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TENDING TO TWO HEARTS: INVESTIGATING THE EMOTIONAL JOURNEY OF SELF-CARE AND INFANT CARE IN KOREAN WOMEN PRONE TO POSTPARTUM DEPRESSION

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Abstract: In South Korea, traditional postpartum care and support are provided by the mother or mother-in-law for at least three weeks following childbirth, aiding the new mother in her physical and psychological recovery and infant care (Song, Chang, & Kim, 2008). This early postpartum period serves as a crucial transition time during which mothers acquire the skills and understanding needed to fulfill their roles and responsibilities as parents (Epifanio, Genna, DeLuca, Rocella, & La Grutta, 2015). Knowledge about newborn care, infant development, and parental roles and responsibilities is gained during this period. Therefore, healthcare professionals play a vital role in assisting women in the postpartum phase (Razurel, Kaiser, Antonietti, Epiney, & Sellenet, 2017).

Keywords: postpartum care, traditional practices, maternal health, infant care, healthcare professionals.

Introduction

In South Korea, for at least three weeks after a woman's childbirth, her mother or mother-in-law has traditionally provided the new mother with postpartum care and support as she learns knowledge and skills for physical and psychological recovery and infant care (Song, Chang, & Kim, 2008). The early postpartum period is a transition time during which mothers acquire skills and execute their roles and responsibilities as parents (Epifanio, Genna, DeLuca, Rocella, & La Grutta, 2015). As women gain knowledge of newborn care and infant development and growth, they also learn parental roles and responsibilities. Therefore, it is critical that healthcare professionals assist women after birth (Razurel, Kaiser, Antonietti, Epiney, & Sellenet, 2017).

1. Literature Review

Following childbirth, women may experience feelings of depression referred to as postpartum depression (PPD; Beck & Driscoll, 2006). PPD can include characteristics such as loss of pleasure, anxiety, guilt, irritability, sadness, misery, inability to sleep, disinterest in the newborn, and difficulty concentrating or remembering (American Psychological Association, 2017). These symptoms usually begin within the first 4 weeks after birth (Hendricks, Altschuler, Strouse & Grosser, 2000) and may last up to 1 year or longer (Ward & Hisley, 2016; Lintner & Gray, 2006). According to the American Psychological Association (n.d), the risk factors for PPD are; a) hormone changes after childbirth

- b) previous experience of depression or anxiety
- c) family history of depression or mental illness
- d) stress involved in caring for a newborn and managing new life changes

Original Article

- e) having a challenging infants who cries more than usual, is hard to comfort, or whose sleep and hunger needs are irregular and hard to predict
- f) having an infant with special needs (e.g., premature birth, medical complications, illness)
- g) first-time motherhood, very young motherhood, or older motherhood
- h) other emotional stressors, such as the death of a loved one or family problems
- i) financial or employment problems
- j) isolation and lack of social support

Prevalence rates for symptoms of PPD in South Korea, estimated using a validated Korean version of the Edinburgh Postpartum Depression Scale (EPDS-K), range from 30 to 60% (Park, Karmus, & Zhang 2015; Choi, Park, Park, Ko, & Shin, 2014; Youn & Jeong, 2013). Korean women are reluctant to contact healthcare services for their depressive feelings because of the social stigma associated with mental illness (Klainin & Arthur, 2009). Continuous mental health management or services to assist women after birth for their wellbeing are often lacking (Ahn, Kang, Park & Choi, 2015). Furthermore, health care provider recognition of the importance of proper management of PPD remains low. Consequently, Korean women are left to search on their own for reliable health information and services for PPD (Kang, Kim, & Kim, 2012).

Self-care is a fundamental and important method for promoting health (Orem, 2001). Women returning home following childbirth care not only for themselves but for their newborns. Women with symptoms of PPD reported an inverse relationship of PPD symptoms with self-care abilities for health (Kim & Dee, 2017). However, the research on maternal self-care after childbirth was still lacking. In particular it was difficult to find a study for maternal self-care with postpartum depression symptoms after birth.

3. Methods

3.1 Objective

The objective of our study was to explore the personal experience of self-care activities among postpartum Korean women at risk for PPD. The research questions were:

- How did you feel after birth of your babies?
- What did you do for yourself and for your infants at home?
- What kind of help did you get from others to take care of yourself and your infants?

3.2 Design

Interpretive description was used as the study design. It is a relatively new qualitative research design for investigating clinical knowledge in healthcare disciplines, with a constructivist and naturalistic orientation to the inquiry (Hunt, 2009; Thorne, Kirkham, & O'Flynn-Magee, 2004). Investigators using this design attempt to capture meaningful topics and patterns by eliciting individual subjective perceptions through personal interviews and analyzing the data to understand focused clinical phenomena (Thorne et al., 2004). The data collection strategy for the study was consistent with the interpretive description design. In-depth interviews were conducted using a field guide that included the research questions designed to elicit participants' feelings after birth, experience of self-care behavior, and perceived level of social support.

3.3 Ethical Considerations

Our study was approved by the Ethics Committee at Seoul Women's College of Nursing (SWCN-201605HR-005) in June 2016. Data collection was commenced after the participants provided informed written consent and eligibility for inclusion was confirmed.

3.4 Setting

The research was conducted in urban cities of Gyeonggi Province which surrounds Seoul, the capital city of South Korea.

3.5 Recruitment of Participants

Two researchers from the four-member study team visited a community healthcare center in Gyeonggi Province, South Korea to distribute flyers explaining the study three weeks prior to data collection. Forty-two interested women met initial screening criteria. Written consent forms were signed by the 42 prospective participants who

Original Article

were then asked to complete the EPDS-K for symptoms of PPD. Sixteen women scored 10 or higher on the EPDS-K and met the study inclusion criteria.

Screening participants for symptoms of PPD. The EPDS was developed by Cox and colleagues to screen women at risk for PPD (Cox, Holden, & Sagovsky, 1987). It is not a diagnostic instrument but rather an effective instrument to detect women at risk for perinatal depression (Cox, Holden, & Henshaw, 2014). The 10 items in the EPDS ask about symptoms of depression including anxiety, fear, guilt, and suicidal ideation in the past 7 days. Questions are measured using a 4-point scale (0–3); with total scores ranging from 0 to 30. A higher score means greater risk for PPD. In our study, the validated EPDS-K, a version of the EPDS translated into the Korean language, was used; Cronbach's alpha coefficients from .82 to .84 have been reported for the EPDS-K (Choi, Park, Park, Ho, & Shin, 2014; Kim, 2006). Choi and colleagues (2014) recommended a score of 9 or 10 as the optimal cut-off number for the EPDS-K to determine Korean women at risk for PPD. Therefore, for our study, women with a score of 10 and above were deemed at risk for PPD. Sixteen women scored 10 or higher on the EPDS-K and met the study inclusion criteria.

Participant Selection. Inclusion criteria for the convenience sample comprised the following: a) Korean women aged at least 20 years old

- b) Had an infant aged 12 months or younger
- c) Scored 10 or higher on the EPDS-K
- d) Able to read and write Korean at a third-grade level

Exclusion criteria comprised the following: How did you obtain this information? Were these two questions in the demographic questionnaire?

- a) Diagnosed with mental disorders by a physician
- b) Took medication for mental disease

3.6 Data Collection

Two researchers from the four-member study team visited a community healthcare center in Gyeonggi Province, South Korea to distribute flyers explaining the study three weeks prior to data collection. Forty-two interested women met preliminary screening criteria. Written consent forms were signed by the 42 prospective participants who were then asked to complete the EPDS-K for symptoms of PPD. Sixteen women scored 10 or higher on the EPDS-K and met all study inclusion criteria. Twelve of the 16 women ultimately agreed to be interviewed about their self-care experience following childbirth.

The interviews were conducted in mutually convenient locations offering privacy. Interviewers used a field guide containing standardized questions to facilitate interviews which typically lasted about 90 minutes; they were recorded on digital recorders. After the interviews, all participants were provided with a \$15 gift-card as a token of appreciation.

3.7 Data Analysis and Rigor

After the completion of the interviews, the research assistants, all senior nursing students from Eulji University, transcribed the recorded raw data. The researchers reviewed the transcripts for accuracy, cleaning the data by correcting transcription errors.

Consistent with the interpretive description research design (Thorne et al., 2004), researchers read the transcripts line-by-line to analyze participants' responses to the interview questions. Each sentence of the participants' statements were then analyzed to discover repeated or similar words and phrases that were subsequently organized using the questions of the focus interview as the framework. Further analysis of the organized words and phrases led to identification of recurrent themes in the participants' experiences. Consensus on the themes arising from the participants' accounts was achieved among all authors in the study. Finally, the demographic characteristics of participants were analyzed.

