

The impact of sociodemographic characteristics on postpartum depression in Hispanic women

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INTRODUCTION: Hispanic people living in the United States “bear a disproportionate burden of disease, injury, death, and disability” when compared to non-Hispanic white people¹. Postpartum depression falls into this category. Despite similar rates of postpartum depression in women of differing ethnicities, among low-income women, the odds of starting and continuing treatment for postpartum depression following delivery are significantly lower for Hispanic women compared to white women². Barriers to care has been hypothesized as a potential explanation, but has not been supported³. Other possible factors that may contribute to the healthcare disparity Hispanic women with postpartum depression face must be examined. Evidence suggests that various sociodemographic characteristics and maternal factors such as age⁴, breastfeeding duration⁵, and intimate partner violence⁶ may be associated with postpartum depression. This study further examines these and other maternal factors and their potential relationship with reliable change in the levels of depressive symptoms from late pregnancy to two months and six months postpartum in a sample of Hispanic women living in Davidson County, TN.

METHODS: Data for this secondary analysis were collected in an RCT conducted from July 2014 to September 2016 which assessed the efficacy of the Maternal Infant Health Outreach Worker (MIHOW) program (www.mihow.org), a peer mentoring home visitation program, in a sample of 188 Hispanic women⁷. A prospective, longitudinal experimental design with two study groups: comparison (printed educational material) and intervention (MIHOW home visits plus printed educational material) was used. Eligibility criteria included: age ≥ 18 , self-identification as Hispanic, confirmation of pregnancy ≤ 26 weeks gestation, and residence within 30 miles of study offices. Data was collected at five time points (prenatal through six months postpartum) using validated measures and questions from national surveys. The study was approved by the Vanderbilt University Institutional Review Board. The sample for the secondary analysis included the 178 participants who completed the parent study and their de-identified data related to: levels of depressive symptoms, acculturation, health literacy, parenting stress, and education, breastfeeding intent, duration, and self-efficacy, time living in the US, maternal age, presence of a medical provider, health insurance, and presence of infant NICU stay. Multivariate logistic regression was used to analyze the significance of each of these demographic variables in explaining

variance in reliable change in level of depressive symptoms. The following three variables were used as co-variables to control for changes in the outcome variable: 1) gestational age at study enrollment, 2) level of depressive symptoms at baseline, and 3) parent study group assignment.

RESULTS: The average maternal age at enrollment was 29.6 years (SD= 6.5). The median gestational age was 17.5 weeks. The median time lived in the USA was 9 years (IQR= 3-13). Mexico had the largest representation of home country (66.9%), followed by Honduras (15.7%) and El Salvador (9.6%). 19.3% of the subjects had graduated high school or completed a GED. 68.5% of the subjects earned less than \$10,000 yearly in family income, and 28.1% earned between \$10,001-\$15,000. Of the factors examined, the presence of health care coverage at two months postpartum was associated with a statistically significant decrease in level of depressive symptoms ($p = 0.017$, 95% CI 1.279 - 12.763) and a higher parental stress score at six months postpartum was associated with a statistically significant increase in level of depressive symptoms ($p = 0.02$, 95% CI 0.842 - 0.986).

DISCUSSION: The findings have clinical and research implications. Helping patients access available health care coverage and resources that may help lower their parenting stress are important factors to consider when caring for Hispanic women, particularly those with postpartum depression. Future research related to postpartum depression should include these variables and potential evaluation of interventions that may impact change. Further research into this healthcare disparity will increase our understanding of characteristics and maternal factors that may contribute to variability of depressive symptoms in Hispanic women and serve as the underpinnings for targeted culturally competent interventions and policies for a growing minority in the United States.

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