



Immigrant and refugee women's post-partum depression help-seeking experiences and access to care: a review and analysis of the literature

J. O'MAHONY¹ RN PhD (c) & T. DONNELLY² RN PhD

¹Nursing Instructor, Faculty of Nursing, and ²Associate Professor, Faculty of Nursing and Department of Community Health Sciences, Faculty of Medicine, University of Calgary, Calgary, AB, Canada

Keywords: immigrant and refugee women, mental health care, post-partum depression

Correspondence:

J. O'Mahony

Faculty of Nursing

University of Calgary

2500 University DR NW

Calgary

AB T2N1N4

Canada

E-mail: jmomahon@ucalgary.ca

Accepted for publication: 9 August 2010

doi: 10.1111/j.1365-2850.2010.01625.x

Accessible summary

- This literature review on post-partum depression (PPD) presents an analysis of the literature about PPD and the positive and negative factors, which may influence immigrant and refugee women's health seeking behaviour and decision making about post-partum care.
- A critical review of English language peer-reviewed publications from 1988 to 2008 was done by the researchers as part of a qualitative research study conducted in a western province of Canada. The overall goal of the study is to raise awareness and understanding of what would be helpful in meeting the mental health needs of the immigrant and refugee women during the post-partum period.
- Several online databases were searched: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PsycINFO, MEDLINE (Ovid), EBM Reviews – Cochrane Database of Systematic Reviews.
- Review of the literature suggests:
 1. Needs, issues and specific risk factors for PPD among immigrant and refugee women have been limited.
 2. Descriptive accounts regarding culture and PPD are found in the literature but impact of cultural factors upon PPD has not been well studied.
 3. Few studies look at how social support, gender, and larger institutions or organizational structures may affect immigrant and refugee women's help-seeking and access to mental health care services.
 4. More research is needed to hear the immigrant and refugee women's ideas about their social support needs, the difficulties they experience and their preferred ways of getting help with PPD.

Abstract

This review and analysis of the literature is about the phenomenon of post-partum depression (PPD) and the barriers and facilitators, which may influence immigrant and refugee women's health seeking behaviour and decision making about post-partum care. As part of a qualitative research study conducted in a western province of Canada a critical review of English language peer-reviewed publications from 1988 to 2008 was undertaken by the researchers. The overall goal of the study is to raise awareness and understanding of what would be helpful in meeting the mental health needs of the immigrant and refugee women during the post-partum period. Several online databases were searched: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PsycINFO, MEDLINE (Ovid), EBM Reviews – Cochrane Database of Systematic Reviews. Findings suggest: (1) needs, issues and specific risk factors for PPD among immigrant and refugee women have been limited; (2) descriptive accounts regarding

culture and PPD are found in the literature but impact of cultural factors upon PPD has not been well investigated; (3) few studies examine how social support, gender, institutional and organizational structures present barriers to the women's health seeking behaviour; and (4) additional research is required to evaluate immigrant and refugee women's perspectives about their social support needs, the barriers they experience and their preferred support interventions.

Introduction

This literature review on post-partum depression (PPD) presents an analysis of the literature about (1) the phenomenon of PPD; and (2) barriers and facilitators that may influence immigrant and refugee women's health seeking behaviour and decision making about post-partum care. A critical literature review of English language peer-reviewed publications from 1988–2008 was undertaken by the researchers as part of a qualitative research study conducted in a western province of Canada. The overall goal of the study is to raise awareness and understanding of what would be helpful in meeting the mental health needs of the immigrant and refugee women during the post-partum period. Several online databases were searched: Cumulative Index to Nursing and Allied Health Literature, PsycINFO, MEDLINE (Ovid), EBM Reviews – Cochrane Database of Systematic Reviews. The reference lists of retrieved articles were perused to identify influential authors and seminal studies. Studies conducted outside of Canada should be considered and interpreted according to the Canadian context.

The key words used for the initial search were: immigrant and refugee women, post-partum depression, and mental health care.

Post-partum depression background

The number of immigrants and refugees coming to Canada from non-European countries has increased significantly over the past several decades. There are over 31 million people living in Canada. Among them, over six million are immigrants (Statistics Canada 2007). According to the 2006 Census of Canada, Alberta has a population of over three million, of which 33.8% are immigrants. In Calgary, Alberta, immigrants make up 22.2% of the total population. Alberta is also home to 27 100 refugees, 11 800 of whom live in Calgary (Statistics Canada 2007). Past studies show that immigrants and refugees are more susceptible to mental illness because of potential mental health stressors, such as pre-migration experience, intolerable memories, acculturation, unemployment, and structural characteristics of the new society that oppress or limit opportunities for newcomers (Beiser 2005).

Moreover, studies reveal that many immigrant and refugee women suffer serious mental health problems such as depression, post-traumatic stress disorders, suicide, and psychosis (Shepherd 1992, Thurston & McGrath 1993, Cheung & Lin 1999, Li & Browne 2000, Bhui *et al.* 2003). How best to assist these escalating numbers of immigrant and refugee women to adapt to their new environment and to cope with mental illness such as PPD is a pressing issue for health care providers (Morrow & Chappell 1999, Meadows *et al.* 2001, Beiser 2005).

Post-partum depression has been described as a 'thief that steals motherhood' that is, it robs women of happiness during the first several weeks and months as new mothers (Beck, 2006, p. 40). Post-partum depression is a serious illness which can have long-lasting traumatic effects on a woman and her family; however, it is treatable (Small *et al.* 2003, Logsdon *et al.* 2006, Mechakra-Tahiri *et al.* 2007, Beck 2008b). Therefore, early detection and treatment of the problem is both valuable and important.

Until recently PPD research was focused more on the population as a whole and not specifically on the needs and issues of refugee and immigrant women (Kumar 1994, Bostock *et al.* 1996, Dennis *et al.* 2004, Goyal *et al.* 2005, Diaz-Granados *et al.* 2006, Stewart *et al.* 2008). Research on specific risk factors for PPD among immigrant and refugee women has been limited (Small *et al.* 2003, Zelkowitz *et al.* 2008). From the few qualitative studies done, the most commonly identified risk factors are lack of social support, multiple roles, stressful life events, and language barriers (Katz & Gagnon 2002, Small *et al.* 2003, Dennis 2004, Zelkowitz *et al.* 2004).

Global phenomenon

Post-partum depression in the first three months after birth affects 3–25% of all new mothers globally (Robertson *et al.* 2003, Posmontier & Horowitz 2004, Horowitz 2006, Dennis & Hodnett 2008, Beck 2008a). Post-partum depression is a universal phenomenon and not just restricted to industrialized Western societies or immigrant and refugee women (Affonso *et al.* 2000, Halbreich & Karkun 2006).

