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The Impact of Cultural Factors Upon Postpartum Depression: A Literature Review

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Postpartum depression is a serious disorder that affects many women globally. Studies have shown that cultural factors play a significant role in postpartum depression; they may trigger postpartum depression as well as contribute to the alleviation of its depressive symptomatology. The cultural aspects of the postpartum period have been described in the literature; however, the impact of cultural factors upon postpartum depression has been less investigated, and studies that looked at this association have yielded oppositional conclusions. In addition, the literature is inconclusive as to whether there are significant differences among various cultures in the prevalence of postpartum depression. The purpose of this literature review is to identify and critically review published and unpublished studies regarding the effect of cultural factors on the alleviation or deterioration of postpartum depression. Results show that cultures have different rituals and beliefs that may affect the severity of postpartum depression.

A birth of a child, which is usually a time of joy for the mother and entire family, can sometimes have negative consequences when the mother becomes depressed. Postpartum depression is a complex and challenging disorder that often takes women and their families by surprise, and can have tremendous individual and familial consequences (Clay & Seehusen, 2004; Miller, 2002). Approximately 10% to 20% of women experience postpartum depression (Miller, 2002), and between 25% and 50% of mothers with postpartum depression have episodes lasting 6 months or longer (Beck, 2002). This prevalence was determined mostly from studies conducted in Western countries. Interestingly, in studies carried out in Asian countries a wider prevalence was found, ranging from 1% to about 20% (Leung, 2002).

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The reason for the discrepancy in the postpartum depression prevalence is unclear; however, some investigators claimed that the low prevalence of postpartum depression in certain cultures may be due to cultural protective factors (Fitch, 2002; Harkness, 1987; Miller, 2002). The literature on the impact of cultural factors on postpartum depression has not been studied systematically and presents a wide range of conclusions. Due to the important role that culture may play in people's lives (Cox, 1999; Kirmayer, 1989; Lazarus & Folkman, 1984; Raphael-Leff, 1991), this article will attempt to fill in the gap by systematically exploring the connection between cultural factors and postpartum depression.

Postpartum depression is a nonpsychotic depressive episode, beginning within 4 weeks after childbirth (O'Hara & Swain, 1996). Some investigators claimed that the onset of postpartum depression could start as early as 2 weeks postpartum and continue up to 1 year (Amankwaa, 2003; Cox, 1999). Mothers with postpartum depression commonly have thoughts of harming their children or themselves, are less emotionally available to their children, and have infants who are less securely attached (Hagen, 1999). Evidence showed that postpartum depression not only has an adverse effect on maternal–infant interaction during the first year of life, but also may have long-term effects on children over the age of 1 year, as well as on the mothers themselves (Beck, 2002). For the mother, this depressive episode can be the precursor for recurrent depression. For her children, a mother's ongoing depression can contribute to emotional, behavioral, cognitive, and interpersonal problems later in life (Miller, 2002).

Researchers have concluded that postpartum depression can occur from multiple hormonal–biological, psychological, familial, social, and cultural factors (Clay & Seehusen, 2004; Leung, 2002; O'Hara & Swain, 1996). Studies examining various cultures have emphasized that postpartum depression can be fully understood only when cultural factors are taken into account together with biomedical, psychological, and social perspectives (Cox, 1999; Harkness, 1987; Leung, 2002). Furthermore, Kirmayer (1989) and Lazarus and Folkman (1984) stressed the fact that cultural factors have a significant impact on the individual's emotional state, and Raphael-Leff (1991) added that cultural beliefs and practices play an important preventive role in life transitions, such as pregnancy and birth.

Culture is defined as “the learned, shared, and transmitted values, beliefs, norms, and lifeways of a particular group that guides their thinking, decisions, and actions in patterned ways” (Leininger, 2001, p. 47). There is a debate in the literature as to whether there are significant differences among various cultures in the prevalence of postpartum depression. Affonso and colleagues (2000) found that Western societies had a lower prevalence of postpartum depressive symptoms than non-Western societies. Studies carried out in different countries around the world have demonstrated that the prevalence of postpartum depression is relatively similar among various

cultures and societies (Cox, 1999; Danaci, Dinc, Deveci, Seyfe Sen, & Icelli, 2002; Ghubash & Abu-Saleh, 1997). On the other hand, some studies revealed that in cultures that are characterized by strong social support for new mothers, the prevalence of postpartum depression appears to be low (Fitch, 2002; Miller, 2002). Stern and Kruckman (1983) claimed that postpartum depression is a culturally bound syndrome, stressing that a lack of organized social support in Western societies is a significant contributing factor to postpartum depression. Therefore, there may be cultures in which women do not experience postpartum depression (Harkness, 1987).

In addition to the discourse on global prevalence, studies investigating the effect of cultural factors on postpartum depression have yielded contrasting results, and therefore deserve a closer investigation. The purpose of this literature review is to summarize, analyze, and critique findings of studies that investigated the effects of cultural factors on postpartum depression, as well as draw conclusions across studies as to these effects.

METHODOLOGY

An electronic literature search was conducted using the following databases: PsycINFO, EBSCOHost-Academic Search Premier, MEDLINE, CINAHL, PubMed, Social Services Abstracts, Sociological Abstracts, Proquest Digital Dissertations: Abstracts and Indexing, Networked Digital Library of Theses and Dissertations Union Catalog, and Current research @ University of Maryland, Baltimore: Dissertations and Theses. The key words used for the search included “postpartum depression,” “postnatal depression,” “culture,” “ethnicity,” and “society.” The electronic search strategies were supplemented by hand searching and careful checking of the references cited in retrieved literature. The search strategy was limited to English language, and included published and unpublished studies from the years 1985 to 2005.

