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Prematurity, ethnicity and personality: risk for postpartum emotional distress among Bedouin-Arab and Jewish women

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Background: Mothers of preterm infants are at high risk for postpartum emotional distress. This risk is further increased for women from ethnic minority groups due to specific stressors such as lack of social support, low socioeconomic status and restricted access to health providers and facilities. **Objective**: This study focused on postpartum emotional distress among Bedouin-Arab mothers, an understudied ethnic minority group living in Israel. Specifically, we examined how premature birth, ethnicity and personality interact in placing Bedouin-Arab and Jewish mothers at risk for postpartum emotional distress. **Methods**: Participants included 156 mothers of preterm infant (48 Bedouin; 108 Jewish) and 177 mothers of full-term infants (55 Bedouin; 122 Jewish). Measures included maternal reports of emotional distress (i.e. depression symptoms and parental role alteration stress) and the personality trait of self-criticism. **Results**: Bedouin mothers of preterm infants experienced the highest level of depression symptoms and parental role alteration stress compared to all other mothers. Furthermore, although no group difference was found in self-criticism, Bedouin mothers were more vulnerable to the negative effect of self-criticism than Jewish mothers. Vulnerability to self-criticism varied between the full-term and preterm groups, and in the context of depression or parental role alteration stress. **Conclusion**: Results are discussed with regard to the unique characteristics of the Bedouin society and the social status of Bedouin women. Clinical implications stressing the need for culturally sensitive adjustments that should be implemented in NICU environment are suggested.

Keywords: postpartum depression; prematurity; self-criticism; cultural context; Bedouin society

The birth of a preterm infant is considered to be a risk for maternal postpartum emotional distress (e.g. Davis, Edwards, Mohay, & Wollin, 2003; Locke et al., 1997). We suggest that there is diversity in maternal adjustment to the birth of a preterm baby, placing some mothers at higher risk than others. Inspired by an ecological perspective positing that multiple levels of proximal and contextual factors affect individual development over time (Bronfenbrenner, 1979), the current study investigated how three factors (i.e. a premature birth, ethnic belonging and personality characteristics) act together to either protect mothers or place them at further risk for postpartum emotional distress.

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Risk factors for maternal postpartum emotional distress

Experiencing a premature birth may be an emotionally traumatising crisis for mothers, raising feelings such as loss of control and inhibited trust in their child, in their own future and in their role as competent parents (Lohr, Von Gontard, & Roth, 2000). Indeed, many studies have demonstrated heightened levels of depression symptoms among mothers of preterm infants during the first months after gestation (e.g. Davis et al., 2003; Locke et al., 1997). The elevated levels of parental distress during the infant's hospitalisation (i.e. depression and anxiety symptoms) may result in mothers' lack of emotional bonding at the time of the infants' discharge, leading to subsequent negative parent–child interactions (Feldman, 2007; Korja et al., 2008; Zelkowitz, Papageorgiou, Bardin, & Wang, 2009).

Research suggests that the most stressful aspect of the infant's hospitalisation in the Neonatal Intensive Care Unit (NICU) is the alteration of the parental role and relationship with the infant (Dudek-Shriber, 2004; Miles, Funk, & Kasper, 1992). Parents of preterm infants reported feeling disappointed and frustrated that they cannot perform normative parental tasks (e.g. feeding, bathing) as they had anticipated, and also experienced distress and helplessness about not being able to protect their infant from pain and distress (Carter, Mulder, & Darlow, 2007; Miles et al., 1992). The NICU staff may also contribute to parental role stress through words and actions implying that the parents are incompetent to care for their infants (Miles & Frauman 1993).