4. Results

4.1 Characteristics of the Interview Participants

Original Article

Of note, sixteen of the original 42 women who agreed to participate in the study had EPDS-K scores of 10 or higher. That is a prevalence of women at risk for PPD by the EPDS-K of 38.0 % in this small sample. Due to the relatively high rate of women screened at risk for PPD using the EPDS-K, all participants were provided with an informative pamphlet about PPD and referred to their healthcare providers for a more comprehensive evaluation. The sociodemographic and obstetric characteristics of the 12 participants are depicted in Table 1. The age range of the interview participants ($n = 12$) was 27 to 38 years with a mean age of 32.50 ($SD = 6.0$). They were all married. Eight women had female infants. Ten women had a vaginal birth while the other two had a caesarean section. Nine participants reported their highest education level was a bachelor degree. Six women reported their annual household income was between \$25,000 and \$50,000 per year. Only two participants had full-time jobs. Half ($n = 6$) were Protestants.

Table 1. Sociodemographic and Obstetric Characteristics of the Sample (N =12)

Variables	<i>M (SD)</i>
Maternal age	32.0 (SD = 6.0).
Marital status	N (%)
	Married/Living with partner 12 (100.00 %)
	Single/With no partner 0 (0.00 %)
Education	
	No education 0(0.00%)
	Elementary 0(0.00%)
	Middle school 0(0.00%)
	High school 2(16.67%)
	College or higher 10(83.33%)
Annual household income	
	Less than \$25,000 2(16.67%)
	\$25,000-50,000 6 (50.00%)
	More than \$50,000 4(33.33%)
Employment	
	Unemployed 10(83.33%)

Original Article

Religion	Employed	2(16.67%)
	Protestant	6(50.00%)
	Catholic	3(25.00%)
	No religion	3(25.00%)
	Others	0(0.00%)
Number of children including the infant		
	1	6(50.0%)
	≥2	6(50.0%)

All 12 participants reported they had received postpartum and newborn care in a Sanhujori facility after hospital discharge. The Sanhujori facilities provided the participants with healthy foods and physical exercise and their newborns with feeding and bathing. The women paid for the postpartum care center services with their own private funds or through health insurance. After receiving services from the postpartum care center, they returned home with their newborn.

4.2 Themes Emerging From Participant Interviews

Four major themes emerged from the study data (Table 2).

Table 2. Themes Identified in Interviews with Women after Birth

Theme	Illustrative Statements from Participants
Maternal ambivalence during the postpartum period	<i>"It was harder than I thought when I took care of the baby. Sometimes I felt happy and sad at the same time."</i>
Lack of maternal self-care and infant care practice at Sanhujori facilities	<i>"After giving birth, I stayed in a postpartum care center for 2 weeks. It was a kind of the vacation before I go back home. So I could focus on myself. It was good. But I did not know what I should do for the postpartum. There were many programs such as face or body massage, postpartum exercise, and counseling, but there seemed to have no person to constantly help me".</i>
Social networking as a source of maternal self-care and infant care information	<i>"Whenever I have questions about baby care, I searched for Internet websites to find answers at night. I think that the information was pretty reliable and trustworthy."</i>
Need for ongoing social support from family members or hired helpers for postpartum care and infant care	<i>"I wanted to be a good and excellent mother but I could not do sit by myself. I definitely need family members' help for the baby care."</i>

Original Article

Theme 1: Maternal ambivalence during the postpartum period. The study participants reported feeling a mix of emotions during the post-partum period. Several described feeling happiness at having an infant.

"It was so precious and lovely. I should take good care of my infant."

"I could not believe I had the infant. It was so strange. But, when I saw my infant, I felt like being a real mother, and I was happy."

However, all the participants reported feeling other, less positive, emotions once they returned home. Some were easily angered and yelled at their infants; they attributed these feelings and behaviors to fatigue and lack of knowledge of how to care for the infant. They regretted their behaviors; one participant reported regretting she had the infant.

Participant # 12:

"It was harder than I thought when I took care of the infant. Sometimes I felt happy and sad at the same time."

"I was angry and yelled at my infant because I was so tired. But, I hate what I did. I really regretted it."

"I was happy when I gave birth. However, after a week later, I was so tired and regretted having the newborn. I doubt how I take the responsibility for the newborn. I am not a good mother."

Finally, all eight novice mothers in the study reported experiencing feelings of guilt. For example:

"Sometimes I felt guilty because I did not know how to take good care of the infant."

"It is my first infant. So I still do not know how to take good care of my infant so I felt guilty as a parent."

Theme 2: Lack of maternal self-care and infant care practice at the Sanhujori facilities. While staying at the postpartum care centers, the participants were able to focus on themselves. They also had free time for rest. However, they reported having a short time to learn about maternal self-care and newborn care.

"After discharge from the hospital, I stayed at the postpartum care center for two weeks, just like other mothers. There were some programs for mothers and babies. But I did not have much to do. The postpartum care center took care of everything. I ate, slept and rested. So, I could rest whenever I wanted. I could only think about myself. That's what I mainly did there."

One participant recognized the need to begin caring for herself. She said:

"When I was in the postpartum care center, I thought of postpartum management because if I did not take good care of my body, I might get sick a lot in the future. So I tried to do my best; for example, avoiding lifting heavy things and colds, and taking as much sleep as possible. But I did not know if I did well or not."

Another participant described her Sanhujori facility stay as "kind of a vacation" but acknowledged that she did not feel as if anyone focused on helping her learn how to take care of herself and her infant.

"After giving birth, I stayed in a postpartum care center for 2 weeks. It was a kind of vacation before I went back home. So I could focus on myself. It was good. But I did not know what I should do for the postpartum period. There were many programs such as face or body massage, postpartum exercise, and counseling, but there seemed to be no person to constantly help me."

Theme 3: Social networking as a source of maternal self-care and infant care information. Upon returning home at the end of their Sanhujori facility "vacation," the participants were focused on infant care. The women provided the full range of infant care including bottle or breast feeding, bathing, adjusting the environment for the infant (e.g., proper room temperature, noise reduction), and bonding with their babies (e.g., eye contact or touching).

"I fed and washed my infant whenever I had to do. I mostly tried to focus on infant care after I came back home."

"Caring for the infant is the most important thing now. So, I do not have any time to think about anything else."

"I tried to create a pleasant environment for the infant. I checked the room temperature and humidity. When the infant sweated, I bathed her and often changed the clothes."

Ten of the 12 participants stated that they had not received any specific healthcare services for themselves since childbirth.

Original Article

"I did not go to any doctors' offices or hospitals for my health unless I was really sick."

"I have not gone to any doctor offices or hospitals for my health problems yet."

Upon assuming the maternal caregiving role, the women sought out additional help for postpartum and newborn care at home, reaching out to their family members (e.g., parents or husbands) or hiring private helpers. When they needed information about their own health or infant care, they called their parents or friends. However, all women preferred using social networking websites (SNS) to obtain information promptly.

"There were many relevant cafés or websites I could find for newborn health or care. I also asked close friends, neighbors, or family members for my infant."

"Whenever I had questions about infant care, I searched for Internet websites to find answers at night. I think that the information was pretty reliable and trustworthy."

"I even found medical comments about health issues on the Internet websites. The information seemed to be useful. The sites were very convenient."

"I usually asked my mom or family, but I also used the internet to find the information I wanted."

Theme 4: Need for ongoing social support from family members or hired helpers for postpartum care and infant care. In our study the women worried about how to manage newborn care. All participants stated that family assistance was important and necessary while taking care of their infants. The family members, or hired private helpers, usually prepared the women's meals, cleaned homes, and helped care for their infants.

"I wanted to be a good and excellent mother but I could not do it by myself. I definitely need family members' help for the infant care."

"My mother came to my house and helped me a lot. So, I was able to be relaxed and had time for myself."

"My mom came to my house to take care of the infant in the morning and left at night. Then I had to take care of the infant by myself. Sometimes it was hard. I definitely need her help."

"My mother-in-law stayed with me for infant-care after the postpartum care center. She cleaned the house and prepared meals for me and a husband. She was so helpful."

"After I came back from the postpartum care, I hired a postpartum assistant because my parents and family were busy. The postpartum assistant served me a meal and took care of the infant. She was helpful."