Numerous studies on culture and postpartum depression were found ($n = 70$); however, only studies that were focused on the impact of cultural factors upon postpartum depression were included in the literature review. Articles focusing on the prevalence of postpartum depression in a culture, for example, without indication of the impact of the culture on postpartum depression, were excluded from the literature review. Abstracts were reviewed by the author for cultural factors. These cultural factors included any cultural elements that the authors specified as unique to the culture, such as cultural traditions, life ways, rituals, norms, beliefs, or structures. In addition, the term “postpartum or postnatal depression” had to be mentioned by the authors as the dependent variable under examination. If the variables were unclear in the abstract, the entire study was reviewed

TABLE 1 Summary of Studies Addressing the Effect of Culture Factors Upon Postpartum Depression

Authors	Place	Sample	Design	Measurement of independent variable	Time of assessment	Cultural factors
Heh et al. (2004)	Taipei, Taiwan	186 Taiwanese women 100% married Mean age = 28 100% primiparous	Cross-sectional	PSSQ ^a , EPDS ^b (cutoff: 10)	4th week postpartum (PP).	"Doing the month"
Lee (2000)	Hong Kong	959 Hong Kong Chinese women 99.6% married	Longitudinal	Psychosocial assessment	2nd trimester, 1–2 days PP, and 3 months PP, and 3 months PP.	Peiyue, and "doing the month"
Stewart and Jambunathan (1996)	USA	Mean age = 29.1 52 Hmong women 100% married Mean age = 27.3 7% primiparous	Ethnographic qualitative	BDI ^c , EPDS ^b (cutoff: 9/10) GHQ ^d , SCID ^e In-depth interviews (based on modification of the Childbirth Questionnaire ^f) Reports of memories and dreams	3 months PP. Within the 1st year PP.	30-day rest period postpartum and family support
Harkness (1987)	Kenya	10 Kipsigis women, and 10 Kipsigis nonpregnant women (comparison group) Mean age = 24 100% multiparous	Ethnographic qualitative	Reports of memories and dreams	During last half of pregnancy, at 2–3 weeks PP, and at 2–3 months PP.	At least one month of rest, and support from mother or mother-in-law
Dankner et al. (2000)	Israel	327 Jewish women 99% married Mean age = 29	Longitudinal	EPDS ^b (cutoff: 9), Sociodemographic questionnaire	Immediately after delivery, and 6–10 weeks PP.	Religiosity with its associated social and communal structuring and distinct social roles
Huang and Mathers (2001)	UK and Taiwan	50 UK women 62% married 40% primiparous, 101 Taiwanese women 92% married 53% primiparous 78% of sample's age: 25–35	Cross-sectional	EPDS ^b (cutoff: 12), socio-cultural questionnaire, and in-depth interviews	0–3 months PP.	"Doing the month"
Stuchbery et al. (1998)	Australia	113 Vietnamese women, 53% primiparous 98 Arabic women 31% primiparous, 105 Anglo-Celtic women 42% primiparous Mean age=27	Cross-sectional	EPDS ^b (treated as continuous), and questionnaire on social support	6 weeks PP.	Social support needs as expected from culture (practical support, support from mother, extended family, and/or friends)
Nahas and Amashkeh (1999)	Australia	22 immigrant Jordanian women with PPD ^g diagnosis	Ethnonursing qualitative	Participant observation and interviews	-----	Extended family support and diet for 40 days, and the importance of not being sad

Danaci et al. (2002)	Turkey	257 Turkish women Mean age = 26.1	Cross-sectional	EPDS ^d (cutoff: 12/13), and a sociodemographic questionnaire	Within 6 months PP.	In-laws involvement, and interest in postpartum women declines over time "Doing the month"
Leung (2002)	Hong Kong	Quantitative: 385 Hong Kong Chinese women 98.5% married 66.5% aged between 20–35 50% primiparous Qualitative: 59 of these women (32 had PPD ^m)	Longitudinal	Demographic questionnaire PSQ ^g PSS, ^b EPDS ^b (cutoff: 13) CSI, ^f PSSQ ^g Interviews	3rd trimester, 3rd trimester, and 5–8 weeks PP. 5–8 weeks PP. 6 months PP.	
Patel et al. (2002)	Goa, India	270 Indian women 99% married Mean age = 26	Longitudinal	GHQ, ^d demographic questionnaire, and obstetric history. Maternal support questionnaire. EPDS ^b (cutoff: 11/12) BDQ ^f	3rd trimester 6–8 weeks PP. 6–8 weeks PP, and 6 months PP. 6 months PP.	Infant gender bias Violence against women
Rodrigues et al. (2003)	Goa, India	39 Indian women (from the above 270), 50% had PPD, ^m and 27 husbands	Qualitative	In-depth interviews	6–8 weeks PP.	Infant gender bias Violence against women
Amankwaa (2000)	USA	12 African American women who had PPD ^m within past 3 years Age: over 18	Naturalistic inquiry	Two identical in-depth interviews. Prestructured open-ended questions	Within 3 years PP. A week to several months' interval between Interviews.	Prayer, faith, and cultural beliefs
Yoshida et al. (2001)	UK and Japan	98 Japanese women living in the UK Mean age = 30 71% primiparous 88 Japanese women living in Japan Mean age = 31 41% primiparous	Longitudinal	SADS, ^h EPDS ^b (cutoff: 8/9) RDC ⁱ	1 month PP, and 3 months PP. End of 3rd week PP, and 3 months PP.	<i>Satogaeri bumben</i>

^aPSSQ: Postpartum Social Support Questionnaire (Hopkins et al., 1987).

^bEPDS: Edinburgh Postnatal Depression Scale (Cox et al., 1987).

^cBDI: Beck Depression Inventory (Beck, Ward, & Mendelson, 1961).

^dGHQ: General Health Questionnaire (Goldberg & Williams, 1988).

^eSCID: Structured Clinical Interview for *DSM-III-R* (Spitzer, Williams, Gibbon, & First, 1992).

^fThe Childbirth Questionnaire (Kruckman et al., 1984).

^gPSQ: Postpartum Support Questionnaire (Logsdon & McBride, 1989).

^hPSS: Perceived Stress Scale (Cohen, Kamarich, & Mermelstein, 1983).

ⁱCSI: Childcare Stress Inventory (Cutrona, 1983).

^jBDQ: Brief Disability Questionnaire (VonKorff, Ustun, Ormel, Kaplan, & Simon, 1996).

^kSADS: Schedule for Affective Disorders and Schizophrenia (Spitzer & Endicott, 1979).

^lRDC: Research Diagnostic Criteria (Spitzer, Endicott, & Robins, 1978).

^mPPD: Postpartum depression.

by the author before an inclusion or exclusion decision was made. After examining the available literature, 14 studies were included in the sample.

RESULTS

The 14 studies are listed in Table 1 by sample, design, measurement of independent variable, time of assessment, and cultural factors. Study findings differed in how cultural factors influenced postpartum depression, and therefore were categorized according to their type of influence. The categories that emerged from the studies' findings included the following cultural factors: (a) an alleviating factor, (b) a deteriorating factor, (c) lack of cultural traditions as deteriorating factor, and (d) a neutral factor (neither alleviating nor deteriorating).

Cultural Traditions as an Alleviating Factor

In five articles the investigators concluded that cultural traditions might have an alleviating impact upon postpartum depression. In four of them (Harkness, 1987; Heh, Coombes, & Bartlett, 2004; Lee, 2000; Stewart & Jambunathan, 1996) the investigators discussed the cultural tradition of mandating new mothers to rest for a month while the extended families offered practical and emotional support.

Heh and colleagues (2004) explored the association between depressive symptoms in the postpartum period of Taiwanese women and the social support aspect of the traditional Chinese rite of "doing the month." "Doing the month" is a traditional practice where women are relieved of most work duties for a month after giving birth in order to recuperate. Women are required to follow certain restrictive prescriptions and proscriptions, such as remaining indoors and following a strict diet. In addition, the custom of "peiyue" is carried out where an elder female family member, usually the woman's mother or mother-in-law, assumes most of the responsibilities for baby care and housework for this month.

A sample of Taiwanese women who followed the "doing the month" tradition participated in this study. In this sample, 21% of the women had postpartum depression. Overall, support from the social network was correlated negatively with postpartum depression. Parental support was related inversely to depressive symptoms, while women who stayed at their in-laws homes and had their mother-in-law serve as their key helper demonstrated higher depressive symptoms. More precisely, too much emotional support from in-laws, which was less wanted by the women, and too little instrumental support from parents, which was more wanted by the women, seemed to contribute to depressive symptomatology. Heh and colleagues (2004) suggested that the Taiwanese ritual of "doing the month"

protects women from the risk of postpartum depression if support during this month meets the women's true needs.

One limitation of this study was that support and depressive symptoms were assessed only during the fourth week postpartum. Therefore, there is no way of knowing what the women's depressive states were later in the postpartum period or if they had prenatal depression. The sampling method was not clearly stated, so the results may not be representative of the Taiwanese population. In addition, it is not always clear which variables and how many of them were included in the various statistical analyses. This is particularly a problem with regards to the stepwise multiple regression, which is not recommended, especially when the ratio of sample size to predictors is smaller than 40:1. This may cause the results to be specific to the sample, debilitating the generalizability of the findings. The sequence of entrance of the independent variables into the regression equation should be determined based on prior research and theory (Cohen, Cohen, West, & Aiken, 2003; Stevens, 2002). The main strength of this study was that the researchers used the Postpartum Social Support Questionnaire (PSSQ; Hopkins, Campbell, & Marcus, 1987), which measures various types of support. This measurement allowed the women to refer to their own perception of the "doing the month" ritual and shared insight on how cultural factors play a role in the personal lives of women and influence their depression. It should be noted that both the PSSQ as well as the Edinburgh Postnatal Depression Scale (EPDS), which were used in this study, were translated into Chinese and their psychometric properties were ascertained prior to this study.

Lee (2000) also explored women's subjective perceptions of cultural traditions as fulfilling or not fulfilling their needs. This study examined the prevalence and risk factors of postnatal depression among Hong Kong women, including the effects of traditional postpartum customs and in-law relationships on the psychological well-being of postpartum women. Chinese women were recruited, mostly during their second trimester. Assessments of risk factors, depressive symptomatology, and diagnostic criteria for postpartum depression were conducted at four time periods.

About 11% of the women were found to have postpartum depression. Looking at the cultural factors associated with postpartum depression indicates that 80% of the women received peiyue care. Thirty percent received help from their mothers, 30% from their mothers-in-law, and the rest from other relatives, friends, or maids. Almost 80% of the sample observed the behavioral and dietary taboos of "doing the month." The peiyue care was found to influence depressive symptoms by improving the psychological well-being of the women. On the other hand, negative relationships with the mother-in-law as well as not receiving peiyue care increased depressive symptoms.

The fact that 40% of the women who were approached did not participate in the study, together with 20% attrition at 3 months postpartum,

posed a limitation to the study, although there was a large sample size. The study was carried out in a large city, making it difficult to generalize the findings to rural Chinese women, who may be affected to a lesser degree by modernism, and may follow and perceive their rituals and customs differently than the women in this study. Another limitation to the generalizability of the findings stems from the types of data analyses used in the study. The fact that multivariate data analyses were carried out only with variables that were found to be significant in the univariate analyses, as well as the use of a stepwise regression model, raise the likelihood of producing a regression equation that is sample specific, which means that findings may be representative of the sample only (Cohen et al., 2003; Stevens, 2002). On the other hand, the interview data addressed the women's own perceptions and values of their customs, which strengthened the study's findings. In addition, the author indicated that the Chinese version of the EPDS has very good psychometric properties in screening for postpartum depression.

Investigators in two ethnographic qualitative studies that assessed women's subjective perceptions of their postpartum period also concluded that cultural traditions serve as a protective factor. Stewart and Jambunathan (1996) explored postpartum depression in Hmong women living in the United States and the influence of cultural practices on postpartum depression. The Hmong people came from the hills of Laos in Southeast Asia, and their cultural postpartum practices included a 30-day rest period after birth and support from family members. A convenience sample of childbearing Hmong women currently residing in Wisconsin, in the United States, was recruited. The inclusion criteria included women 18 years or older within the first year postpartum. The average time of the interviews was at 4.6 months postpartum.

Findings were discussed according to pertinent categories on the Childbirth Questionnaire (Kruckman, Ford, & Asminn-Finch, 1984), which served as an interview guide. The authors indicated that, in general, the Hmong women did not report symptoms associated with postpartum depression. Any depressive symptoms that were reported, such as mood swings (in 50% of the women) or thoughts of harming themselves (in .07% of the women) were associated with living in a different culture, lack of education and income, and economic difficulties. The researchers concluded that the cultural practice of a month rest period combined with high levels of support received from relatives and husbands might have made the women less vulnerable to postpartum depression.

