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Acculturative Stress and Lack of Social Support Predict Postpartum Depression Among U.S. Immigrant Women of Arabic Descent

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ABSTRACT

PURPOSE: To examine the relationships among acculturative stress, social support, and postpartum depression (PPD) symptoms among U.S. immigrant women of Arabic descent; and to examine if social support moderates the associations between acculturative stress and PPD symptoms.

METHODS: Using a cross-sectional design, a sample of 115 U.S. immigrant women of Arabic descent, all between 1 and 12 months postpartum, were enrolled from clinics in Dearborn, MI. Data were analyzed using correlational and multiple linear regression.

RESULTS: Women had a mean age of 29 ± 5 years and were 5 ± 4 months postpartum. Women had been in the U.S. for 7 ± 6 years and had a mean education of 12 ± 4 years. The majority had an annual household income of < $40,000 (88%), were unemployed (80%), and preferred Arabic language for interview (68%). Higher levels of acculturative stress, higher levels of education, antenatal anxiety, and lower levels of social support predicted PPD symptoms (all significant at $p < .05$). The moderating effect of social support on the association between acculturative stress and PPD symptoms was not supported.

CONCLUSIONS: Acculturative stress, lack of social support, higher level of education, and antenatal anxiety predicted PPD symptoms. Future research is needed to examine acculturative stress among immigrant women in different U.S. settings. Longitudinal studies and utilizing diagnostic assessments of PPD is highly recommended. Nurses need to screen immigrant women of Arabic descent for anxiety and depression during antenatal visits and develop evidence-based interventions targeted to improve mental health during pregnancy and postpartum.

INTRODUCTION

Becoming a mother is often a joyful, but also a stressful event for many women, and involves a huge emotional, physical, and social adjustment, in addition to engagement in new developmental tasks (Stapleton et al., 2012). Life changes, new responsibilities, and unfamiliar childcare practices accompanied with the transition from pregnancy to motherhood can leave women feeling isolated, lonely, and exhausted (Razurel, Bruchon-Schweitzer, Dupanloup, Irion, & Epiney, 2011). Due, in part, to many of these factors, the postpartum period has been defined as a time of increased vulnerability during which mothers can experience mood disorders (Gauthier, Guay, Senécal, & Pierce, 2010). Of these mood disorders, postpartum depression (PPD) is the most common (Miller, 2002). PPD affects 12–20% of United States (U.S.) mothers (Centers for Disease Control and Prevention [CDC], 2008). Recent research shows that 14% of new mothers in the U.S. may screen positive for PPD (Wisner et al., 2013). PPD has negative effects on the mother as well as on her children. Research has found that many mothers who suffer from PPD express withdrawal, negative emotions, and insensitive unresponsive interactions with their infants (O'Hara & McCabe, 2013), inadequate parenting (Forman et al., 2007), impaired maternal–infant bonding, and attachment insecurity (Huang, Lewin, Mitchell, & Zhang, 2012). Because they face significant and unique challenges due to cultural differences and variation in social constraints between their country of origin and their host country, such as language barriers, social isolation, and limited resources (Kim, Conway-Turner, Sherif-Trask, & Woolfolk, 2006; Tsai, Chen, & Huang, 2011; Tummala-Narra, 2004), immigrant women may be particularly at risk for the development of PPD.

Indeed, research suggests that PPD is prevalent among immigrant women. A recent systematic literature review reported an incidence of PPD symptoms among Arabic women living in the Middle East ranging

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from 10 to 37% (Alhasanat & Fry-McComish, 2015). In the U.S., studies that reported prevalence of PPD symptoms among immigrants were mainly conducted among Hispanic women and reported a prevalence of 43%–60% (Heilemann, Frutos, Lee, & Kury, 2004; Kuo et al., 2004; Lucero, Beckstrand, Callister, & Sanchez Birkhead, 2012; Shellman, Beckstrand, Callister, Luthy, & Freeborn, 2014). In a pilot study with a sample of 50 U.S. immigrant women of Arabic descent, 36% of these women were at high risk for developing PPD symptoms (Alhasanat, Fry-McComish, & Yarandi, 2017). These results suggest that immigrant women have high rates of PPD symptoms with a significant risk for the development of PPD.

Acculturative stress is a stress reaction in response to immigration manifested by uncertainty, anxiety, and depression (Berry, 1997). Few studies have addressed the role of acculturative stress on PPD or maternal mental health. Some of these studies found that acculturative stress was positively related to depressive symptoms during pregnancy and postpartum periods in Mexican American women (D'Anna-Hernandez, Aleman, & Flores, 2015; Zeiders, Umana-Taylor, Updegraff, & Jahromi, 2015). Acculturative stress was also found to be a predictor of depression among a sample of Arab Americans between 60 and 92 years old (Wrobel, Farrag, & Hymes, 2009). However, no published studies were identified that examined the relationship between acculturative stress and PPD symptoms among U.S. immigrant women of Arabic descent.