Women from ethnic minority groups may be at further risk for postpartum emotional distress following a premature birth (Poehlmann, Schwichtenberg, Bolt, & Dilworth-Bart, 2009). Overall, women from ethnic minorities are at high risk for experiencing postpartum depressive symptoms (e.g. Howell, Mora, Horowitz, & Leventhal, 2005; Kuo et al., 2004; Onozawa, Kumer, Adams, Dore, & Glover, 2003). The high rates of depressive symptoms among these women may be accounted for by specific stressors that characterise ethnic minority mothers, such as limited social support, low socioeconomic status, restricted access to health providers and facilities and low trust in the medical system (Howell et al., 2005; Kuo et al., 2004). Specifically, mothers from ethnic minorities who experience a *premature* birth may be at double risk for experiencing emotional distress. However, to the best of our knowledge, only one study investigated maternal ethnicity as a potential contributor to maternal depressive symptoms following a premature birth (Poehlmann et al., 2009). Findings from this study suggest that mothers from racial and ethnic minority groups in the US experienced more depressive symptoms than their ethnic majority counterparts (Poehlmann et al., 2009). Additional research is needed to further delineate the links between ethnicity and emotional distress among mothers of preterm infants.

Bedouin-Arabs are a minority group living in Israel, where the Jewish population is the majority. In the southern region of Israel, the Bedouin society accounts for over 25% of the population, including approximately 180,000 residents (The Negev Bedouin Statistical Data Book, 2010). While the Jewish population is oriented towards individualism, emphasising values such as autonomy and personal growth (Triandis, 2001), the Bedouin society is collectivistic, where relational-oriented values such as belongingness, loyalty (Gardner, Gabriel, & Lee, 1999), family hierarchy and stability are valued over individualism and change (Al-Krenawi, Graham, & Al-Krenawi, 1997). Furthermore, the Bedouin society is patriarchal and

gender-segregated, and women's physical and intellectual capabilities are generally undervalued (Al-Krenawi & Slonim-Nevo, 2008). Their choice of education, occupation and use of birth control are usually determined by their husbands or other primary male family figure (Green, Broome, & Mirabella, 2006). Bedouin mothers may be at higher risk for postpartum emotional distress due to main two reasons. The first reason is a struggle between the traditional tribal Bedouin culture and the modern western Israeli culture, resulting in severe social problems, including poverty, family dysfunction, school dropout, delinquency, and substance abuse (Al-Krenawi & Graham, 2004; Al-Krenawi et al., 1997). Indeed, it has been reported that overall Bedouin women suffer from high rates of health problems, depressive symptoms, low self-esteem (Cwikel & Barak, 2002) and postpartum depression (Glasser, Stoski, Kneler, & Magnezi, 2011). Second, childbearing and motherhood are considered to be significant social values among women in the Arab society (Zurayk, Sholkamy, Younis, & Khattab, 1997).Thus, women's self-concept is strongly contingent upon bearing and rearing children (Al-Krenawi, 1998). Premature birth may be self-perceived as well as objectively experienced by Bedouin women as a disappointment to the Bedouin society, provoking negative attributions about the self and high levels of emotional distress.

Personality has been found to be a main factor that interacts with culture in the process of coping with a stressful situation (Chun, Moos, & Cronkite, 2006). Specifically, individualistic and collectivistic cultural orientations may predispose individuals towards a greater sensitivity to their personal attributes or to their interpersonal relationships, thereby affecting the relative importance of these contributors toward emotional distress (Chen, Chan, Bond, & Stewart, 2006). Research has revealed variations in the links between personality traits and emotional distress among collectivistic and individualistic cultural groups (e.g. Chen et al., 2006). A specific personality vulnerability factor to depressive symptoms found in Bedouin society is self-criticism (Abu-Kaf & Priel, 2008). Self-criticism is a personality trait characterised by elevated self-standards and obsessive concerns with failure and guilt (Blatt & Zuroff, 1992). Self-criticism was found to be a prominent risk factor for depression (e.g. Blatt, 1995), especially in reaction to failure-related and interpersonal stressful events (Zuroff & Mongrain, 1987). Previous research within Bedouin society indicated that the positive link between self-critical personality traits and depressive symptoms was stronger among Bedouin undergraduate students compared to Jewish students (Abu-Kaf & Priel, 2008). While self-criticism may be viewed as a normative, maybe even an adaptive personality trait among the Jewish individualistic society, it contradicts with Bedouins' collectivistic cultural norms, placing Bedouin self-critical individuals at risk for emotional distress (Abu-Kaf & Priel, 2008).