The authors state that a number of Hmong interpreters were used to review the interview instrument for adequate translation and cultural relevance. They do not specify how many interviewers participated in the study, however, and there is no mention of steps taken to enhance the trustworthiness and rigor of the study. It is therefore difficult to draw conclusions as to how reliable and nonbiased the study was. On the other

hand, the study was strengthened by the fact that the analysis of the data was based on a clear method—the sensitization method (Knafl & Webster, 1988, as cited in Stewart & Jambunathan, 1996), which identifies categories and subcategories, constructs descriptive grids, and identifies major themes.

The subjective nature of this study served both as a strength as well as a limitation. The perceptions of the cultural rituals provided rich data to explain the women's experiences. The researchers relied only on the women's self-perceptions of their feelings, however, to conclude if the women had postpartum depression. Some of these women may have had postpartum depression but did not disclose their symptoms to the interviewers.

Harkness (1987) also relied on women's self-perceptions of their postpartum experience and did not objectively assess postpartum depression. She studied the cultural structuring of affective experiences during pregnancy and the postpartum period as manifested through women's dreams. The study took place in a rural Kipsigis community of Kenya. Despite their exposure to modernization, the Kipsigis have maintained many aspects of traditional life, including practices related to the childbirth period. In this community mothers or mothers-in-law of the women giving birth are their primary sources of support in the postpartum period. Husbands do not see their wives for a number of weeks following childbirth, and women are mandated to rest for at least a month.

Ten Kipsigis women were interviewed during the last half of their pregnancy, eight were interviewed again at 2 to 3 weeks postpartum, and six were interviewed once again at 2 to 3 months postpartum. A comparison sample consisted of 10 women who did not appear to be pregnant and who did not have a child less than 6 months old. These women matched the study group in age and parity, and were interviewed once. All women were asked to report their own dreams and memories.

In order to indicate the women's mood, the memories were analyzed for their positive or negative valence, as well as for their thematic content. The results indicated that the memories of the childbirth group were the most positive at the early postpartum period (100% of memories), and the least positive at the prenatal period (30% of memories). The later postpartum period memories and the comparison's group memories were rated in between (60% and 75%, respectively). The memories reported by the childbirth group in the pregnancy phase included fears of birth, home and relationship with parents, and desires and goals. In the early postpartum phase, they expressed warm and happy relationships with relatives who appreciated and nurtured them, and in the later postpartum period their memories included themes from both previous interview periods as well as common themes with the comparison group, which included activities with peers and children and instrumental help from parents. The continuing presence of home and parents in the memories of the mothers who gave birth reflected the warm care provided to them by their families. Due to the

high rates of positive memories in the postpartum period, Harkness (1987) concluded that there seems to be no evidence of postpartum depression among these Kipsigis women, therefore emphasizing that culture is a mediating factor in the postpartum period, and helps prevent postpartum depression.

No objective measure for postpartum depression was used to assess these women, therefore making the conclusion of absence of postpartum depression a far-fetched one. This omission is especially important in light of the fact that 40% of memories in the second postpartum interview were not found to be wholly positive, and no analysis of the negative themes was undertaken. These findings raise the question as to whether depression was present at that postpartum stage. It is important to note that this study predated the EPDS (Cox, Holden, & Sagovsky, 1987), however, and that standard open-ended interviews were found to be unsuitable for these women (Harkness, 1987). The use of dreams to elicit memories, therefore, seems appropriate, and provided the study with a rich amount of data. In addition, the use of a control group strengthened the study by providing a comparison between postpartum and nonpostpartum experiences.

The only study in which the researchers concluded that cultural factors had an alleviating influence upon postpartum depression and was not based on women's subjective satisfaction with these factors was that of Dankner, Goldberg, Fisch, and Crum (2000). They examined the social, cultural, and religious factors underlying postpartum depression in Jewish Israeli women. They hypothesized that greater religiosity would be associated with a decreased risk of postpartum depressive symptoms. This hypothesis was based on the fact that in the more traditional religious communities there is a more cohesive social structuring, emphasis on rituals, clearer role definitions, and more extensive community support. Women were recruited during the first 3 days after delivery, while still in the hospital. Thirty-eight percent of the women defined themselves as religious, 29% as orthodox, 20% as traditional, and 13% as secular. Eleven percent of the women were found to have postpartum depressive symptoms. The researchers' main finding demonstrated a decreasing mean of the follow-up EPDS scores across the secular, traditional, religious, and orthodox groups, which brought them to conclude that greater religiosity, with its associated social and community structuring and distinct social roles, is associated with a decreased risk of postpartum depressive symptoms.

The fact that the researchers compared groups that differed across their level of religiosity, and the cultural-communal factors associated with it, enabled them not only to show the alleviating component of religion, but also how lack of religion served as a deteriorating factor. One main limitation of this study pertains to the fact that no validation of the EPDS with a structured psychiatric interview has been performed in Israel (Dankner et al., 2000). Also, due to the fact that there was no validation of the EPDS's Hebrew

translation, it is unclear how the cutoff score of nine was chosen. Moreover, the researchers drew conclusions on the preventive effect of the social and community structuring of those women with a higher level of religiosity, when in fact they tested only for the level of religiosity. The connection between greater religiosity and a more structured–cohesive community was drawn subjectively by the researchers. In addition, the fact that the data analysis included a multiple regression with variables that were found significant in the univariate analyses raises the likelihood of the results to be specific to the sample and not generalizable (Cohen et al., 2003; Stevens, 2002).

Lack of Cultural Traditions as a Deteriorating Factor

A number of studies focused on the lack of cultural traditions as having a negative influence upon postpartum depression. Huang and Mathers (2001) compared factors that were associated with postpartum depression in the United Kingdom and Taiwan. The motive behind this study was, as the researchers' stated, that postnatal rituals and care systems in the United Kingdom and Taiwan were different from one another, and that this factor may contribute to a difference in the prevalence of postpartum depression. Women from the United Kingdom and Taiwan participated in interviews at some point during their 3-month postnatal period.

Results show that 18% of women from the U.K. group and 19% of women from the Taiwan group had postpartum depression. Overall, the U.K. women had higher maternal satisfaction (28.1%) than the Taiwanese women (24.3%). Only 30% of the Taiwanese women received help from their parents or in-laws, and between 72% to 95% observed the behavioral and dietary taboos of "doing the month." These results may suggest that the modernization in Taiwan, moving from an agricultural to an industrial society, where the strong ties between parents and married children have gradually become weaker, caused the postnatal women to follow the cultural rituals on their own without the traditional help from their mothers or mothers-in-law, and contributed to their depression.

This study utilized a random sampling in the design, which allows generalization of the findings. In addition, in-depth interviews offered the women's self perception of satisfaction with their support. The study suffered, however, from a number of methodological problems. First, the authors stated that although the Chinese version of the EPDS was found to be valid, it was problematic to compare results with the U.K. group, since the psychological meanings of the questions may be different in the two languages. This said, the researchers added that the results did have maximal face and concurrent validity (Huang & Mathers, 2001). Second, there was only one assessment of depression, and one cannot know if the

women were depressed before the study began; therefore, it is difficult to conclude what percentage of the depression was actually postpartum depression. Third, most U.K. mothers were interviewed closer to delivery, while most Taiwanese mothers were interviewed at 3 months postpartum. This factor also makes it difficult to compare the results. It may be possible that some of the U.K. results indicated postpartum blues, which is a transitory mood swing that lasts 2 weeks postpartum and is not postpartum depression.

As to the data analysis, the researchers utilized many univariate analyses that provided appropriate preliminary descriptions of the differences between the two groups of women as well as associations between various factors and postpartum depression. No multivariate analysis was performed, however, that could have examined a more complex relationship between the various factors and postpartum depression. In addition, the researchers stated that a grounded theory method was used in order to analyze the qualitative data; however, no specification of the emerging categories and themes was provided.

Stuchbery, Matthey, and Barnett (1998) also compared different cultural groups. They studied the social support needs of postpartum women, as expected according to cultural values, of Vietnamese, Arabic, and Anglo-Celtic mothers in Australia, and the relation of these needs to postpartum depression. Postpartum depression was assessed with the EPDS used as a continuous variable, mainly due to the fact that appropriate cutoff points for different ethnic groups were uncertain (Stuchbery et al., 1998).

Results showed that for Anglo-Celtic mothers, wanting more emotional support from their partner and mother was associated with low postnatal mood. Arabic women were more dissatisfied with their support than Vietnamese or Anglo-Celtic women, and they expressed a higher desire for more help and support from mothers, relatives, and friends. The researchers suggested that the Arabic women's expectations of support might be higher as a result of their cultural milieu, which highly values community support at the postpartum phase. For Vietnamese women, poor quality of relationship with partners and wanting more practical support from them were associated with higher EPDS scores. Vietnamese life circumstances in Australia often do not permit the observance of postnatal cultural traditions, which provide women with practical support and instructions for care for their baby, and this may be the reason why women want more practical support from their partners, who are in many cases their only family support source. Without having their mothers or other female relatives around to help, postnatal mothers may not be able to observe the traditional 40 days of rest that is prominent in the Arabic and Vietnamese culture. The results suggested that the type of social support as well as its degree of significance in relation to postpartum depression vary according to women's cultural backgrounds. If, according to a woman's culture, support is expected to be given in the

postpartum period, then lack of such support may contribute to increased postpartum depression.

The EPDS scores were used appropriately in this study as a continuous scale, indicating a low or high mood state, mainly due to the fact that three different ethnic groups were examined and appropriate cut-off scores for different ethnic groups are uncertain (Stuchbery et al., 1998). The statistical analyses were appropriate and included univariate analyses for descriptive purposes and three multiple regression analyses, one for each ethnic group. As to limitations, translated versions of the EPDS were used; however, the psychometric properties of these translations are unknown. In addition, the authors point to the fact that the social support data were collected only postpartum and as a consequence may have been contaminated with the women's current low mood. Therefore, it is unclear whether the support needs preceded the low mood or vice versa. Furthermore, the connection between support and cultural traditions was done by the authors and not by the women themselves; therefore, it may be inaccurate to attribute the conclusions to lack of cultural traditions rather than just to lack of support. An interview with the women would have overcome this limitation.

Nahas and Amasheh (1999) interviewed postpartum women and reached similar conclusions that the lack of cultural traditions had a positive association with postpartum depression. They explored the experiences, perceptions, and care meanings of postpartum depression among Jordanian women residing in Sydney, Australia, who had postpartum depression.

The three themes expressed were the very high expectations of women, the importance of the extended family as support, and the traditional naming ceremony of the babies 7 days after birth. In the Jordanian Muslim community, the "good" mother copes well after childbirth. New mothers receive practical support (e.g., meal preparation and child care responsibilities) from family members or servants who reside with or live near them for 40 days. Family members also assist in the naming ceremony. In this study, most of the women were new immigrant mothers who did not have family support nearby; therefore, they became overwhelmed with their responsibilities. These women felt that they failed to be a perfect mother and wife, and, therefore became depressed. The findings of this study suggested that the unavailability of cultural factors contributed to postpartum depression.

The combination of subjective viewpoints of women together with a theoretical framework (Leininger, 1991, as cited in Nahas & Amasheh, 1999), which guided the research, the data analysis, and the interpretation of the data, strengthened this study. In addition, the researchers shared the major findings with key informants, a step that increased credibility of findings. Also, having two researchers analyze the data assisted in reducing possible researchers' bias. On the other hand, this study had a number of methodological limitations. First, there was no mention as to the timing and location of the observations and interviews or the women's current

state of their depressive symptoms. Second, the study was performed only with depressed women. Obviously not all Jordanian women in Australia suffer from postpartum depression, while at least a number of them also lack support from their extended family due to distance. Therefore, the conclusions of this study should be viewed with caution. In addition, there was no mention of age, marital status, or number of children, which are demographic factors that are usually examined in postpartum studies due to their possible effect on postpartum depression.

