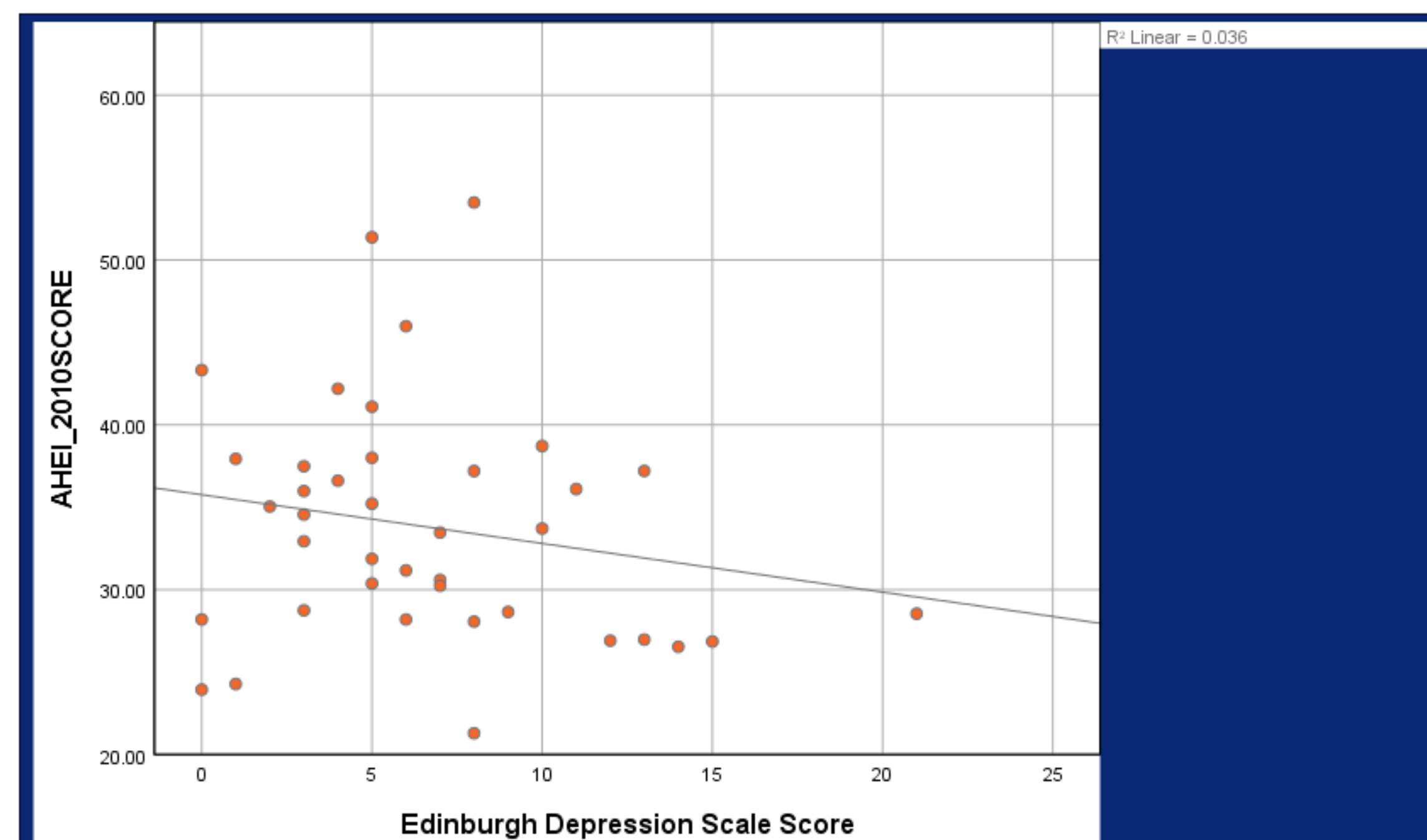
Instruments:

- Edinburgh Postnatal Depression Scale (EPDS)
- Block-Bodnar online Food Frequency Questionnaire (FFQ).
- Data from the FFQ was scored using the Alternate Healthy Eating Index-2010 (AHEI-2010). Scores can range from 0 – 110, with higher scores indicative of better diet quality.

Analysis:

- Descriptive statistics
- Dietary scoring into AHEI-2010
- Bivariate associations
- All analyses conducted using IBM SPSS version 25.

Scatterplot of Depressive Symptoms and AHEI-2010 Diet Quality



Results

Sample Characteristics (n=39)

| Characteristic | Study Sample |
|--|--------------|
| Age, mean years (SD) | 27.0 (4.9) |
| Education, n (%) | |
| < High School | 5 (12.9%) |
| High School Graduate | 13 (33.3%) |
| Some College/College Graduate | 21 (53.8%) |
| Marital Status, n (%) | |
| Single | 26 (66.7%) |
| Edinburgh Postnatal Depression Scale Score | |
| Mean (SD) | 6.6 (4.6) |
| Scores <13, n (%) | 34 (87%) |
| Scores ≥13, n (%) | 5 (13%) |
| AHEI-2010 Diet Score, mean (SD) | 33.8 (7.1) |

Depressive symptoms were not associated with AHEI-2010 diet scores ($r = -.19$, $p = .24$)

When dichotomized by categories of higher versus lower depressive symptoms, diet quality was higher in those with lower depressive symptoms ($M=34.5$, $SD=7.2$) compared to those with higher depressive symptoms ($M=29.2$, $SD=4.5$), but this was not statistically significant ($t(37) = 1.6$, $p = .13$).

Summary and Conclusions

- Overall diet quality as measured by the AHEI-2010 dietary score was suboptimal.
- Preliminary analysis indicates that there is not an association between continuous measures of depressive symptoms. However, when depressive symptoms were categorized by recommended cutoff scores, the trend indicated higher diet quality in women with less depressive symptoms.
- Our preliminary findings support the association between poor diet quality and higher depressive symptoms that have been reported in other populations.
- Further study is recommended in a larger sample size of postpartum African American women.
- There is a significant opportunity to develop and test culturally-tailored dietary interventions to improve overall diet quality in postpartum women.

Acknowledgement

Funding for this project was supported by an Emory University NIH/BIRCWH K12HD085850 and an NINR 1K01NR017664-01.

The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH