PSYCHOSOCIAL FEATURES AT DIFFERENT PERIODS AFTER CHILDBIRTH

Chich-Hsiu Hung

College of Nursing, Kaohsiung Medical University, and Department of Nursing, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan.

The purpose of this study was to examine and compare first-time mothers' postpartum stress, depression, social support, and health status over the first 6 weeks following discharge from hospital after childbirth. Four hundred and thirty-five women were enrolled from clinics and hospitals in Kaohsiung City, southern Taiwan. The study showed that three items-"the baby getting sick suddenly", "the unpredictability of the baby's schedule", and "the flabby flesh of my belly"—were consistently perceived to be among the top five postpartum stressors by women, regardless of which postpartum week it was. Most women had minimal depression with 71.83% in the sixth week to 81.58% in the first week. Women perceived a high level of social support and their greatest amount of support was from family. A range of women from 25.71% in the fifth week to 32.39% in the second week of postpartum was categorized as having minor psychiatric morbidity. However, the results indicated that the mean scores for postpartum stress and social support did not differ significantly for the women over the 6 postpartum weeks. Women with different depression levels and health status over the 6 postpartum weeks had no significant differences either. Insight into the results of this study provides a framework for additional research that a longitudinal design is needed from immediate childbirth to 1 year postpartum in order to explore the fluctuations of women's psychosocial factors.

Key Words: depression, health status, postpartum stress, primipara, social support (*Kaohsiung J Med Sci* 2007;23:71–9)

Following the dramatic changes of pregnancy and delivery, the transition to parenthood is a time of significant psychologic, social, and physical changes for first-time mothers [1]. New mothers after being discharged from hospital have to continue to meet many competing concerns, as well as begin recovery from childbirth and take care of a needy infant. However, they are often unprepared to take care of themselves and their babies, and become overwhelmed with

Kaohsiung J Med Sci February 2007 • Vol 23 • No 2

© 2007 Elsevier. All rights reserved.

increased responsibility and vulnerability [2]. These may combine to cause postpartum stress and could be detrimental to women's health [3].

Western literature indicates that depression during the postpartum period is an important issue in women's health [4,5]. Postpartum depression is a mood disorder with symptoms of anxiety, despair, fatigue, fear, compulsive thoughts, dependency, feelings of inadequacy, and loss of libido [6]. The consequences can have long-term adverse effects on women's health, and result in postpartum women's emotional, behavioral, and interpersonal problems. In addition to threatening women's health and functioning, maternal depression poses risks to the maternal–child relationship and the child's development. A meta-analysis

Received: March 22, 2006 Accepted: September 29, 2006 Address correspondence and reprint requests to: Dr Chich-Hsiu Hung, College of Nursing, Kaohsiung Medical University, 100 Shih-Chuan 1st Road, Kaohsiung 807, Taiwan. E-mail: chhung@kmu.edu.tw

demonstrated that maternal depression had a moderate to large effect on maternal–infant interaction during the first year of life [7].

Stern and Kruckman [8] suggested that the depression of childbearing women reflected disturbances in cultural and social structuring of the postpartum period that lead to inadequate support. New mothers must struggle to adapt to new role expectations and become propelled into support-seeking by their lack of resources. Social support has been viewed as a buffer in times of stress, and is defined as an interpersonal resource accessed and mobilized when individuals attempt to deal with the strain of life. Social support may be especially important for the new postpartum woman's health status due to the demands of childbearing and parenting. Research findings have indicated that social support from spouse and family was associated with mothers' positive self-evaluation in parenting [9].

Recently, cost-containment pressure has been inherent in the managed healthcare system because of the switch to the National Health Insurance policy in Taiwan. Although research suggests that a reduced hospital stay following delivery does not result in an increased incidence of health problems that require hospitalization [10], psychologic issues may occur commonly in the early weeks following childbirth. The entire complement of complications experienced by new mothers is not documented and needs to be explored further. Thus, the purpose of this study was to examine and compare first-time mothers' postpartum stress, depression, social support, and health status over 6 postpartum weeks following discharge from hospital after childbirth.

METHODS

Sample

A sample of first-time mothers was taken from 22 hospitals and clinics that had a birth rate of 30 or above in Kaohsiung City, Taiwan. Proportional stratified quota sampling from those hospitals or clinics with the birth rates was used. The women, who (1) had had a single, healthy, and full-term baby, without complications, (2) had no major postnatal complications or underlying medical problems, (3) were married Taiwanese residents, and (4) could speak Mandarin Chinese, were selected.

Instruments

Hung Postpartum Stress Scale (Hung PSS)

The 61-item Hung PSS is a valid and reliable tool for assessing women's postpartum stress during the 42-day puerperium. Exploratory factor analysis indicated that maternal role attainment, negative body changes, and lack of social support are three components of postpartum stress. Moreover, the generalizability of the Hung PSS has been shown with high coefficients of congruence among postpartum women across the type of delivery, level of education, and income status. The internal consistency reliabilities for its three dimensions across the full sample and within pertinent subsamples also showed that the Hung PSS is a reliable tool for measuring postpartum stress, with α coefficients ranging from 0.84 to 0.92 [11].