Cultural Traditions as a Deteriorating Factor

In five studies culture was found to have a deteriorating influence upon postpartum depression. Three of the studies focused on cultural beliefs (Amankwaa, 2000; Patel, Rodrigues, & DeSouza, 2002; Rodrigues, Patel, Jaswal, & DeSouza, 2003), while the other two focused on the support factor embedded in the cultural traditions (Danaci et al., 2002; Leung, 2002).

Danaci and colleagues (2002) investigated the epidemiological aspects and cultural factors that may affect postpartum depression in Turkey. Women were interviewed face-to-face by one of four physicians in primary health care centers between 0 to 6 months postpartum. The results indicated that 14% of the participants had postpartum depression. In addition, the researchers specified a number of results as being significant to the Turkish culture. One result indicated that the prevalence rate of depression grew over time from immediately after birth to 12 weeks later. The researchers suggested that in Turkish society mothers draw significant interest and receive good support soon after birth, but as time goes by this attention diminishes. Another finding suggested that the mother's unconstructive relationship with her in-laws had a negative impact on her postpartum depression. The researchers argued that in Turkish culture, a couple often lives together with the husband's parents, or the parents of the couple play an active interfering role. These findings suggested that some Turkish cultural factors serve to increase postpartum depression.

The sample in this study was randomized, so the findings may be representative of the Manisa population. In addition, the Turkish version of the EPDS was previously translated and found to be reliable and valid. On the other hand, the researchers drew conclusions on the connection between culture and postpartum depression based on their own perceptions. There were no interviews with the women experiencing postpartum depression, which could have provided the women's own perceptions on these cultural deteriorating factors. In addition, the data were collected at different points of time during the women's postpartum period, with no prenatal assessment of symptoms. Therefore, women in the sample may have had prenatal depression, postpartum blues, or distinct postpartum depression.

In addition, it is not clear how many statistical analyses were performed, and in some instances it is unclear which variables were included in the analysis. Moreover, by performing many univariate analyses the researchers provided appropriate preliminary descriptions of the results; however, no multivariate analysis was performed that could have examined a more complex association between cultural factors and postpartum depression.

Leung (2002) overcame the screening time limitations, as well as the limitation of subjective researchers' conclusions of the connection between culture and postpartum depression. Leung examined the relationship among social support, stress, and postpartum depression in the context of Chinese culture. Twelve percent of the sample lived with their parents, and almost 30% lived with their in-laws. Assessments of support, stress, and postpartum depressive symptomatology were conducted at three different periods of time.

Prevalence of postpartum depression was found to be 19.8% in this study. Almost 80% of the women indicated that they followed the ritual of "doing the month"; however, most of them reported that they observed only part of the "doing the month" practices. Social support was not found to have a stress-buffering effect on postpartum depression. Instead, the unmet needs of support from spouses, parents, and in-laws were found to be crucial factors in the development of postpartum depression. If the women valued this type of support, they were more likely to experience postpartum depression. On the other hand, the higher the support received from husbands and parents, the less likely women were to have postpartum depression. These factors were investigated in the context of Chinese culture, and the study revealed that although postnatal women practiced traditional rituals, they were not necessarily protected against postpartum depression. On the contrary, practicing the rituals had an impact upon stress, partially because of the negative support that came from the in-laws. Leung (2002) suggested that practicing the rituals had a crucial effect upon the women, and the degree to which they could adapt the rituals to fit into their modern lives was what affected their level of stress and postpartum depression.

Qualitative data, alongside with quantitative data, enriched this study and provide a deeper understanding of the factors that influence postpartum depression. In addition, the PSSQ was utilized in this study to assess subjective perceptions of specific needs of support in the postpartum period, as opposed to using global measures of support or social networks. This allowed the women to refer to their own perceptions of the supportive factor of "doing the month." The PSSQ was not validated prior to this study, but it was translated into Chinese by the researcher, and psychometric properties were assessed in a pilot study. The EPDS, on the other hand, was translated prior to this study and was validated among the Hong Kong population.

The findings of this study were striking in light of most other studies, which found the postpartum cultural traditional support (i.e., “doing the month”) to be an alleviating factor for postpartum depression. One reason for this opposite conclusion may be that more than twice as many women in this study lived with their in-laws as opposed to those who lived with their own parents, and the negative impact of in-laws is well documented (Danaci et al., 2002; Lee, 2000). Also, it is unclear with whom almost 50% of the sample resided; however, 98.5% of the women in the sample were married. It is likely, therefore, that those 50% lived with their husbands. It may be possible that support from the husband was not enough for these women. In addition, most women indicated that they only partially observed the ritual of “doing the month,” therefore raising the question whether this study could actually reach conclusions regarding this cultural tradition.

The analysis of the qualitative data was guided by Morse’s model (1995, as cited in Leung, 2002), which includes comprehending, synthesizing, theorizing, and recontextualizing. This added strength to the study; however, there was no mention of the number of people who participated in the data analysis process. Having more than one person analyze the data is crucial for reducing biases and helps ensure trustworthiness of the study. The quantitative data analyses included a multivariate analysis that was carried out with variables that were found to be significant in the univariate analyses. This raises the likelihood of the results being sample specific, therefore posing a limitation to the generalizability of the study (Cohen et al., 2003; Stevens, 2002).

In a number of studies, researchers examined cultural beliefs and attitudes in association with postpartum depression. Patel and colleagues (2002) examined the effect of risk factors, particularly related to infant gender bias, which is deeply embedded in the Indian culture, on the occurrence and outcome of postpartum depression. Indian women who were mostly Hindu (89%) from Mapusa, a town in Goa, India, participated in the study. The result indicated that at 6–8 weeks postpartum, 23% of the women had postpartum depression, at 6 months postpartum 22% were depressed. Fourteen percent of the women were considered to be chronically depressed (depressed at both periods of time). A significant risk factor for postpartum depression was the women’s sadness about their infants’ female gender. In addition, the risk for postpartum depression in women who had experienced marital violence was significantly greater if the infant was a girl, but it was significantly lower if the infant was a boy. These results suggested that the preference for male children, which is deeply rooted in Indian society, as well as violence against women, which they reported to occur to 30% of women in India (Patel et al., 2002), served as significant risk factors for postpartum depression.