The present study

Our examination of the emotional state of Bedouin mothers of preterm infants is novel in several ways. First, we examined maternal emotional distress through an ecological perspective, stressing the need to study maternal mental health in culturally sensitive research. Second, self-criticism was examined in relation to premature motherhood. Finally, we examined the way risk factors act together in putting mothers at risk for emotional distress following a premature birth. It was

hypothesised that overall (a) mothers of preterm infants will report higher levels of emotional distress (i.e. depression symptoms and role alteration stress) than mothers of full-term infants; (b) Bedouin mothers will report higher levels of emotional distress than Jewish mothers; and (c) mothers with higher levels of self-criticism will report more emotional distress compared to mothers with lower levels of self-criticism. In addition, we expected that there will be an interaction effect between prematurity, ethnicity and self-criticism. Specifically, it was hypothesised that Bedouin mothers will be more vulnerable to the negative effects of self-criticism, and that this vulnerability will be heightened under the stressful situation of a premature birth.

Method

Sample

The sample included 333 mothers: Bedouin mothers of preterm (n = 48) and full-term (n = 55) infants and Jewish mothers of preterm (n = 108) and full-term (n = 122) infants. Mothers were recruited at the maternity ward and the NICU of the largest medical centre in the southern region of Israel. The preterm groups included mothers who delivered singleton infants born between 28 and 34 weeks of gestation. The full-term groups included mothers who delivered healthy singleton infants at full term (> 37 weeks gestation). Demographic information concerning mothers (age, years of education) and infants (gender, gestational age at birth, birth weight, days of hospitalisation, Apgar score, number of siblings and medical risk score) are detailed for each group separately (see Table 1). Bedouin and Jewish preterm infants did not significantly differ with regard to gender distribution, gestational age at birth, birth weight, the number of hospitalisation days, Apgar score and medical risk score. Similarly, Bedouin and Jewish full-term infants did not significantly differ on any of these variables. However, overall Bedouin mothers held lower educational qualifications than their Jewish counterparts ($F(3,332) = 86.92$, $p < .001$). Furthermore, Bedouin mothers were younger than Jewish mothers ($F(3, 323) = 11.08$, $p < .001$). Finally, Bedouin infants had more siblings than their Jewish counterparts ($F(3,332) = 13.93$, $p < .001$).

Procedure

Subsequent to Helsinki Review Board approval, data collection occurred in the maternity ward and the NICU. Mothers were invited to participate in the study during their infants' hospitalisation period. Seventy percent of the mothers who were offered to take part in the study agreed to participate. The main reasons for refusal were time constraints and fatigue. Written consent forms were obtained from mothers willing to participate. Mothers were requested to orally complete a questionnaire booklet with the help of a trained research assistant. The questionnaires were verbally administered due to two main reasons. First, as a result of the natural fatigue following childbirth mothers preferred to be orally interviewed over answering a written questionnaire. Second, most Bedouin mothers were illiterate and therefore could not answer a written self-report measure. All the questionnaires were translated into Hebrew and Arabic and back-translated to English, and mothers answered in their native language.

Table 1. Demographic information by ethnic group.

		Bedouin mothers		Jewish mothers	
		N = 103		*N* = 230	
		Preterm *N* = 48	Full-term *N* = 55	Preterm *N* = 108	Full-term *N* = 122
Maternal variables					
Age (years)	M (SD)	26.66 (6.8)	27.21 (6.4)	31.50 (5.5)	29.94 (4.9)
Education (%)					
	Less than 12 years of studies	70.8	80	24	15.6
	High school degree	10.4	12.7	26	24.6
	Higher nonacademic qualification	4.2	–	2	6.6
	Academic education	14.6	7.3	48	53.3
Infant variables					
Gender (%)					
	male	62.5	60	59.3	51.6
	female	37.5	40	40.7	48.4
Number of siblings	M (SD)	2.67 (2.56)	3 (2.9)	1.52 (1.3)	1.30 (1.34)
Gestational age (weeks)	M (SD)	32.13 (1.87)	39.3 (1.5)	32.3 (1.75)	39.38 (1.2)
Birth weight (g)	M (SD)	1790 (498)	3185 (452)	1841 (458)	3371 (432)
Days of hospitalisation	M (SD)	21.5 (17.94)	2.8 (1.9)	18.7 (14)	2.9 (1.22)
Apgar score	M (SD)	9.4 (1.2)	9.98 (.13)	9.42 (1.1)	9.95 (.29)
NBRS score	M (SD)	0.7(1.3)	–	0.6(1)	–

Measures

Infant medical risk

The Nursery Neurobiological Risk Score (NBRS; Brazy, Eckerman, Oehler, Goldstein, & O'Rand, 1991) was used to assess preterm infants' medical risk. The NBRS includes seven items: infection, blood PH, seizures, intraventricular hemorrhage, assisted ventilation, periventricular variation and hypoglycaemia. Each item is assessed on a 4-point scale (0 = no evidence to 4 = most severe condition) by a trained research assistant based on the infants' medical records. The total NBRS is the sum of the scores for each item. Higher scores indicate higher levels of medical risk. A cutoff score of ≥ 6 identifies infants at high risk for abnormal outcomes. The mean NBRS score in the present study was 0.6 (SD = 1.1) and all scores ranged between 0 and 5, indicating that all infants were at low to moderate medical risk.

Depression symptoms

The Center for Epidemiological Studies Depression (CES-D; Radloff, 1977) is a 20-item inventory of depression symptoms. Mothers were asked to report on the frequency of symptoms experienced since the birth of their child (e.g. 'I felt sad') on a 4-point Likert scale that ranges from 0 (rarely or none of the time) to 3 (most or all of the time). Higher scores indicate higher levels of depressive mood and symptoms. The CES-D has demonstrated good internal reliability among Bedouin and Jewish populations in Israel in previous research (Abu-Kaf & Priel, 2008). Internal consistency reliability coefficients in the present study were 0.88 among both Bedouin and Jewish mothers.

Role alteration stress

The Parental Stressor Scale: Neonatal Intensive Care Unit (PSS: NICU; Miles, Funk, & Carlson, 1993) is a scale that measures parental stress that is related to different dimensions of the NICU environment. In the current study, the parental role alteration and relationship with the baby scale (11 items) was used, a scale that describes stress that is associated with loss of the parental role during the infant's hospitalisation at the NICU. Mothers were asked to rate each item (e.g. 'Feeling helpless about how to help my baby during this time') on a 5-point Likert scale from 1 (not at all stressful) to 5 (extremely stressful). Higher scores indicate higher levels of stress associated with parental role alteration. Internal consistency reliability coefficients were 0.73 among Bedouin mothers and 0.83 among Jewish mothers.

Self-criticism

In the present study, six items from the original Depressive Experiences Questionnaire (DEQ) were used to measure trait self-criticism (DEQ-SC6; Rudich, Lerman, Gurevich, Weksler, & Sahar, 2008). Mothers were asked to rate items (e.g. 'I find it hard to accept my weaknesses'), on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Higher scores indicate higher levels of trait self-criticism. The self-criticism scale has demonstrated good internal reliability among Bedouin and Jewish populations in Israel in previous research (Abu-Kaf & Priel, 2008). Internal consistency reliability coefficients in the present study were 0.66 among Bedouin mothers and 0.77 among Jewish mothers.