Affonso *et al.* investigated differences in post-partum symptoms among an international sample of 892 women

from nine countries and representing five continents. The Edinburgh Postnatal Depression Scale (EPDS) was used in this study to measure the risk of PPD. The study revealed that samples of Australia and the western European countries such as Sweden have the lowest levels of symptoms. While it is unclear why Australian women score low on the EPDS, Wickberg & Hwang (1996) found significant state support for Swedish women after childbirth including paternity leave. Mid-range levels were found in American women. The researchers postulate that advances in assessment, as well as education and treatment programmes in Western countries may buffer these women from depressive symptomatology and be responsible for the lower rates compared to high-risk countries. The highest levels of PPD are found in selected Asian and South American sites. Within these sites it is suggested that PPD may not be fully recognized as a health concern or illness. Kumar (1994) asserts that the physiology of pregnancy and childbirth is the same globally. However, the event is conceptualized and experienced differently by mothers and their community. Traditional Asian healing practices differ from Euro-American practices in that the focus is on achieving harmony and balance of internal and external forces (Fitch 2002). It has been established that some Asian women somatize their depressive symptoms (Kleinman 1996) thereby referring to their depressed feelings as wind inside the head (Lee *et al.* 2001) or express emotional problems as physical or childcare issues (Yoshida *et al.* 1997). Halbreich & Karkun's (2006) literature review on the prevalence of PPD from 143 studies in 40 countries reveals that there is a broad range of reported prevalence ranging from 0% to about 60% and that the widely cited mean prevalence of 10–15% is not the actual representation of the magnitude of this global problem.

Oates *et al.* (2004) conducted research in 11 countries to explore whether PPD is universally recognized and to enquire into new mothers', fathers' and health professional perceptions of appropriate health services available. The authors concluded that participants described a morbid unhappiness comparable to PPD; however, concerns were raised about the cross-cultural equivalence of PPD, and whether it was an illness remediable by health interventions.

Risk factors of post-partum depression

The exact cause of PPD remains uncertain, with general consensus suggesting there are psychological and psychosocial factors that predispose women to this condition (Dennis & Creedy 2007, Dennis & Letourneau 2007, Stewart *et al.* 2008, Beck 2008a). There is little evidence to support a biological origin (O'Hara 1997, Beck 2008a).

All women are at risk of developing PPD following childbirth (Robertson *et al.* 2004). Women who have one or more of the risk factors outlined below have a significantly higher chance of experiencing PPD.

Robertson *et al.* (2004) synthesized two meta-analyses conducted by Beck (2001) and O'Hara & Swain (1996) incorporating over 70 studies to summarize potential risk factors. Predictors are identified in order of magnitude: (1) strong to moderate risk factors – depression or anxiety during pregnancy, past history of depression, recent life stress, lack of social support; (2) moderate risk factors – high levels of childcare stress, marital relationship, neuroticism, low self-esteem, difficult infant temperament; (3) small risk factors – obstetric and pregnancy complications, socio-economic status (SES). It is of interest to note the following factors which were not associated with PPD: maternal age when the mother is over 18 years of age (although the incidence is much higher in teenage mothers), length of relationship with partner, parity, and education level (Robertson *et al.* 2004).

Migration

Past research has indicated migration status as a risk factor for depression during pregnancy and in the post-partum phase (Hyman & Dussault 2000, Mechakra-Tahiri *et al.* 2007, Zelkowitz *et al.* 2008). Little attention, however, has been focused on the relationship between immigration and PPD (Small *et al.* 2003). Immigrant and refugee women are exposed to significant risk factors that may affect mental health such as marginalization and minority status, pre-migration experience, intolerable memories, socio-economic disadvantage, poor physical health and difficulty adapting to host cultures (Dhooper & Tran 1998, Ziguras *et al.* 1999, Li & Browne 2000, Thompson 2000, Bhui *et al.* 2003, O'Mahony 2005). Although they may be at risk for poor health in the post-partum period, studies show that these women have difficulty meeting their mental health care needs and do not necessarily get the care they need even when health care is universally available (Morrow & Chappell 1999; Sword *et al.* 2006, Donnelly & McKellin 2007, O'Mahony & Donnelly 2007a).

Battaglini *et al.* (2001) investigated factors associated with immigration and perinatal risk of 91 immigrant and refugee women in eastern Canada. Their findings suggest that factors (arising from migration) such as social isolation, poverty, stress caused by war or persecution from country of origin and loss of family through immigration negatively impact the perinatal period. Zelkowitz *et al.* (2008) examined differing trajectories from pregnancy to post-partum and found that immigrant women who were not depressed prenatally but had developed post-partum depressive symptomatology showed various predisposing

risk factors during pregnancy. These included pre-migration stress, high perinatal anxiety and numerous somatic complaints. Zerkowitz *et al.* (2004) also found in previous research that stress associated with migration (housing difficulties, discrimination and prejudice issues, changes in income) were more common among immigrant women scoring 12 or higher on the EPDS.

Lack of social support

Psychosocial factors such as lack of support from formal and informal sources have been well documented as contributing causes (Bernazzani *et al.*, 1997, Beck 2001, Cairney *et al.* 2003, Robertson *et al.* 2004, Sword *et al.* 2006, Dennis & Letourneau, 2007). Although the concept of social support has a range of definitions, it is usually classified as either perceived or received support. Social support is also grouped as one of three essential types, each of which may be experienced as positive or negative: (1) emotional (e.g. feeling loved, cared for and valued); (2) informational (e.g. advice or guidance is given); and (3) instrumental (e.g. tangible help or assistance with tasks) (Broadhead *et al.* 1989, Orr, 2004). Social support is also a recognized determinant of psychological and physical health which may affect health-related beliefs and behaviours (Thornton *et al.* 2006, Dennis & Hodnett 2008).

It is widely established that women with less support also report increased symptoms of depression (Seguin *et al.* 1999; Forman *et al.* 2000, Dennis & Ross 2006, Letourneau *et al.* 2007). There have been consistent findings in epidemiological and meta-analyses studies that suggest lack of social support significantly increase the risk of PPD (Forman *et al.* 2000, Beck 2001, Dennis 2003). It is thought that during stressful times receiving support from family and friends is a protective factor against depression (Brugha *et al.* 1998). Analyses in predictive studies reveal that the following factors increase the likelihood of PPD: (1) social isolation (Small *et al.* 1997, Barclay & Kent 1998); (2) lacking friends or close confidants/partners (Logsdon & Usui 2001, Cairney *et al.* 2003, Dennis & Ross 2006); (3) lack of perceived support from primary social network group (Brugha *et al.* 1998); and (4) not having someone to share feelings with who has experienced a similar problem (Dennis & Letourneau 2007). In Canadian women, lower social support has been found to be an important predictor of PPD (Dennis *et al.* 2004, Dennis & Ross 2006).

Limited financial resources

Seguin *et al.* (1999) reported in a Canadian longitudinal study that low SES new mothers were more likely to experience higher depressive symptoms in the second month post-partum than higher SES mothers. They found that

chronic stressors (lack of money for daily needs, maternal and infant health issues, conflicts in social networks) coupled with poor social support were associated with PPD symptomatology. Many studies have suggested that low income, unemployment and financial strain have a predictive relationship to PPD (Sword 1997, Seguin *et al.* 1999; Beck 2001, Boyce 2003). Sword & Watt (2005) examined learning needs and SES at time of discharge from hospital and at four weeks post-partum. Learning needs included breast feeding, bottle feeding, infant care and behaviour, maternal physical and emotional changes, and family planning. Women of low SES were significantly more likely to report unmet learning needs (nine out of ten areas) as compared to women of higher SES. Recently, Kurtz Landy *et al.* (2008) compared socio-economically disadvantaged post-partum women's health, health service needs and utilization patterns with those of higher socio-economically advantaged post-partum women. Findings within this study of 1000 Canadian post-partum women reveal that socio-economically disadvantaged women were (1) less likely to report very good health; (2) more likely to be discharged from hospital <24 h; and (3) had increased rates of PPD symptoms (Kurtz Landy *et al.* 2008).

Social isolation

Immigrants may be at a higher risk because they are separated physically and culturally from their support systems. Studies often demonstrate that new immigrant mothers report feeling socially isolated and overwhelmed (Barclay & Kent 1998, Katz & Gagnon 2002, Robertson *et al.* 2004). Zerkowitz & Millet (1995) reported from a screened sample of 1559 childbearing women at six weeks post-partum that immigrant women living in Montreal had a 9.4% higher risk of depression compared to Canadian-born women (5.5%). Stewart *et al.* (2008) found similar results comparing post-partum newcomer women and Canadian-born women. Not only did they find newcomer women were at more risk for PPD, but that all groups of newcomer women with elevated EPDS scores had lower social support scores. Barclay & Kent (1998) pointed out that the new immigrant mother's difficulties are exacerbated because they often come from cultures where women are held in high esteem, valued and supported during this period in their life. Similarly, Oates *et al.* (2004) found that immigrant mothers may find themselves without a support net where normally they would have found recognition, nurturing and assistance within their culture.

Stuchberry *et al.* (1998) found that the type of social support and its significance vary according to the mother's cultural background. Culture may create expectations of support and even contribute to the woman's high expectations and her consequential feelings of failure. Stuchberry

et al. concludes that cultural factors intervene between social supports and PPD. Therefore, it is not surprising that childbearing immigrant and refugee women may be at considerable risk of PPD because of new environment stressors such as language barriers, separation from extended family and financial difficulties (Logsdon *et al.* 2000, Katz & Gagnon 2002, Zayas *et al.* 2002, Zelkowitz *et al.* 2004, 2008, Teng *et al.* 2007, Stewart *et al.* 2008).

Post-partum depression screening

Cox *et al.* (1987) developed a 10-item self-report scale EPDS to screen for PPD in the community. Scores below 10 indicate low risk with regular follow-up with the community health nurse and physician. Scores above the cut-point (a set marker) of 10 indicate mothers at risk. Mothers with scores greater than 10 should be referred to their physician and post-partum support services for further follow-up. Evidence from screening by means of the EPDS indicates higher risks and prevalence of PPD (Sword *et al.* 2006, Stewart *et al.* 2008, Zelkowitz *et al.* 2008). Even though this is a valid screening tool for identifying women who are at risk for PPD it should be noted that it does not constitute a psychiatric diagnosis of depression (Zelkowitz *et al.* 2004).

The EPDS is widely used to assess maternal depression subsequent to childbirth in many English speaking countries and is increasingly being used through translated versions in non-English speaking countries (Small *et al.* 2007). Small and colleagues compared English speaking and non-English speaking sample populations of post-partum mothers in Australia to test the performance of the EPDS. They concluded that the EPDS was an effective tool with good item consistency and stability in factor patterns across the samples. In other words, the scale is understood and completed similarly by women in these different groups. However, the authors do specify that careful translation processes and piloting of translations are always necessary.

Edinburgh Postnatal Depression Scale in the Canadian context

Most Canadian nurse researchers investigating PPD have used the EPDS (Dennis 2004, Dennis & Boyce 2004, Dennis & Ross 2006, Clarke 2008, Stewart *et al.* 2008). Presently, community health nurses in Alberta Health Services use the EPDS in secondary prevention of PPD at the 2-month clinic appointment. Cut-point scores of 10–11 in English or translated Punjabi indicate further follow-up to appropriate resources and communiqué to the physician. Scores >12 in English and Punjabi and scores >10 in trans-

lated Chinese, Arabic, Vietnamese or Spanish also indicate higher risk for PPD and therefore referral to post-partum support services and the physician. As part of the assessment to universal PPD screening the community health nurse also assesses post-partum coping and adjustment by observing maternal and parental behaviours, and as needed, asks key questions about activities of daily living such as sleeping, eating and perceived available support (Alberta Health Services-Child & Youth Community Health Services-Well Child Services 2008).

Recent research by Zelkowitz *et al.* (2008) found that 37.7% of the 106 immigrant women in their community sample collected in Canada scored above the cut-point on the EPDS. Stewart *et al.* (2008) also found immigrant women (35.1%) and refugee women (25.7%) were significantly more likely than Canadian women to score above the cut-point in the EPDS. A further sample of 1250 women (approximately one-third born outside of Canada) was assessed by Sword *et al.* (2006) in Ontario. This study found that 15% of the immigrant women scored above the cut-point as compared with 7% of Canadian-born women. Furthermore, immigrant women reported that they experienced poorer overall health in the first four weeks post-partum than women born in Canada. In spite of the greater likelihood of PPD coupled with poorer health, these same immigrant women were no more likely to ask for help than women born in Canada for their physical and emotional problems (Sword *et al.* 2006). Researchers in Vancouver found immigrant women were at greatest risk of developing persistent PPD from 1 to 8 weeks after childbirth (Dennis & Ross 2006).

Intervention and treatment options

Treatment may be divided into three key areas: support groups, psychopharmacologic treatment and interpersonal psychotherapy. A systematic review of 21 randomized controlled trials of preventative interventions was conducted by Boath *et al.* (2005) with five of the studies focusing on support groups. Of the five studies, two found the intervention reduced depressive symptoms whereas the other three trials did not detect a decrease. Psychopharmacologic options may be used for acute PPD which includes a combination of antidepressant medications and psychotherapy (Wallington 2003, Beck 2006, Dennis & Creedy 2007). Most common groups of antidepressant medications to treat PPD are specific serotonin reuptake inhibitors which include fluoxetine (prozac), sertraline (zoloft), paroxetine (paxil), and tricyclic antidepressants such as tofranil (imipramine) and elavil (amitriptyline) (Wisner *et al.* 1999).

Stuart & O'Hara (1995) suggested that disruption in relationships may contribute to PPD. In their study, interpersonal psychotherapy, which is a short-term therapy with a focus on relationships, was found to reduce depressive symptoms in the early post-partum period. In a similar study, Zlotnick *et al.* (2001) also found that this therapy reduced symptoms early in the post-partum period but longer term impact remains unclear. In Dennis's (2003) literature review there is continuing evidence indicating favourable results with lowered depressive scores and significant changes reported by participants (Stuart & O'Hara 1995, Spinelli 1997, O'Hara *et al.* 2000, Klier *et al.* 2001).

Findings have consistently suggested the importance of psychosocial factors and the salience of social supports, and therefore a variety of psychosocial and psychological interventions have been developed (Dennis & Creedy 2007). Interventions include cognitive-behavioural therapy with or without antidepressants (Appleby *et al.* 1997, Cooper *et al.* 2003), telephone-based peer support (Dennis 2003), non-directive counselling (Wickberg & Hwang 1996) and interpersonal psychotherapy (O'Hara *et al.*, 2000, Zlotnick *et al.* 2001, Beck 2006). Psychopharmacologic options may be used for acute PPD which includes a combination of antidepressant medications and psychotherapy (Wallington 2003, Beck 2006, Dennis & Creedy 2007).

