SEASONAL EFFECTS ON DEPRESSION RISK (EPDS≥10) AND SUICIDAL SYMPTOMS IN POSTPARTUM WOMEN.

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ABSTRACT

Objective: We examined the relationship between seasonal variation and risk for depression risk and suicidal ideation in postpartum women. Methods: From 2006-2010, women who were 4-6 weeks after delivery received telephone screenings for postpartum depression (PPD) through the Edinburgh Postnatal Depression Scale (EPDS). The outcome variables were EPDS≥10 (depression risk) and EPDS item10≥1 (suicidality). The explanatory variables included the calendar month used spectral analysis to explore seasonal variations in risk for depression and suicidal ideation. Results: The team screened 9339 women: 1316 (14%) had positive EPDS≥10 scores which suggested PPD risk; 294 (3%) had suicidal ideation (EPDS item10≥1). Patients with depression risk had high odds for any SI (OR=41; 95%CI 30-59); Depression risk peaked in the winter. We detected no seasonal peaks or trends in SI. Conclusions: Postpartum depressed patients may have changes in mood and anxiety. The biological effects of seasonal light may contribute to increased risk for depressive symptoms in some patients. Suicidal symptoms may be compounded by increased maternal stressors.

INTRODUCTION

Postpartum depression (PPD) is the most common complication after delivery. A new episode of PPD strikes 10 to 15% of women after childbirth. Patients with PPD respond to treatment with antidepressants. Many women also have seasonal affective disorder (SAD), which is common as it may contribute to increased risk for PPD in susceptible patients. Lasting episodes of PPD may occur in up to 10% of women who experience a first episode of PPD in the first year after birth. A new episode of PPD strikes 10 to 15% of mothers after childbirth. Patients with PPD respond to treatment with antidepressants.

METHODS

The University of Pittsburgh Institutional Review Board approved the study. This prospective study involved the screening of postpartum women for depression and suicidal ideation (SI). The outcome variables used were positive EPDS≥10 scores, rates of any SI (EPDS item10≥1), and suicidal ideation (SI) (EPDS item10≥1). We used spectral analysis to detect seasonal changes in PPD risk and SI. Conclusions: Postpartum depressed patients may have changes in mood and anxiety. The biological effects of seasonal light may contribute to increased risk for depressive symptoms in some patients. Suicidal symptoms may be compounded by increased maternal stressors.

RESULTS

Data Analysis. We assessed the cumulative percentage of patients, rates of positive EPDS scores, rates of any SI (item10>1), and suicidal ideation (SI) (item10>1) with depression risk had high odds for any SI (OR=41; 95%CI 30-59). Depression risk peaked in the winter. We detected no seasonal peaks or trends in SI. Conclusions: Postpartum depressed patients may have changes in mood and anxiety. The biological effects of seasonal light may contribute to increased risk for depressive symptoms in some patients. Suicidal symptoms may be compounded by increased maternal stressors.

DISCUSSION AND CONCLUSIONS

The rate of PPD risk (EPDS≥10) is consistent with reported rates (Gaynes et al, 2005). The winter peak in postnatal symptoms aligns with the winter peak in PPD risk for the autumn sample (O’Hara et al, 2005) but contrast with other findings (Jewell et al, 2010). The seasonal peak in mood symptoms may be from a pre-existing pattern of seasonal illness (Corral et al, 2007) or reduced sunlight exposure (Hiltunen et al, 2004)(Praschak-Rieder et al, 2008). Broader changes in neurotransmitter processes could explain the seasonal variations in depressive change in postpartum depression and winter depression. SAD patients with depression risk had high odds for any SI (OR=41; 95%CI 30-59) and suffer depression relapses with monoamine depletion (Lam et al, 2001). Increased winter depression risk is associated with reduced sunlight exposure (Lam et al, 2001). Winter depression risk is associated with 28% of maternal deaths in low-resource environments (Sacher et al, 2010). Winter depression risk is associated with 28% of maternal deaths in low-resource environments (Sacher et al, 2010).

REFERENCES