Results

Preliminary analysis

Due to the cultural differences reported in maternal education, maternal age and number of infant's siblings, correlations were calculated among these variables and the study measures. It was found that maternal education was negatively correlated with depression ($r = -.24$, $p < .001$) and role alteration stress ($r = -.30$, $p < .001$). Therefore, all of the analyses concerning depression and role alteration stress were conducted controlling for maternal education. All other correlations were negligible (ranging between $r = .00$ and $r = .15$).

Correlational analyses

Next, intercorrelation analyses of prematurity, ethnicity and self-criticism were computed. As can be seen in Table 2, no significant association was found between these variables. That is, ethnicity was not linked to self-criticism and prematurity, and no association was found between prematurity and self-criticism.

Risk factors for postpartum emotional distress

Three-way 2 × 2 × 2 ANOVA analyses for prematurity (full-term, preterm), ethnicity (Bedouin, Jewish) and self-criticism (high, low) were conducted for maternal depression symptoms (see Table 3 for means and standard deviations). In order to include self-criticism in the ANOVA analyses, this variable was first converted into a dichotomous variable by using a median split and dividing the sample into 'low' and 'high' self-criticism groups. Significant main effects of prematurity ($F(1, 332) = 38.4$, $p < .001$), ethnicity ($F(1, 332) = 10.3$, $p < .01$) and self-criticism ($F(1, 332) = 37.3$, $p < .001$) on depression symptoms were found. Specifically, mothers of preterm infants reported more depressive symptoms (M = 23.5, SD = 11.9) compared to full-term mothers (M = 16.2, SD = 8.8). In addition, Bedouin mothers reported more depressive symptoms (M = 23.8, SD = 12.4) than Jewish mothers (M = 17.7, SD = 9.6). Finally, mothers with high self-criticism reported more depressive symptoms (M = 23, SD = 11.1) than mothers with low self-criticism (M = 16.6, SD = 9.9). In addition, a trend for a three-way interaction was found between prematurity, ethnicity and self-criticism ($F(1,332) = 2.2$, $p = .06$), indicating that the pattern of results varied between the prematurity groups. Post-hoc analysis indicated that Bedouin mothers of preterm infants reported the highest level of depression symptoms compared to all other mothers ($p \leq .001$), followed by Jewish mothers of preterm infants and Bedouin mothers of full-term infants who reported comparable levels of depression symptoms. Finally, Jewish mothers of full-term infants reported the lowest level of depression symptoms compared to all other

Table 2. Correlations among study variables.

	1	2	3
1. Prematurity	–	–.00	–.02
2. Ethnicity		–	.06
3. Self-criticism			–

* $p < .05$, $^{**}p < .01$, *** $p < .001$.

Table 3. Means and (SD) of depression symptoms by birth status, ethnicity and levels of self-criticism.

	Preterm			Full-term		
	Bedouin N = 48	Jewish N = 107	Total	Bedouin N = 55	Jewish N = 122	Total
Low self-criticism	24.9 (13.4)	18.9 (9.5)	20.66 (11.1)	14.9 (7.7)	12.4 (7.2)	13.2 (7.3)
High self-criticism	31 (12.7)	24.3 (11.2)	26.5 (12.1)	26.7 (9.7)	16.8 (6.9)	19.9 (9)
Total	27.9 (13.4)	21.36 (10.6)		20.2 (10.4)	14.5 (7.3)	

mothers ($p < .001$). Furthermore, among the preterm group although Bedouin mothers with high self-criticism reported the highest level of depression symptoms, nevertheless this difference did not reach significance. However, among the full term group Bedouin mothers with high levels of self-criticism reported the highest level of depressive symptoms compared to all other mothers of full-term infants ($p \leq .001$) (see Figure 1).