On a five-point Likert scale rating from 1 (not at all) to 5 (always), women rated each item on how much stress was perceived during the postpartum period. The score for postpartum stress was derived by summing all ratings, resulting in potential scores between 61 and 305. Higher values indicated higher stress. Cronbach's α of the Hung PSS in this study was 0.94.

Beck Depression Inventory-II (BDI-II)

The BDI-II has been translated from English into Chinese with copyright [12]. Its reliability and validity have been established across a broad spectrum of clinical populations. Beck et al [13] found that Cronbach's a coefficient of the BDI-II was 0.91 in 140 outpatients who were diagnosed with various DSM-IV psychiatric disorders. In Steer et al's later study [14], two factors representing somatic-affective and cognitive dimensions were also found with the BDI-II responses of 210 adult outpatients who were diagnosed with DSM-IV depressive disorders. This built upon the earlier work of the same authors [15] and investigated the BDI-II's construct validity with respect to self-reported depression and anxiety as measured by the SCL-90-R. The authors reported that the BDI-II was more highly correlated with the SCL-90-R depression subscale (r = 0.89) than with the SCL-90-R anxiety subscale (r = 0.71) in 210 psychiatric outpatients.

The BDI-II is scored by summing the highest ratings for each of the 21 items. Each item is rated on a fourpoint scale ranging from 0 to 3, and the total scores can range from 0 to 63. BDI-II total scores ranging from 0 to 13 represent "minimal" depression; total scores from 14 to 19 are "mild"; total scores from 20 to 28 are "moderate"; and total scores from 29 to 63 are "severe". Cronbach's α in this study was 0.88.

Social Support Scale (SSS)

SSS is a 10-item, five-point Likert-type scale and includes the Family APGAR (Adaptation, Partnership, Growth, Affection, and Resolve) [16] and Friend APGAR [17]. Items were scored using a 1 (never) to 5 (always) scale, and a summative score was derived. The total score represented the frequency with which social support was accepted from either family or friends. High scores indicated high social support during the postpartum period. Correlations with the Pless-Satterwhite Family Function Index and Psychotherapist estimate were 0.80 and 0.64, respectively [17], and Cronbach's α was 0.86 [17]. The SSS has been used extensively in other research, supporting its construct validity through factor analysis [18-20] and its reliability with Cronbach's α was 0.87 and 0.92, respectively [19,20]. Cronbach's α was 0.91 in this sample.

Chinese Health Questionnaire (CHQ)

Postpartum women's health status was measured with the 12-item CHQ [21,22]. This culture-specific questionnaire is designed to reflect Chinese sociocultural preferences in the expression of distress, including anxiety, depression, sleep disturbance and somatic symptoms, somatic concerns, and interpersonal difficulties [21,23]. Respondents rated how frequently each symptom for these minor psychiatric morbidities was experienced during the previous weeks on a four-point scale ranging from 1 (not at all) to 4 (most of the time). One and two ratings were recoded as 0, and three and four ratings were recoded as 1. All ratings were added, forming a summary score rating from 0 to 12 [22]. The scores used as a cut-off point for the "case"/ "noncase" judgment for minor psychiatric morbidity in community samples were 3/2, and the sensitivity and specificity were 91.9% and 66.7%, respectively. The CHQ-12 has been used extensively in other studies and has been demonstrated to have high internal consistency with Cronbach's α ranging from 0.75 to 0.84 [20,24]. Cronbach's α in this study was 0.67.

Procedure

After approval from the Institutional Review Board at each participating institution, the potential participant was visited by a research assistant during postpartum hospitalization. The study and consent forms were explained to her using standardized scripts. Once a signed consent form was obtained, a demographic questionnaire was completed by each woman, and with systematic random sampling, each woman was assigned to receive a telephone interview during one of her 6 postpartum weeks based on the contact order. Simultaneously, a packet containing the four instruments was given in a plastic folder to the participants and the women were encouraged to have it available at the time of the telephone interview. All telephone interviews took place in the participant's residence within 6 weeks of delivery. During the telephone interview, each woman completed the Hung PSS, BDI-II, the SSS, and the 12-item CHQ.

RESULTS

Characteristics of postpartum women

A sample of 435 primipara was taken over the 6 postpartum weeks and the range of participants targeted for each postpartum week was from 70 to 77 women (Table 1). Their average age ranged from 27.93 (standard deviation [SD]=4.20) to 28.46 (SD=3.77) years and most of the women had obtained a senior high school diploma or below except for 45.1% women in the 2nd week who were junior college-educated. Of the women, 48.1–60.6% were employed full-time. Most had a total monthly household income of 50,000 New Taiwan Dollars or above. The mean length of marriage ranged from 18.44 (SD=23.81) to 22.23 (SD=21.04) months. Of the women, 22.4-40.0% revealed that this pregnancy was planned, and most of the women expressed no preference about infant gender. The women in the 6 postpartum weeks (excluding the 4th week) had a higher rate of cesarean section than vaginal delivery. About 84.5-92.1% of the women were satisfied with their childbirth experience. Of the newborn babies, 44.3-55.8% were boys, and the baby's average birth weight was 3.07 kg (SD = 0.36) or above. Most of the women fed their babies using a combination of formula and breast-feeding. There were no significant differences in the women's demographic characteristics determined by either the χ^2 test or one-way analysis of variance among women in the 6 postpartum weeks (Table 1).