This study collected data longitudinally over 6 months, which allowed some evidence to support that postpartum depression exists in the later postpartum period. Women were assessed during pregnancy, which allows

differentiation between those women who were depressed during pregnancy and those women who developed depression only in the postpartum period. Two different measures were utilized, however, for assessing depression during pregnancy and postpartum. The General Health Questionnaire (GHQ, Goldberg & Williams, 1988) was utilized during pregnancy, while the EPDS was used postpartum. Therefore, it may be possible that these two measures did not measure the same construct of depression. Furthermore, while the Konkani (one of the languages spoken in Goa) version of the GHQ was validated for use in Goa in the past, the Konkani translation of the EPDS was validated only in the pilot phase of this study. In addition, it is unclear if respondents spoke other languages and therefore were given other translations of the EPDS.

The authors stated that their study findings were representative of the entire low-income population of Goa, although they collected data only from women attending a hospital in one city in Goa. They based their conclusions on the low refusal rates, high follow-up rates, and the fact that the majority of low-income women in the study area delivered their babies in public hospitals (like the one from which the participants were recruited). This conclusion should be viewed with caution, however, due to the fact that the researchers utilized a multivariate data analysis using only variables that were significantly associated with postpartum depression in the univariate analyses, therefore raising the likelihood that the results were specific to the sample (Cohen et al., 2003; Stevens, 2002).

Interestingly, a follow-up qualitative study was carried out with the above-mentioned Indian women, published a year later (Rodrigues et al., 2003). The focus of this study was on describing the attitudes and perceptions of mothers and husbands toward childbirth and on exploring the process through which the relationship between postpartum depression and social adversity is mediated. The result indicated that a common reason for distress was poor relationships with husbands, mothers-in-law or both. Some women claimed that the birth of a girl contributed to their strained relationship with their husbands and in-laws. Some husbands also referred to the gender of the baby as a possible cause for nervous problems in their wives. These findings suggested that a poor marital relationship might serve as a vulnerability factor, which in light of a provoking element of a birth of a girl may trigger postpartum depression. On the other hand, a birth of a boy may act as a protective factor even for women who experience an unhappy marital situation. In light of the Indian cultural beliefs about boys and cultural attitudes toward women, as mentioned above, this study strengthens the findings that cultural factors have a significant impact upon postpartum depression.

The integration of this qualitative research part into the larger study (Patel et al., 2002), as well as the participation of the husbands, serves as a methodological strength to the study. It enabled the women and husbands

to elaborate on the stressful phenomenon of the importance of the baby's gender in the Indian culture. Also, the fact that women who were depressed were compared with those who were not depressed added strength to the study. Another strength pertains to the fact that the data were analyzed by four authors, a strategy that helps to reduce possible bias in analyzing and interpreting the data. It is unclear what method of data analysis was used, however, and how themes were identified.

Another qualitative study focused on the negative effects of cultural beliefs upon women's postpartum well-being (Amankwaa, 2000). In her naturalistic qualitative study, the researcher aimed at generating theory to identify the psychosocial processes that African American women engage in for adapting to postpartum depression. Six themes emerged from the data, and the theme titled "dealing with it" was found to have a cultural context in the lives of these women. The women attempted to live up to the image of being a "strong Black women," believed the myth that postpartum depression can only happen to "White women," and were ashamed of having depression. In addition, the women relied on prayer or faith to help them cope with their depression. Amankwaa (2000) stressed that these beliefs and rituals are widely held by African Americans and may have prevented the women from seeking professional help, therefore contributing to the deterioration of their postpartum depression. Amankwaa suggested that these cultural sanctioned strategies might have served as barriers rather than facilitators of successful resolution of postpartum depression, therefore contributing to the increase in their postpartum depression.

This study sheds light on the understudied, but important, connection between African Americans' beliefs and rituals and postpartum depression. The author used the grounded theory method (Stern, 1990, as cited in Amankwaa, 2000) to guide her research, which served to strengthen the study. In addition, she used peer debriefing which helped reduce bias in analyzing and interpreting the data, and provided evidence for trustworthiness. On the other hand, the study included interviews only of women who had postpartum depression. It might be that themes that evolved from these interviews could pertain to women not suffering from postpartum depression as well. Also, some of these women were categorized as having postpartum depression based on their own self-report, and not on a clinical evaluation.

Cultural Traditions as Neutral Affect on Postpartum Depression

In one study the researchers concluded that cultural traditional support was not associated with the onset of postpartum depression. Yoshida, Yamashita, Ueda, and Tashiro (2001) compared two groups of Japanese mothers in a longitudinal study. One group consisted of women living in Japan, while the other consisted of women living in England. Their aims were to examine

whether there was a difference in the incidence of postpartum depression between Japanese women and Western women, and whether *Satogaeri bunben* contributed to a lower incidence of postpartum depression in Japanese women. *Satogaeri bunben* is a Japanese rite where the pregnant mother returns to her family home for the delivery around 32–35 weeks gestation and stays with her parents and family members to obtain support and to rest physically and psychologically after the birth for a few months (Yoshida et al., 2001).

The incidence of postpartum depression was 12% in the English group and 17% in the Japanese group. Seventy-six percent of the English group received support from their mothers who came to visit them postpartum. Sixty-seven percent of the Japanese group received support from their mothers through *Satogaeri bunben*. These findings suggested that the ritual of *Satogaeri bunben* did not make a difference in the occurrence of postpartum depression.

In order to determine the sociocultural context and the role of *Satogaeri bunben* for Japanese women in today's society, another sample was recruited from a community health center in Fukuoka City, Japan. The result indicated that approximately 70% chose to follow the ritual of *Satogaeri bunben*. Out of those women who did not follow this ritual, 20% of them wanted to look after their own family and did not want to change their obstetrician, and 10% of them had existing emotional discord with their mothers.