"I hired a postpartum assistant. She came to me every day for a month and took care of the housework and the infant care; thus I could sleep and rest at home."

All husbands of the study participants were employed. The women all expected their husbands to take care of the babies after work. However, nine participants among the twelve stated that their husbands did not know how to take care of their infant. The mothers felt dissatisfied with the husbands' help and wanted the husbands to provide more assistance with infant care.

"After my mom was gone, I had to take care of the newborn by myself. My husband must help me. But he did not do well."

"My husband tried to take care of the infant, but, he did not know what to do. I want him to do better."

5. Discussion

Because of the study objective, all participants screened at high risk for PPD. However, it is noteworthy that 16 of the 42 potential participants in our study screened at risk for postpartum depression, a prevalence in the group of 38%. This is within the reported range of prevalence of postpartum depression in South Korea (Park, Karmus, & Zhang, 2015; Choiet et al., 2014; Youn & Jeong, 2013).

Relative to the first research question in the study, participants felt ambivalent feelings such as happiness and guilt during the postpartum period. These feelings are not unique to women at risk for PPD. While experiencing pregnancy and childbirth, women are undergoing critical changes physically and psychologically. Thus some women may experience mood swings or disorder after birth (APA, 2017). New mothers, in particular, often have a sense of maternal depression including guilt after childbirth (Leger & Letourneau, 2015; Stewart, Gagnon,

Original Article

Saucier, Wahoush, & Dougherty, 2008). In addition women can also feel guilty after childbirth due to a lack of confidence in whether they are doing well in infant care and whether they can become perfect parents for their babies (Feld, n.d.; Warren, 2005). Therefore it is a common phenomenon for women to have ambivalent feelings after birth. Sufficient encouragement and assistance from family members are effective in reducing maternal depression and guilt feelings among postpartum women (Kim & Dee, 2018; Leahy-Warren, McCarthy, & Corcoran, 2012; Stewart et al., 2008), increasing maternal competence at infant care (Ponomartchouk & Bouchard, 2015; Warren, 2005), and helping mothers cope.

As far as the authors know, our study is the first to report the self-care activities among Korean women at risk for postpartum depression who have received supportive / dependent care in a Sanhujori facility. In Korea it is common for women to stay in Sanhujori facilities after childbirth to receive rest, physical exercise, breast massage, and staff assistance with infant care such as bathing and feeding (Kim, 2003; Song, Chae, & Park, 2015; Song & Park, 2010). As of December 2017, there were 593 private postpartum care centers operated by obstetrics and gynecology clinics and 5 public postpartum care centers operated by communities or the government (Ministry of Health and Welfare, December, 2017).

The postpartum women in our study preferred receiving post-hospital care at a Sanhujori facility after childbirth. However, the participants also reported a lack of education about and opportunities to practice maternal self-care and infant care at the Sanhujori facilities. They acknowledged the welcome opportunity to rest while in the facility but reported feeling unprepared for infant care once they were discharged home with their babies.

The Korean government has policies on the establishment and management of postpartum care centers. However, there continues to be a lack of professional nursing care available in these facilities; current postpartum care centers are classified as lodging businesses (Hwang & Kwon, 2013). It has also been noted that commercial postpartum care centers vary in the levels of care quality provided (Kim, 2016). Education of postpartum women about maternal self-care and infant care should be performed by trained healthcare professionals to maximize women's preparedness for maternal and infant care (Song et al., 2015). Additionally, opportunities to practice new skills should be included in Sanhujori facility care, to enhance self-confidence and potentially decrease depressive feelings after birth.

Furthermore, the education should include women's family members to help prepare them for providing ongoing support to the postpartum women (Stone et al., 2015). Educational interventions should be tailored, based on the level of knowledge of the postpartum woman and her family members, to meet designated outcomes and increase satisfaction with maternity and child care (Vijayalakshmi, Susheela, & Mythili, 2015).

Relative to the second research question, study participants reported focusing on infant care once they returned home. The mothers breast- or bottle-fed their babies, structured the home environment with the infant in mind, and bathed and bonded with their newborns. They tended to subordinate their own needs to those of the newborn. In short, the participants' activities upon returning home with their newborns were similar to those reported by mothers not at risk for PPD (Sword, Busser, Ganann, McMillan, & Swinton, 2008).