In order to assess the interaction between ethnicity and self-criticism on maternal role alteration stress, a two-way ANOVA analysis was conducted among the preterm group. Significant main effects were found for ethnicity ($F(1,153) = 7.5$, $p \leq .001$) and self-criticism ($F(1,153) = 3.09$, $p < .05$), indicating that among the preterm group, Bedouin mothers reported more role alteration stress (M = 41.52, SD = 7.2) compared to their Jewish counterparts (M = 33.6, SD = 10.6). In addition, preterm mothers with high levels of self-criticism reported more role alteration stress (M = 37.7, SD = 11) than mothers with low levels of self-criticism (M = 34.7, SD = 9.6). No interaction effect was found ($F(1,153) = .17$, ns). However, correlation analyses between role alteration stress and self-criticism (as a continuous variable) conducted separately for Bedouin and Jewish mothers yielded different patterns of results between the groups. Specifically, whereas among Bedouin mothers higher levels of self-criticism were associated with higher levels of role alteration stress ($r = .33$, $p < .05$), for Jewish mothers this link was not found ($r = .00$, ns). Furthermore, the difference revealed in correlations between the two cultural groups was found to be significant ($z = 1.91$, $p < .05$).

Discussion

This study examined the roles of a premature birth, ethnicity and personality in placing Bedouin-Arab and Jewish mothers at risk for postpartum emotional distress.

Overall, Bedouin mothers of preterm infants experienced the highest level of emotional distress compared to all other mothers. Furthermore, it was found that Bedouin mothers were more vulnerable to the negative effect of the personality trait self-criticism.

Risk factors for maternal postpartum emotional distress

Supporting our first hypothesis, mothers of preterm infants reported elevated levels of depression symptoms compared to mothers of full-term infants. These findings replicate previous research indicating greater emotional distress among preterm than

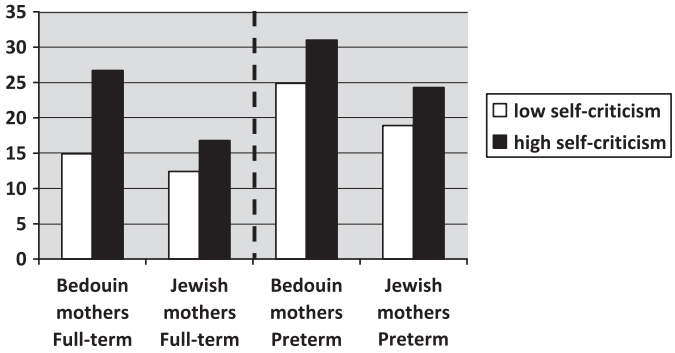

Figure 1. Levels of depression among Bedouin and Jewish mothers of full-term infants with regard to low and high levels of self-criticism.

full-term mothers (e.g. Davis et al., 2003; Locke et al., 1997). In addition, it was found that mothers with high self-criticism reported elevated emotional distress (i.e. more depression symptoms and higher role alteration stress) compared to mothers with low self-criticism. These results further confirm the role of self-criticism as a prominent risk factor for elevated emotional distress (e.g. Blatt, 1995). In line with a previous study (Glasser et al., 2011), Bedouin mothers reported more depression symptoms compared to Jewish mothers. The current study expanded these findings by indicating that Bedouin mothers of preterm infants experience more depression symptoms compared to Jewish mothers of preterm infants. This finding supports the notion that mothers from ethnic minorities who experience a premature birth may be at double risk for experiencing depression symptoms. Furthermore, this study was the first to examine emotional distress at the NICU among Bedouin mothers of preterm infants. Interestingly, we found that Bedouin mothers of preterm infants experienced higher levels of stress associated with parental role alteration in the NICU compared to their Jewish counterparts. Bedouin mothers may experience a cultural conflict in the NICU environment. That is, the interaction between the Jewish medical staff and the Bedouin mothers is an encounter between two different cultures who appraise the value of health and healing differently (Lubetzky, Shvarts, Merrick, Vardi, & Galil, 2004). In addition, the lack of Arabic-speaking medical staff may further contribute to Bedouin mothers' dissatisfaction with modern health care services (Borkan, Morad, & Shvarts, 2000). The language constraints and cultural differences may lead to tension between Bedouin mothers and the NICU staff, promoting a view of themselves as inept mothers.