Utilizing two groups, in which one followed the Japanese cultural rite of *Satogaeri bunben* and the other did not, the researchers were able to make a comparison between the effects of a cultural rite and different types of support. It is unclear how the English group perceived their mothers' support, however, which may have served as a type of *Satogaeri bunben*. Interviews with these mothers may have helped to understand the postnatal cultural experience of the English group. In addition, a major limitation to the study pertains to the fact that no statistical analysis was utilized. The authors simply compared the incidences of postpartum depression in the two groups, and it is unclear whether the difference between the incidences was significant. Also, the authors indicated that the EPDS was translated into Japanese and was used as a screening tool on Japanese women prior to this study; however, there is no mention of the psychometric properties of this version. Furthermore, the conclusion of the researchers that the Japanese rite does not help alleviate postpartum depression was based not only on a comparison of incidence of postpartum depression in the two groups of the study, but also on a comparison with the incidence of postpartum depression known to exist in Western cultures. These Western incidences of postpartum depression are not always similar, and therefore a more accurate conclusion could have been made if the researchers would have examined a third group from a Western culture and made a comparison with their two Japanese groups.

DISCUSSION

The comprehensive review of the literature has shown that despite the effect of cultural traditions, beliefs, and rituals on postpartum depression, not many studies actually have investigated this association. This finding was quite surprising since cultural factors can greatly influence postpartum depression, either positively or negatively. Researchers in eight studies investigated the association between cultural rituals and postpartum depression and concluded that cultural rituals had an alleviating impact upon postpartum depression and that the lack of cultural traditions leads to increased postpartum depression.

The most common ritual, which was described in nine studies, was the resting for a period of time after giving birth, observing a diet and other restrictions, and receiving support from the extended family (usually the mother or mother-in-law). Two more studies discussed the cultural social support factor as well. The phenomenon of social support has been studied extensively in the literature, demonstrating mostly a positive impact upon postpartum mood (O'Hara & Swain, 1996). Furthermore, this review of the literature also has pointed out the importance of the woman's perceived support, the fact that subjectively she feels that her needs are being met. Since there were contradictory conclusions as to the impact of cultural types of support upon postpartum depression, it is important to further investigate this issue to better understand the cultural context of women's lives, and the meanings of receiving the appropriate support.

There were a number of methodological problems with the studies included in this literature review. First, some of the studies that assessed women's perceived support were done only at the postpartum stage, therefore leading to a possible contamination of the social support data with the women's current mood. In those studies it was difficult to establish whether the social support needs preceded the low mood or vice versa. People suffering from depression are more likely to perceive a social situation as negative, therefore leading them to express higher needs of support (Stuchbery et al., 1998).

Second, although in most of the studies the EPDS was used to assess depressive symptoms, in many of them no psychometric properties of the translated versions were reported and several different cutoff points, some of which were found to be more suitable for different cultures, were used. This diversity in scores makes it difficult to compare among different cultures. Therefore, it is important to set a standard as to how a comparison should be made among various cultures with regard to postpartum depression. For instance, studies should rely on the EPDS cutoff that was validated for the particular culture under examination. In cultures where an EPDS cutoff was not validated, a validation should be made before using this instrument.

Third, although the term “postpartum depression” was used in most of the studies, these studies included an assessment of the women based on the EPDS scale, which assesses postpartum depressive symptomatology, not postpartum depression. It is extremely important to use the suitable definitions. In addition, a number of researchers (Harkness, 1987; Stewart & Jambunathan, 1996) referred to postpartum depression without assessing the women or receiving prior assessments of them. This lack of objective measurements makes it extremely difficult to reach any conclusion about postpartum depression existing or not existing in these groups of women. This issue also raises the question as to what exactly the studies were assessing: Were they assessing postpartum depression, postpartum depressive symptomatology, or some other type of depression or sadness? It is difficult to compare among studies since they were possibly measuring different phenomena.

A fourth methodological limitation was that depressive symptoms were evaluated only after giving birth in one-half of the studies. This cross-sectional methodology makes it difficult to conclude whether these women had depression during pregnancy and it was “carried over” to the postpartum, or whether they actually started having depression in the postpartum period. Although some of the studies checked previous depression in the women, they did not specify if the women had a history of depression or prenatal depression.

Another limitation pertains to the fact that the samples were from diverse cultures, which made it difficult to compare their results. Some samples were taken from rural areas and some from urban areas. The rural areas are usually less prone to modernization, and women from those areas might be observing more cultural traditions than the women living in urban areas, where Western elements have been more absorbed into the culture. In addition, some of the samples included women who were immigrants, making it difficult to differentiate between problems arising from immigration and challenges arising from postpartum depression.

Finally, in many of the studies the methodology limited the generalizability of the findings. Whether it was a nonrandom sample or the type of data analysis chosen, conclusions of those studies should be limited to the sample that was under examination. In future studies careful attention should be given to the sample selection and type of data analyses used in order to overcome this limitation and be able to generalize findings.

Despite these methodological limitations, the studies under review highly contributed to the understanding of culture in relation to postpartum depression. The qualitative studies presented rich information on women’s subjective experience of their postpartum period. The greatest contribution was a deeper understanding of what women in specific cultures might experience during the postpartum period. The quantitative studies demonstrated the association between culture and postpartum depression, providing a more systematic evaluation of this association.

There are a number of limitations to this literature review. First, only studies in English were included in the review. Second, the search for studies was done utilizing the electronic databases and resources available through the University of Maryland system. Last, the decision whether to include a study in the literature review was based heavily on reading the abstract, although when suitability of the article was not clear from the abstract the entire study was read in order to determine whether to include it in the literature review or not.

CONCLUSION

This review of literature stressed the importance of women's perception of tradition in the postpartum period. Looking deeper into some of the contrasting results, mainly those regarding the women's relationships with their in-laws, we are led to the notion that if women do not perceive rituals as helpful to them, they can have a negative effect on their postpartum mood. Future studies should incorporate this important subjective assessment.

It is time to move beyond prevalence, incidence, and descriptive studies of different cultures and toward a more scientific evaluation of the different cultural traditions and beliefs, and their influences upon postpartum depression. Studies with randomized samples need to address the differences between rural and urban populations, combine objective and subjective measures, utilize appropriate data analyses, and set standards for culture comparisons.

We hope that this literature review contributed to health and mental health practitioners from different disciplines in their understanding of the different cultural factors' impact upon postpartum depressive symptomatology. Health and mental health providers need to be aware of the cultural background of their clients in order to accommodate their needs and refer them to communal resources. If these mothers' access to supportive cultural resources is associated with enhanced psychological functioning, facilitating this access will be an important goal of intervention.

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