Social support is a facilitator of well-being during major life transitions and during stressful situations (Cohen & Wills, 1985). Although stressful life events often have deleterious effects on psychological health, social support has been found to limit these negative effects in two ways; main effect and stress-buffering effect (Cohen & Wills, 1985; House, Landis, & Umberson, 1988). In the main effect, social support has a direct positive effect on psychological health, thereby benefiting individuals during both stressful and non-stressful situations. According to this model, higher levels of social support are directly associated with higher levels of psychological well-being. Studies have examined the direct effects of social support on immigrant women. For instance, lack of social support predicted higher PPD among immigrant women in Canada and Taiwan (Chien, Tai, & Yeh, 2012; Dennis, Janssen, & Singer, 2004; Dennis & Ross, 2006; Huang & Mathers, 2008; Mechakra-Tahiri, Zunzunegui, & Seguin, 2007; Small, Lumley, & Yelland, 2003; Stewart, Gagnon, Merry, & Dennis, 2012; Stewart, Gagnon, Saucier, Wahoush, & Dougherty, 2008; Sword, Watt, & Krueger, 2006). A recent literature review reported that lack of social support was a risk factor for PPD among immigrant women and Arabic women in the Middle East (Alhasanat & Fry-McComish, 2015). A recent meta-analysis of 40 studies revealed that lack of social support is associated with perinatal depression among immigrant women from low to middle income countries (Fellmeth, Fazel, & Plugge, 2016). In stress-buffering effect, social support buffers the effects of stress on psychological health. The benefits of social support are most apparent when support is provided during times of high stress. According to the stress-buffering model, social support protects mental health by moderating the stressor's effect.

To date there have been no studies that have examined the relationship between social support and PPD symptoms in U.S. immigrant women of Arabic descent. Furthermore, no studies have examined the moderating effect of social support on the association between acculturative stress and PPD symptoms. Therefore, the purpose of this study was to examine the relationships among acculturative stress, social support (main effect) and PPD symptoms; and to examine whether social support moderates (stress-buffering effect) the associations between acculturative stress and PPD symptoms among U.S. immigrant women of Arabic descent (see Fig. 1).

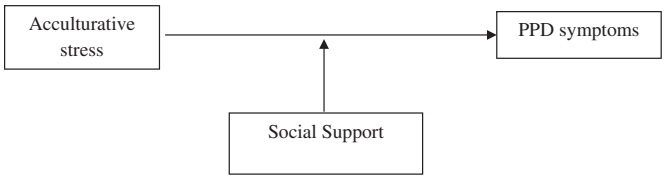

Fig. 1. Study framework.

MATERIALS AND METHODS

Design and Sample

Using a cross-sectional design, a convenience sample of 122 U.S. immigrant women of Arabic descent were enrolled. Seven women had > 20% missing data and were excluded from data analysis. The remaining 115 women had complete data and were included in data analysis. Inclusion criteria were: (a) 18–45 years old, (b) had a live birth, (c) were 1–12 months postpartum, (d) were born and grew up outside of the U.S. and came to U.S. after the age of 14, and (e) spoke and read either Arabic or English language. Women were excluded from the study if they: (a) were diagnosed with mental illness (major depression diagnosis, schizophrenia, bipolar disorder, or substance abuse), (b) were taking psychiatric medications; or (c) had self-reported HIV or cancer diagnoses. Women with cancer (Jacob, Kalder, Arabin, & Kostev, 2017) or HIV (Brittain et al., 2017) are at higher risk of developing depression and thus might influence the results of this study. Women were recruited from two sites in the Midwest that provide social and medical services to women of Arabic descent.

Variables and Instruments

Acculturative Stress

Acculturative Stress was measured using the Multi-Dimensional Acculturative Stress Inventory (MASI; Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002). MASI was originally developed for adults of Mexican origin to measure acculturative stress. The MASI was translated into Arabic to reflect Arabic culture and language (Wrobel et al., 2009). For example, the original scale included statements like "Because of my cultural background, I have a hard time fitting in with Whites," the word "Americans" was substituted for "Whites," since Arabs are classified as white (Wrobel et al., 2009). The total score for the 25 items can range from 0 to 125 with higher scores indicating higher levels of acculturative stress. (Wrobel et al., 2009). In this study, the modified Arabic and English versions were utilized and administered to participants according to their language preference. The 25-item MASI demonstrated good internal consistency reliability (Cronbach's $\alpha = 0.88$ for English version, and 0.79 for Arabic version).

Social Support

Social support was measured by the Multidimensional Scale of Perceived Social Support (MSPSS) which includes three subscales: family, friends and significant other (Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS was modified and translated into Arabic to measure perceived social support among Arab women and it was named MSPSS for Arab women (MSPSS-AW) (Aroian, Templin, & Ramaswamy, 2010). In the MSPSS-AW, spousal support is considered distinct from family support; therefore, the wording of MSPSS items on two of the original three MSPSS subscales were modified (Aroian et al., 2010). The MSPSS-AW has 12 items, with four items for each of the three sources of support (family, friends, and husband). In the MSPSS-AW, the 7-point Likert scale was collapsed into a 3-point Likert scale because Arabs are less likely to use middle response categories when presented with many options (Aroian et al., 2010). To maintain comparability with the original version of the scale, the 3-point Likert scale is coded as: 1 = *disagree*, 4 = *neutral* and 7 = *agree* (Aroian et al., 2010). Construct validity