Dennis & Kingston (2008) recently conducted randomized controlled trials of telephone support for pregnant and early post-partum women from countries such as Canada, the UK, Australia and the USA. The systematic review included 14 studies involving 8037 women to assess the effects of telephone-based support on PPD, low birth weight, preterm birth, breastfeeding and smoking. Overall preliminary results show that proactive telephone support may (1) decrease depressive symptomatology; (2) increase duration of breast feeding; (3) reduce the risk of low birth weight; and (4) aid in smoking relapse. The authors suggested there may be a role for telephone support in improving outcomes among pregnant and new mothers (Dennis & Kingston 2008).

Beck (2008a) conducted an integrative review of PPD research and found inconsistent findings reported in the interventions studies done by nurse researchers. For example, educational material such as pamphlets, videos or both provided to adolescent mothers ($n = 128$) in the prenatal and post-natal period did not lessen their depressive symptoms (Logsdon *et al.* 2005). Webster *et al.* (2003) conducted a randomized controlled trial that provided educational materials to women screened as high risk for PPD. They noted no statistically significant improvement in the intervention group. In contrast, Heh & Fu (2003) using a

randomized controlled study reported statistically significant improvement in Taiwanese women who received informational material. This area of intervention strategies continues to be underdeveloped and more research is essential (Beck 2008a). Future research needs to focus on intervention strategies that have been developed in collaboration with immigrant women. This will further the understanding about PPD care and provide significant information about immigrant and refugee women's support needs and their preferences.

Barriers and facilitators to help-seeking among immigrant and refugee women

New immigrants are ten times more likely than Canadian-born individuals to identify barriers related to individual circumstances such as transportation, cost, and lack of information on where and how to access health care services [Canadian Research Institute for the Advancement of Women (CRIAOW) 2002, Sanmartin & Ross 2006]. Teng *et al.* (2007) identified two main types of barriers to access post-partum care for recent immigrant women, from a health care provider's perspective: practical barriers and culturally determined barriers. Practical barriers include language difficulties, unfamiliarity with how and where to access health care services, low SES and childcare issues (Neufeld *et al.* 2002, Steele *et al.* 2002, Wu *et al.* 2005).

Cultural influence

Culturally determined barriers include fear of stigma and lack of validation of depressive symptoms within family and ethnic community. Mental illness is heavily stigmatized in many cultures (Morrow & Chappell 1999; Holopainen 2002, Dennis & Chung-Lee, 2006, Teng *et al.* 2007). For example, in some cultures there is perception that it is inappropriate to seek out external help for depressive symptoms. Post-partum depression may not be viewed as a medical problem and therefore medical assistance is not considered appropriate (Holopainen 2002, Rodrigues *et al.* 2003, Ugarriza 2004, Teng *et al.* 2007). Rodrigues and colleagues found that Asian Indian mothers suffering from PPD perceive their symptoms as normal, natural effects of childbirth and therefore they are unlikely to access health care services. Studies of Asian Indian communities indicate that maternal depression often goes unrecognized and as a result, the mother remains alone and isolated within her own family (Bostock *et al.* 1996, Goyal *et al.* 2005). Some studies have shown that the shame, stigma and fear of being mentally ill are significantly strong predictors of whether immigrant and refugee women will seek help or not (Whitton *et al.* 1996, Rodrigues *et al.* 2003). For

example, the role of informal social support within Asian families is highly regarded and the majority of Asian immigrants would rather seek help for mental health problems from family members and friends rather than from a health care provider (Cheung & Lin 1999, Li & Browne 2000).

Descriptions of the cultural aspects of the post-partum experience may be found in the literature (Kirmayer 1989, Affonso *et al.* 2000, Amankwaa 2003, Oates *et al.* 2004, Zerkowitz *et al.* 2004); however, research on the impact of cultural factors upon PPD is limited (Bina 2008). Bina conducted a comprehensive literature review globally and found 70 articles on culture and post-partum women; however, only 14 articles investigated the impact of cultural factors on PPD. This is quite noteworthy since cultural factors can greatly influence PPD. Findings revealed that cultural traditions and rituals were alleviating factors on PPD in many of the studies, and lack of cultural tradition could lead to increased depression. Dankner *et al.* (2000) examined social, cultural and religious factors underlying PPD and found that greater religiosity was associated with a decreased risk of post-partum depressive symptoms. It is also important to note that it is dependent on the mother's perception of tradition during the post-partum period. It was suggested that the cultural tradition of 'doing the month' (mandating new mothers to rest for a month while extended family offer emotional and practical support) offered protection from the risk of PPD. Heh *et al.* (2004) noted that this traditional ritual is protective only if support meets the women's actual needs. Unwanted emotional support from parents-in-law or rituals not being viewed as helpful by the mother may offset benefits of assistance and even contribute to developing depressive symptoms in Taiwanese women. Their study emphasized that support during transition to motherhood needs to be perceived as support by the mother. Therefore, cultural values and social practices provide positive and negative impacts which influence the women's responses to health and accessing mental health services.

Gender roles as barrier

Gender has been well established as being a determinant of health and is interlinked with biological and social determinants (Health Canada 2003, Spitzer 2005). Gender analysis has been identified as particularly relevant and helpful in immigrant research. In addition, gender sensitive research has become more focused on the notion of intersectionality, meaning that gender is experienced by women at the same time as their experiences of class, race and sexual orientation and any other forms of social difference. Forms of oppression and inequity are viewed as inseparable and are reinforced by each other as they interact (Varcoe

et al. 2008). Barriers in access to services are often explained as cultural differences rather than the social structures that may prevent full participation by immigrant women with norms, values, and beliefs that differ from the mainstream population (Nazroo 1998, Thurston *et al.* 2006). Gender is also a complex variable because of the changeable and dynamic nature of social and cultural systems. Viewing through a gender lens one can determine different exposures to particular risks, different help-seeking patterns and differential impacts of social and economic determinants of health (Greaves *et al.* 1999). The cultural and social environment affects immigrant and refugee women's responses in accessing and using mental health services (Morrow & Chappell 1999; British Columbia Center of Excellence for Women's Health 2003).

Female gender roles often require women to be accountable for a disproportionate amount of domestic work, rearing of children, attending to family social relations and employment outside the home (Anderson & Reimer Kirkham 1998, Spitzer 2004). The role of gender influences the immigrant women in her everyday experiences and might limit or make it impossible to even consider accessing help for mental health needs. The multiple changing roles of immigrant women situate them in a vulnerable, high-risk position. The shifting of the gender roles and the underlying power relations within the family greatly influences the immigrant woman's access to mental health care services. (Greaves *et al.* 1999, Kinnon 1999, Jiwani 2001).

A relevant study revealed that immigrant women's health care behaviour is influenced by their cultural knowledge and values, their SES, social support networks, gender roles and expectations (O'Mahony & Donnelly 2007b). Spitzer (2005) also found that health service utilization is influenced by gender as it interplays with socio-economics, immigration status and gender roles. These interactions have been neglected in research and in the development of policies with respect to immigrant women (Thurston *et al.* 2006). To provide effective health care services to immigrant and refugee women, health care providers need to recognize that the women's social position and conditions in which they work and live could be major deterrents to the appropriate management of illness (Anderson *et al.* 1993, Donnelly 2004).