Finally, relative to the third research question, study participants sought assistance from others to perform postpartum care and infant care after they returned home. The women also sought specific information about and solutions for health problems related to newborn care through the Internet or SNS rather than during doctors' office or hospital visits. Specifically, the mothers used Internet blogs or cafés to contact other mothers with similar situations or problems and share their experiences and knowledge. These behaviors are consistent with the information-gathering strategies used by contemporary young adults who turn to the internet to find information they need to solve problems, complete tasks, and learn new skills (Slomianet et al., 2017). The participants reported trusting the information they obtained from informal sources.

This is of concern, however, because information obtained via these sources is typically based on personal opinions and experiences. Few websites from reputable providers of health care make expert health information available. At the government health service level, infrastructures should be built that support provision of readily

Original Article

accessible, accurate information on childcare and postpartum care to new mothers via Internet services or SNS. Lee (2016) proposed the establishment of a government-level infrastructure addressing both pre- and post-natal women's and children's health in South Korea.

6. Strengths and Limitations

There are some limitations in our study. First, the interviewers may have served as a confounding variable, influencing participants' responses during the personal interview. It may have been uncomfortable for study participants to express their personal experiences and feelings to interviewers whom they did not know. Therefore, it is not clear whether the participants frankly answered the questions about their experiences and feelings. Second, the study used a single interview to investigate participants' personal experience of self-care after birth. The interview offered a snapshot of the participants' postpartum needs and self-care behaviors based on their recollections after the fact.

Strengths of the study include its naturalistic design and its attention to a particular sub-population of postpartum women, new mothers who are at risk for PPD. Despite the study's limitations, the findings have highlighted women's needs and problems after childbirth and prompted the authors to suggest strategies to investigate and address those needs. For example, future research should include longitudinal studies to explore patterns of postpartum depression across the early to late postpartum period and the effect of early versus late PPD on maternal self-care behaviors.

7. Implications for Practice

The fact that 38 percent of the 42 potential participants in the study screened at risk for PPD confirms the need for early screening of postpartum women. Early onset of PPD occurs within 2 to 4 weeks after birth (Ward & Hisley, 2016) and mostly appears within the first 12 weeks (Letourneau et al., 2007; McQueen, Montgomery, LappanGracon, Evans, & Hunter, 2008). Early detection of postpartum depression is imperative; mothers should be screened for PPD within 2-4 weeks of birth, including while receiving services at specialized postpartum centers (Sanhujori facilities).

Attention to maternal education at Sanhujori facilities is needed. The participants in our study expressed appreciation for the rest and care they while residing in a facility. However, they also reported feeling as if they did not received adequate education to prepare them for self-care and infant care once they returned home. The staffs of Sanhujori facilities are perfectly situated to provide focused education on infant care and maternal self-care to new mothers, to prepare them for assuming full responsibility for infant care upon their discharge and return home. Maternal newborn nurses are well prepared to teach Sanhujori facility staff to deliver this education. Finally, as illustrated by the findings of our study, new mothers, even those who have received postpartum care at Sanhujori facilities, still need help with maternal self-care and infant care once at home after birth. They often rely on family members or websites to find information. Postpartum care, including care for PPD, should not be limited in hospital or postpartum care centers; it should be extended to community-based education and resources for maternal and newborn health. Healthcare interventions in community settings and on social media platforms should be developed to meet postpartum women's needs and facilitate early intervention for women with PPD risk. Furthermore a Health policy at the national level may require expansion to focus on maternal self-care and preparation for infant care after birth.

8. Conclusions

In general, the study participants, though they all screened at risk for PPD, reported having similar feelings and using similar infant care and information gathering strategies to those used by most new mothers. Although the study participants reported having had pleasurable experiences while receiving care at postpartum care centers, the limited self-care and infant care instruction they reported receiving in Sanhujori facilities means a timely opportunity to learn about self-care and care of their infants was missed. Healthcare professionals should insure that comprehensive education about self-care and infant care is offered to postpartum women in every setting in which they receive care. Additionally, healthcare agencies, as part of a government-supported infrastructure,

Original Article

should make accurate self-care and infant care information readily available on their websites and social media platforms.

Finally, given the rate of increased risk for PPD among all postpartum women screened for inclusion in the study, recommendations for early screening of new mothers for postpartum depression should be followed by staff in settings in which new mothers commonly receive care.

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Original Article

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