Our second hypothesis premised that Bedouin mothers will be more vulnerable to the negative effects of self-criticism on emotional distress than Jewish mothers, and that this vulnerability will be heightened under the stressful situation of a premature birth. This hypothesis was partially supported. In regards to depression symptoms, Bedouin mothers of preterm infants with high self-criticism reported the highest rating of depression symptoms. Nevertheless, this difference did not reach significance. However, in the full-term group, Bedouin mothers with high self-criticism were found to have significantly more depressive symptoms than all other mothers having infants born full-term. This finding is in line with previous research indicating that self-criticism is a specific personality vulnerability factor for depressive symptoms in Bedouin society (Abu-Kaf & Priel, 2008). The different pattern

of vulnerability between Bedouin and Jewish women may be rooted in the collectivistic nature of the Bedouin culture. The Bedouin culture stresses interdependency within the family and tribe. Women are particularly expected to fulfil their social roles as wives and mothers and there are cultural prohibitions against women having careers or obtaining high education (Al-Krenawi, 1998). On the contrary, self-criticism represents preoccupation with individualistic values such as personal failure and heightened strivings for mastery and achievement (Blatt & Zuroff, 1992). Thus, Bedouin mothers with high self-criticism may experience a conflict between their cultural norms and their need for personal achievement resulting in heightened levels of depression symptoms.

Finally, the positive correlation between self-criticism and role alteration stress found exclusively among Bedouin mothers, and not among Jewish mothers suggests that self-critical Bedouin mothers experience the premature birth as a failure-related event. Giving birth to a premature infant in a society in which women's social status is strongly contingent upon bearing and rearing children (Al-Krenawi, 1998) seems to be experienced as a failure to fulfil their maternal role. Their functional difficulties at the Hebrew-oriented NICU may further enhance their feelings of incompetency. However, it seems that Jewish mothers' role alteration stress does not evolve around issues such as self-worth and personal failure. Jewish mothers may be more involved in their infants' care in the NICU and therefore they can better function in the NICU situation.

Study limitations and future research

Results should be considered in light of a few limitations. First, this study employed a cross-sectional research design, and thus levels of prepartum emotional distress were not measured and controlled for. Therefore, causality cannot be determined. Second, additional variables that may explain within-group differences in emotional distress were not included. For example, a variable that may be salient among Bedouin women is acculturation; the changes in attitudes, values, and behaviors that result from contact between two distinct cultures (Berry, 1997; Phinney, 1990). Previous research indicated that different aspects of acculturation were associated to maternal postpartum depression among ethnic minority mothers (e.g. Martinez-Schallmoser, Telleen, & Macmullen, 2003). Finally, as postpartum distress has been linked to later mother–child interactions among preterm infants (e.g. Feldman, 2007; Korja et al., 2008; Zelkowitz et al., 2009), future research should examine longitudinally how emotional distress may affect the development of the mother–infant relationship in Bedouin society.

Clinical implications

By exploring the links between prematurity, self-criticism, ethnic belonging and emotional distress, the present study provided new directions for researchers and clinicians on cultural vulnerability to distress among Bedouin and Jewish mothers. Bedouin mothers of preterm infant were found to be a high-risk population for postpartum depression symptoms and the alteration in their maternal role at the NICU was specifically stressful for these mothers. These findings stress the need for culturally sensitive adjustments that should be implemented in NICU environment. Specifically, additional Arab speaking personnel should be recruited in order to

facilitate Bedouin mothers' communication with the medical staff. Furthermore, due to the high rates of depression symptoms among Bedouin mothers, postpartum depression should be screened for regularly in the maternity wards. Finally, the medical staff should be sensitive to the unique social structure of Bedouin society and involve the extended family and local leaders in cases of severe postpartum emotional distress.

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