It is also identified that social policies create bias against immigrant and refugee women which affects them directly (Kinnon 1999, Thobani 1999, CRIAW 2002, Beiser 2005). The CRIAW (2006) has noted discrimination is inherent in the policy behind Canadian immigration laws. These laws situate women in a vulnerable and helpless position and create dependence on their spouse or family. For example, English training programmes are made to support labour demand and are often available only within a timeframe.

Thus for some immigrant and refugee women language training is not an option because of being home raising children, patriarchal ideologies and practices which may limit their choices, insufficient income to attend programmes or programmes that fail to provide affordable child care, and lack of access to social support. Over time these women become 'isolated in a language ghetto' (CRIAOW 2006, p. 13). For many immigrant and refugee women access to support from community resources is influenced by policies that systematically structure and reinforce sexism and racism against women and put them in a disadvantaged status and create barriers that prevent them from accessing certain social supports and resources (Ng 1988, Thobani 1999, Neufeld *et al.* 2002, Thurston *et al.* 2006).

Although a number of barriers exist, many immigrant and refugee women manage to seek help because of facilitative factors such as supportive interactions from their partner and family members (Dennis & Chung-Lee, 2006, Dennis & Ross 2006, Ahmed *et al.* 2008, Grewal *et al.* 2008), religious and spiritual practices (Choudhry 1998, Amankwaa 2003, Edge & Rogers 2005) and strong cultural beliefs which impact the way immigrant women solve their problems individually and within the family (O'Mahony 2005).

Holistic health beliefs, valuing the need to be healthy, diet, lifestyle and rituals have all been reported as facilitating good health care practices by immigrant women in the perinatal period (Posmontier & Horowitz 2004, Thornton *et al.* 2006, Hoban 2007, Grewal *et al.* 2008). Positive attributes of the immigrant woman such as strong family relations, community-centred values, sharing within the cultural unit, and resiliency of the immigrant woman were viewed as positive characteristics in coping and problem solving during very difficult circumstances (O'Mahony 2005).

In summary this comprehensive literature review provides relevant knowledge about PPD and other related factors concerning immigrant and refugee women in the post-partum period. There is a plethora of research focusing on mainstream populations and PPD; however, research on the needs and issues and specific risk factors for PPD among immigrant and refugee women has been limited (Zelkowitz *et al.* 2004, 2008, Sword *et al.* 2006). From the few qualitative studies done, the most commonly identified risk factors are lack of social support, multiple roles, stressful life events, and language barriers (Katz & Gagnon 2002, Small *et al.* 2003, Dennis 2004, Zelkowitz *et al.* 2004).

The literature review illuminates some knowledge gaps. Descriptive accounts regarding culture and PPD may be found in literature; however, the impact of cultural factors upon PPD has not been well investigated. Many studies

have focused attention on how health care practices based on Western cultural concepts influence the ways in which immigrant and refugee women use mental health care services. However, not many studies have examined how social support, gender, institutional and organizational structures present barriers to women's health seeking behaviour. There is limited research to date that have examined immigrant and refugee women's perspectives about their social support needs, the barriers they experience and their preferred support interventions. There is suggestion that existing mental health services may not provide appropriate support to women with PPD and that additional research is required to evaluate women's health service needs and barriers to service (Sword 1997, Sword *et al.* 2006, Kurtz Landy *et al.* 2008). Accordingly, by drawing on this literature of immigrant and refugee help-seeking practices and access to care, a qualitative study will be conducted to explore immigrant and refugee women's PPD help-seeking experiences and access to mental health care. This study is motivated by the need to enhance opportunities for improved health among immigrant and refugee women in the post-partum period.

Acknowledgments

Alberta Heritage Foundation for Medical Research (AHFMR) and the Canadian Institutes of Health Research (CIHR) for supporting this research study.

References

- Affonso D.D., De A.K., Horowitz J.A., *et al.* (2000) An international study exploring levels of postpartum depressive symptomatology. *Journal of Psychosomatic Research* **49**, 207–216.
- Ahmed A., Stewart D.E., Teng L., *et al.* (2008) Experiences of immigrant new mothers with symptoms of depression. *Archives Women's Mental Health* **11**, 295–303.
- Alberta Health Services-Child & Youth Community Health Services-Well Child Services (2008) *Guidelines for Postpartum Assessment and Postpartum Depression Screening*. pp. 1–63. Alberta Health Services-Child & Youth Community Health Services-Well Child Services, Calgary, AB.
- Amankwaa L.C. (2003) Postpartum depression among African-American women. *Issues in Mental Health Nursing* **24**, 297–316.
- Anderson J.M. & Reimer Kirkham S. (1998) Constructing nation: the gendering and racializing of the Canadian health care system. In: *Painting the Maple: Essays on Race, Gender and the Construction of Canada* (eds Strong-Boag, V., Grace, S., Eisenberg, A., *et al.*), pp. 242–261. UBC Press, Vancouver, BC.
- Anderson J.M., Blue C., Holbrook A., *et al.* (1993) On chronic illness: immigrant women in Canada's work force – a feminist perspective. *Canadian Journal of Nursing Research* **25**, 7–22.
- Appleby L., Warner R., Whitton A., *et al.* (1997) A controlled study of fluoxetine and cognitive behavioural counselling in the

- treatment of postpartum depression. *British Medical Journal* 314, 932–936.
- Barclay L. & Kent D. (1998) Recent immigration and the misery of motherhood: a discussion of pertinent issues. *Midwifery* 14, 4–9.
- Battaglini A., Gravel S., Poulin C., *et al.* (2001) Centres of Excellence for Women's Health. Research Bulletin 2. Available at: <http://www.cewh-cesf.ca/PDF/RB/bulletin-vol2no2EN.pdf> (accessed 10 February 2009).
- Beck C.T. (2001) Predictors of postpartum depression: an update. *Nursing Research* 50, 275–285.
- Beck C.T. (2006) Postpartum depression: it isn't just the blues. *American Journal of Nursing* 106, 40–50.
- Beck C.T. (2008a) State of the science on postpartum depression: what nurse researchers have contributed-Part 1. *MCN The American Journal of Maternal/Child Nursing* 33, 122–126.
- Beck C.T. (2008b) State of the science on postpartum depression: what nurse researchers have contributed-Part 2. *MCN The American Journal of Maternal/Child Nursing* 33, 152–156.
- Beiser M. (2005) *The Health of Immigrants and Refugees in Canada*. Canadian Institutes of Health Research, Toronto, Canada.
- Bernazzani O., Saucier J.F., David H., *et al.* (1997) Psychosocial predictors of depressive symptomatology level in postpartum women. *Journal of Affective Disorders* 46, 39–49.
- Bhui K., Abdi A., Abdi M., *et al.* (2003) Traumatic event, migration characteristics and psychiatric symptoms among Somali refugees. *Social Psychiatry Psychiatric Epidemiology* 38, 35–43.
- Bina R. (2008) The impact of cultural factors upon postpartum depression: a literature review. *Health Care for Women International* 29, 568–592.
- Boath E., Bradley E. & Henshaw C. (2005) The prevention of postnatal depression: a narrative systematic review. *Journal of Psychosomatic Obstetric and Gynecology* 26, 185–192.
- Bostock J., Marsen M., Sarwar Z., *et al.* (1996) Postnatal depression in Asian women. *Community Nurse* 10, 34–36.
- Boyce P.M. (2003) Risk factors for postnatal depression: a review and risk factors in Australian populations. *Archives of Women's Mental Health* 6, s43–s50.
- British Columbia Center of Excellence for Women's Health (2003) *Mainstreaming Women's Mental Health: Building A Canadian Strategy*. British Columbia Center of Excellence for Women's Health, Vancouver, BC.
- Broadhead E., Gehlbach S., DeGruy F., *et al.* (1989) Functional versus structural social support and health care utilization in a family medicine outpatient practice. *Medical Care* 27, 221–233.
- Brugha T.S., Sharp H.M., Cooper S.A., *et al.* (1998) The Leicester 500 Project. Social support and the development of postnatal depressive symptoms, a prospective cohort survey. *Psychological Medicine* 28, 63–79.
- Cairney J., Boyle M., Offord D.R., *et al.* (2003) Stress, social support and depression in single and married mothers. *Social Psychiatry Psychiatric Epidemiology* 38, 442–449.
- Cheung F. & Lin F. (1999) Mental health issues for Asian Americans. *Psychiatric Services* 50, 774–780.
- Choudhry U.K. (1998) Health promotion among immigrant women from India living in Canada. *Image: Journal of Nursing Scholarship* 30, 269–274.
- Clarke P.J. (2008) Validation of two postpartum depression screening scales with a sample of first nations and Métis women. *Canadian Journal of Nursing Research* 40, 113–125.
- Cooper P., Murray L., Wilson A., *et al.* (2003) Controlled trial of the short-term and long-term effect of psychological treatment of postpartum depression and impact on maternal mood. *British Journal of Psychiatry* 182, 412–419.
- Cox J., Holden J. & Sagovsky R. (1987) Detection of postnatal depression: development of the 10-item Edinburgh postnatal depression scale. *British Journal of Psychiatry* 150, 782–786.
- Canadian Research Institute for the Advancement of Women (CRIAOW) (2002) Fact Sheet. Women's experience of race: how race and gender interact. Available at: <http://www.criaw-icref.ca> (accessed 15 January 2009).
- Canadian Research Institute for the Advancement of Women (CRIAOW) (2006) Intersectional feminist frameworks: an emerging vision. Ottawa Publisher = Canadian Research Institute for the Advancement of Women. pp. 4–19.
- Dankner R., Goldberg R.P., Fisch R.Z., *et al.* (2000) Cultural elements of postpartum depression. A study of 327 Jewish Jerusalem women. *Journal of Reproductive Medicine* 45, 97–104.
- Dennis C.L. (2003) Detection, prevention, and treatment of postpartum depression. In: *Postpartum Depression: Literature Review of Risk Factors and Interventions* (eds Stewart, D.E., Robertson, E., Dennis, C.L., *et al.*), pp. 73–195. University Health Network women's Health Program, University of Toronto, Toronto, ON.
- Dennis C.L. (2004) Can we identify mothers at risk for postpartum depression in the immediate postpartum period using the Edinburgh Postnatal Depression Scale? *Journal of Affective Disorders* 78, 163–169.
- Dennis C.L. & Boyce P. (2004) Further psychosomatic testing of a brief personality scale to measure vulnerability to postpartum depression. *Journal of Psychosomatic Obstetrics and Gynecology* 25, 305–311.
- Dennis C.L. & Chung-Lee L. (2006) Postpartum depression help-seeking barriers and maternal treatment preference: a qualitative systematic review. *Birth* 33, 323–331.
- Dennis C.L. & Creedy D. (2007) Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database Systematic Reviews*, Issue 4. Art. No.: CD001134. DOI: 10.1002/14651858.CD001134.pub2.
- Dennis C.L. & Hodnett E. (2008) Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database Systematic Reviews*, 2007 Issue 4. Art. No.: CD006116. DOI: 10.1002/14651858.CD006116.pub2.
- Dennis C.L. & Kingston D. (2008) A systematic review of telephone support for women during pregnancy and the early postpartum period. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 37, 301–314.
- Dennis C.L. & Letourneau N. (2007) Global and relationship-specific perceptions of support and the development of postpartum depressive symptomatology. *Social Psychiatry and Psychiatric Epidemiology* 42, 389–395.
- Dennis C.L. & Ross L.E. (2006) Depressive symptomatology in the immediate postnatal period: identifying maternal characteristics related to true- and false- positive screening scores. *Canadian Journal of Psychiatry* 51, 265–273.
- Dennis C.L., Janssen P.A. & Singer J. (2004) Identifying women at-risk for postpartum depression in the immediate postpartum period. *Acta Psychiatrica Scandinavica* 110, 338–346.

- Dhooper S.S. & Tran T.V. (1998) Understanding and responding to the health and mental health needs of Asian refugees. *Social Work in Health Care* 27, 65–82.
- Diaz-Granados N., Ross L., Azar R., *et al.* (2006) A literature review on depression among women: focussing on Ontario. Report for the Ontario Women's Health Council, Toronto, Canada.
- Donnelly T.T. (2004) *Vietnamese women living in Canada: Contextual factors affecting Vietnamese women's breast cancer and cervical cancer screening practices*. Unpublished Ph.D. Dissertation. Vancouver, BC: UBC Individual Interdisciplinary Studies.
- Donnelly T.T. & McKellin W. (2007) Keeping healthy! Whose responsibility is it anyway? Vietnamese Canadian women and their healthcare providers' perspectives. *Nursing Inquiry* 14, 2–12.
- Edge D. & Rogers A. (2005) Dealing with it: Black Caribbean women's response to adversity and psychological distress associated with pregnancy, childbirth, and early motherhood. *Social Science & Medicine* 61, 15–25.
- Fitch K.D. (2002) *The influence of culture and social support on postpartum depression*. Proquest Digital Dissertations: Abstracts and Indexing, ID 727389531.
- Forman D., Videbeck P., Hedegaard M., *et al.* (2000) Postpartum depression: identification of women at risk. *BJOG: An International Journal of Obstetrics and Gynaecology* 107, 1210–1217.
- Goyal D., Murphy S. & Cohen J. (2005) Immigrant Asian Indian women and postpartum depression. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 35, 98–104.
- Greaves L., Hankivsky O., Amaratunga C., *et al.* (1999) *CIHR 2000: Sex, Gender and Women's Health*. British Columbia Centre of Excellence for Women's Health, Vancouver, BC.
- Grewal S.K., Bhagat R. & Balneaves L.G. (2008) Perinatal beliefs and practices of immigrant Punjabi women living in Canada. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 37, 290–300.
- Halbreich U. & Karkun S. (2006) Cross-cultural and social diversity of prevalence of postpartum depression and depressive symptoms. *Journal of Affective Disorders* 91, 97–111.
- Health Canada (2003) Population health: what determines health? Public Health Agency of Canada. Available at: <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php> (accessed 15 January 2009).
- Heh S.S. & Fu Y.Y. (2003) Effectiveness of informational support in reducing the severity of postpartum depression in Taiwan. *Journal of Advanced Nursing* 42, 30–36.
- Heh S.S., Coombes L. & Bartlett H. (2004) The association between depressive symptoms and social support in Taiwanese women during the month. *International Journal of Nursing Studies* 41, 573–579.
- Hoban E. (2007) Celebrating safe childbirth. In: *Reproduction, Childbearing and Motherhood* (ed Liamputtong, P.), pp. 99–112. Nova Science, New York.
- Holopainen D. (2002) The experience of seeking help for postnatal depression. *Australian Journal of Advanced Nursing* 19, 39–44.
- Horowitz J.A. (2006) Community-based postpartum depression screening within the first month after delivery. *Contemporary Nurse* 21, 85–91.
- Hyman I. & Dussault G. (2000) Negative consequences of acculturation on health behaviour, social support and stress among pregnant Southeast Asian immigrant women in Montreal: an exploratory study. *Canadian Journal of Public Health* 91, 357–360.
- Jiwani Y. (2001) *Intersecting Inequalities: Immigrant Women of Colour, Violence and Health Care*. Feminist Research Education Development and Action Centre, Vancouver, BC.
- Katz D. & Gagnon A.J. (2002) Evidence of adequacy of postpartum care for immigrant women. *Canadian Journal of Nursing Research* 34, 71–81.
- Kinnon D. (1999) *Canadian Research on Immigration and Health: An Overview*. Minister of Public Works and Government Services, Ottawa, ON.
- Kirmayer L.J. (1989) Cultural variations in the response to psychiatric disorders and distress. *Social Science and Medicine* 29, 327–339.
- Kleinman A. (1996) How is culture important for DSM-IV? In: *Culture and Psychiatric Diagnosis: A DSM-IV Perspective* (eds Mezzich, J.E. & Kleinman, A.), pp. 15–25. American Psychiatric Press, Washington, DC.
- Klier C.M., Muzik M., Rosenblum K.L., *et al.* (2001) Interpersonal psychotherapy adapted for the group setting in the treatment of postpartum depression. *Journal of Psychotherapy Practice & Research* 10, 124–131.
- Kumar R. (1994) Postnatal mental illness: a transcultural perspective. *Social Psychiatry Psychiatric Epidemiology* 29, 250–264.
- Kurtz Landy C., Sword W. & Ciliska D. (2008) Urban women's socioeconomic status, health service needs and utilization in the four weeks after postpartum hospital discharge: findings of a Canadian cross-sectional survey. *BMC Health Services Research* 8, 203.
- Lee D.T.S., Yip A.S.K., Chiu H.F.K., *et al.* (2001) A psychiatric epidemiological study of postpartum Chinese women. *American Journal of Psychiatry* 158, 220–226.
- Letourneau N., Duffett-Leger L., Stewart M., *et al.* (2007) Canadian mothers' perceived support needs during postpartum depression. *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 36, 441–449.
- Li H.Z. & Browne A.J. (2000) Defining mental illness and accessing mental health services: perspectives of Asian Canadians. *Canadian Journal of Community Mental Health* 19, 143–159.
- Logsdon M.C. & Usui W. (2001) Psychosocial predictors of postpartum depression in diverse groups of women. *Western Journal of Nursing Research* 23, 563–574.
- Logsdon M.C., Birkimer J.C. & Usui W.M. (2000) The link of social support and postpartum depressive symptoms in African-American women with low incomes. *American Journal of Maternal Child Nursing* 25, 262–266.
- Logsdon M.C., Birkimer J.C., Simpson T., *et al.* (2005) Postpartum depression and social support in adolescents. *Journal of Obstetric, Gynecologic, and Neonatal Nursing* 34, 46–54.
- Logsdon M.C., Wisner K.L. & Pinto-Foltz M.D. (2006) The impact of postpartum depression on mothering. *Journal of Obstetric, Gynecologic and Neonatal Nursing* 35, 652–658.
- Meadows L., Thurston W. & Melton C. (2001) Immigrant women's health. *Social Science & Medicine* 52, 1451–1458.
- Mechakra-Tahiri S., Zunzunegui M.V. & Sequin L. (2007) Self-rated health and postnatal depressive symptoms among immigrant mothers in Quebec. *Women & Health* 45, 1–17.
- Morrow M. & Chappell M. (1999) *Hearing Women's Voices: Mental Health for Women*. British Columbia Centre of Excellence for Women's Health, Vancouver, BC.

- Nazroo J.Y. (1998) Genetic, cultural or socio-economic vulnerability? Explaining ethnic inequalities in health. *Sociology of Health and Illness* 20, 710–730.
- Neufeld A., Harrison M., Stewart M., *et al.* (2002) Immigrant women: making connections to community resources for support in family care giving. *Qualitative Health Research* 12, 751–768.
- Ng R. (1988) Immigrant women and institutionalized racism. In: *Changing Patterns: Women in Canada* (eds Burt, S. & Code, L.), pp. 184–203. McClelland and Stewart, Toronto, ON.
- O'Hara M. (1997) The nature of postpartum depressive disorders. In: *Postpartum Depression and Child Development* (eds Murray, L. & Cooper, P.), pp. 3–31. Guilford, New York.
- O'Hara M. & Swain A. (1996) Rates and risk of postpartum depression- a meta- analysis. *International Review in Psychiatry* 8, 37–54.
- O'Hara M., Stuart S., Gorman L., *et al.* (2000) Efficacy of interpersonal psychotherapy for postpartum depression. *Archives of General Psychiatry* 57, 1039–1045.
- O'Mahony J.M. (2005) *Exploring immigrant women's mental health care experiences: from a health care provider's perspective*. Unpublished master's thesis, University of Calgary, Calgary, Alberta, Canada.
- O'Mahony J.M. & Donnelly T.T. (2007a) The influence of culture on immigrant women's mental health care experiences from the perspectives of health care providers. *Issues in Mental Health Nursing* 28, 453–471.
- O'Mahony J.M. & Donnelly T.T. (2007b) Health care providers' perspective of the gender influences on immigrant women's mental health care experiences. *Issues in Mental Health Nursing* 28, 1171–1188.
- Oates M.R., Cox J.L., Neema S., *et al.* (2004) Postnatal depression across countries and cultures: a qualitative study. *British Journal of Psychiatry* 184, (Suppl. 46), s10–s16.
- Orr S.T. (2004) Social support and pregnancy outcome: a review of the literature. *Clinical Obstetrical Gynaecology* 47, 842–855.
- Posmontier B. & Horowitz J. (2004) Postpartum practices and depression prevalences: technocentric and ethnokinship cultural perspectives. *Journal of Transcultural Nursing* 15, 34–43.
- Robertson E., Celasun N. & Stewart D.E. (2003) Risk factors for postpartum depression. In: *Postpartum Depression: Literature Review of Risk Factors and Interventions* (eds Stewart, D.E., Robertson, E., Dennis, C.L., *et al.*), pp. 15–70. Publisher-University Health Network, Toronto.
- Robertson E., Grace S., Wallington T., *et al.* (2004) Antenatal risk factors for postpartum depression: a synthesis of recent literature. *General Hospital Psychiatry* 26, 289–295.
- Rodrigues M., Patel V., Jaswal S., *et al.* (2003) Listening to mothers: qualitative studies on motherhood and depression from Goa, India. *Social Science & Medicine* 57, 1797–1806.
- Sanmartin C. & Ross N. (2006) Experiencing difficulties accessing first-contact health services in Canada. *Health Care Policy* 1, 103–119.
- Seguin L., Potvin L., St Denis M., *et al.* (1999) Socio-economic factors and postnatal depressive symptomatology: a longitudinal study. *Women and Health* 29, 57–71.
- Shepherd J. (1992) Post-traumatic stress disorder in Vietnamese women. *Women & Therapy* 13, 281–296.
- Small R., Johnston V. & Orr A. (1997) Depression after childbirth: the views of medical students and women compared. *Birth* 24, 109–115.
- Small R., Lumley J. & Yelland J. (2003) Cross-cultural experiences of maternal depression: associations and contributing factors for Vietnamese, Turkish and Filipino immigrant women in Victoria, Australia. *Ethnicity & Health* 8, 189–206.
- Small R., Lumley J., Yelland J., *et al.* (2007) The performance of the Edinburgh postnatal depression scale in English speaking and non-English speaking populations in Australia. *Social Psychiatry Psychiatric Epidemiology* 42, 70–78.
- Spinelli M.G. (1997) Interpersonal psychotherapy for depressed antepartum women: a pilot study. *American Journal of Psychiatry* 154, 1028–1030.
- Spitzer D. (2004) In visible bodies: minority women, nurses, time and the new economy of care. *Medical Anthropology Quarterly* 18, 490–508.
- Spitzer D. (2005) Engendering health disparities. *Canadian Journal of Public Health* 96, 78–96.
- Statistics Canada (2007) Population by immigrant status and period of immigration, 2006 counts, for Canada, provinces and territories, Immigration and Highlight tables. 2006 Census. Statistics Canada Catalogue no.97-557-XWE2006002. Ottawa. Released December 4, 2007.
- Steele L., Lemieux-Charles L., Clark J., *et al.* (2002) The impact of policy changes on the health of recent immigrants and refugees in the inner city. *Canadian Journal of Public Health* 93, 118–122.
- Stewart D.E., Gagnon A., Saucier J., *et al.* (2008) Postpartum depression symptoms in newcomers. *The Canadian Journal of Psychiatry* 53, 121–124.
- Stuart S. & O'Hara M.W. (1995) Interpersonal psychotherapy for postpartum depression. A treatment program. *Journal of Psychotherapy Practice & Research* 4, 18–29.
- Stuchberry M., Matthey S. & Barnett B. (1998) Postnatal depression and social supports in Vietnamese Arabic and Anglo-Celtic mothers. *Social Psychiatry Psychiatric Epidemiology* 33, 483–490.
- Sword W. (1997) Enabling health promotion for low-income single mothers: an integrated perspective. *Clinical Excellence for Nurse Practitioners* 1, 324–332.
- Sword W. & Watt S. (2005) Learning needs of postpartum women: does socioeconomic status matter? *Birth* 32, 86–92.
- Sword W., Watt S. & Krueger P. (2006) Postpartum health, service needs, and access to care experiences of immigrant and Canadian born women. *Journal of Obstetric, Gynecologic, and Neonatal Nursing* 35, 717–727.
- Teng L., Robertson Blackmore E. & Stewart D. (2007) Healthcare worker's perceptions of barriers to care by immigrant women with postpartum depression: an exploratory qualitative study. *Archives of Women's Mental Health* 10, 93–101.
- Thobani S. (1999) Sponsoring immigrant women's inequalities. *Canadian Women Studies* 19, 11–16.
- Thompson E.N. (2000) Immigrant occupational skill outcomes and the role of region- specific human capital. RIIM.
- Thornton P.L., Kieffer E.C., Salabarria-Pena Y., *et al.* (2006) Weight, diet, and physical activity-related beliefs and practices among pregnant and postpartum Latino women: the role of social support. *Maternal and Child Health Journal* 10, 95–104.
- Thurston W. & McGrath A. (1993) 'With two pennies in my pocket, I just feel not so helpless'. A report on the mental occupational health promotion needs of immigrants in Calgary: Canada. University of Calgary, Canadian Mental Health Association.

- Thurston W., Meadows L., Este D., *et al.* (2006) *The interplay of gender, migration, socio economics and health*, PMC working paper series PCERII, Prairie Metropolitan Centre.
- Ugarriza D.N. (2004) Group therapy and its barriers for women suffering from postpartum depression. *Archives in Psychiatric Nursing* 18, 39–48.
- Varcoe C., Hankivsky O. & Morrow M. (2008) Introduction: beyond gender matters. In: *Women's Health in Canada* (eds Morrow, M., Hankivsky, O. & Varcoe, C.), pp. 3–30. University of Toronto Press, Toronto, ON.
- Wallington T. (2003) Public health interventions and strategies which reduce or mitigate the impact of postpartum depression on the mother-infant relationship and the growth and development of children. In: *Postpartum Depression: Literature Review of Risk Factors and Interventions* (eds Stewart, D.E., Robertson, E., Dennis, C.L., *et al.*), pp. 254–280. University Health Network Women's Health Program, Toronto, ON.
- Webster J., Linnane J., Roberts J., *et al.* (2003) Identify, educate and alert (IDEA) trial: an intervention to reduce postnatal depression. *British Journal of Obstetrics and Gynecology: An International Journal of Obstetrics and Gynecology* 110, 842–846.
- Whitton A., Warner R. & Appleby L. (1996) The pathway to care in post-natal depression: women's attitudes to post-natal depression and its treatment. *British Journal of General Practice* 46, 427–428.
- Wickberg B. & Hwang C. (1996) Counselling of postnatal depression: a controlled study on a population based Swedish sample. *Journal of Affective Disorders* 39, 209–216.
- Wisner K.L., Gelenberg A.J., Leonard H., *et al.* (1999) Pharmacologic treatment of depression during pregnancy. *Journal of the American Medical Association* 282, 1264–1269.
- Wu Z., Penning M.J. & Schimmele C.M. (2005) Immigrant status and unmet health care needs. *Canadian Journal of Public Health* 96, 369–373.
- Yoshida K., Marks M.N., Kibe N., *et al.* (1997) Postnatal depression in Japanese women who have given birth in England. *Journal of Affective Disorders* 43, 69–77.
- Zayas L.H., Cunningham M., McKee M.D., *et al.* (2002) Depression and negative life events among pregnant African-American and Hispanic women. *Women's Health Issues* 12, 16–22.
- Zelkowitz P. & Millet T.H. (1995) Screening for postpartum depression in a community sample. *Canadian Journal of Psychiatry* 40, 80–86.
- Zelkowitz P., Schinazi J., Katofsky L., *et al.* (2004) Factors associated with depression in pregnant immigrant women. *Transcultural Psychiatry* 41, 445–464.
- Zelkowitz P., Saucier J., Wang T., *et al.* (2008) Stability and change in depressive symptoms from pregnancy to two months postpartum in childbearing immigrant women. *Archives of Women's Mental Health* 11, 1–11.
- Ziguras S.J., Stankovska M. & Minas I.H. (1999) Initiatives for improving mental health services to ethnic minorities in Australia. *Psychiatric Services* 50, 1229–1231.
- Zlotnick C., Johnson S.L., Miller I.W., *et al.* (2001) Postpartum depression in women receiving public assistance: pilot study of an interpersonal-therapy-oriented group intervention. *American Journal of Psychiatry* 158, 638–640.