	Week [(mean \pm SD) or n (%)]							
Demographic characteristic	1 (<i>n</i> =76)	2 (<i>n</i> =71)	3 (<i>n</i> =70)	4 (<i>n</i> =77)	5 (<i>n</i> =70)	6 (<i>n</i> =71)		
Age ^a (yr)	27.93 ± 4.20	28.46 ± 3.77	27.94 ± 3.87	28.13 ± 4.52	28.05 ± 4.07	28.15 ± 4.19		
Education ^b Senior high or below Junior college Bachelor or above	38 (50.0) 28 (36.8) 10 (13.1)	24 (33.8) 32 (45.1) 15 (21.1)	26 (37.1) 25 (35.7) 19 (27.1)	41 (53.3) 25 (32.5) 11 (14.3)	33 (47.1) 22 (31.4) 15 (21.4)	35 (49.3) 18 (25.4) 18 (25.4)		
Current employment status ^c Full-time Part-time or housewife	41 (53.9) 35 (46.1)	43 (60.6) 28 (39.4)	38 (54.3) 32 (45.7)	37 (48.1) 40 (52.0)	38 (54.3) 32 (45.7)	36 (50.7) 35 (49.3)		
Household income per month ^d <nt\$50,000 ≥NT\$50,000</nt\$50,000 	35 (46.1) 41 (53.9)	21 (29.6) 50 (70.4)	18 (25.7) 52 (74.3)	28 (36.4) 49 (63.6)	25 (35.7) 45 (64.3)	25 (35.2) 46 (64.8)		
Length of marriage ^e (mo)	18.61 ± 18.71	22.23 ± 21.04	20.84 ± 22.04	18.44 ± 23.81	19.24 ± 20.83	19.38 ± 18.77		
Pregnancy ^f Planned Unplanned No contraceptive used Used contraceptives	17 (22.4) 37 (48.7) 22 (28.9)	27 (38.0) 33 (46.5) 11 (15.5)	22 (31.4) 35 (50.0) 13 (18.6)	18 (23.4) 43 (55.8) 16 (20.8)	28 (40.0) 33 (47.1) 9 (12.9)	18 (25.4) 33 (46.5) 20 (28.2)		
Preferred sex of baby ^g Boy or girl Did not matter	19 (25.0) 57 (75.0)	19 (26.8) 52 (73.2)	15 (21.4) 55 (78.6)	26 (33.8) 51 (66.2)	22 (31.5) 48 (68.6)	14 (19.8) 57 (80.3)		
Type of delivery ^h Vaginal delivery Cesarean section	33 (43.4) 43 (56.6)	29 (40.8) 42 (59.2)	22 (31.4) 48 (68.6)	41 (53.2) 36 (46.8)	30 (42.9) 40 (57.1)	28 (39.4) 43 (60.6)		
Childbirth experience ⁱ Satisfied Unsatisfied	70 (92.1) 6 (7.9)	60 (84.5) 11 (15.5)	60 (85.7) 10 (14.3)	70 (90.9) 7 (9.1)	64 (91.4) 6 (8.6)	63 (88.7) 8 (11.3)		
Sex of baby ^j Boy Girl	35 (46.1) 41 (53.9)	36 (50.7) 35 (49.3)	31 (44.3) 39 (55.7)	43 (55.8) 34 (44.2)	38 (54.3) 32 (45.7)	33 (46.5) 38 (53.5)		
Baby's birth weight ^k (kg)	3.21 ± 0.36	3.20 ± 0.41	3.20 ± 0.43	3.13 ± 0.34	3.07 ± 0.36	3.24 ± 0.39		
Method of baby's feeding ^l Breast or formula Mixed	26 (34.2) 50 (65.8)	31 (43.6) 40 (56.3)	31 (44.3) 39 (55.7)	39 (50.7) 38 (49.4)	34 (48.6) 36 (51.4)	30 (42.3) 41 (57.7)		

 ${}^{a}F(5, 435) = 0.16, p = 0.98; {}^{b}\chi^{2}_{(10, n = 435)} = 15.18, p = 0.13; {}^{c}\chi^{2}_{(5, n = 435)} = 2.61, p = 0.76; {}^{d}\chi^{2}_{(5, n = 425)} = 7.74, p = 0.17; {}^{e}F(6, 429) = 0.35, p = 0.88; {}^{f}\chi^{2}_{(10, n = 435)} = 15.51, p = 0.12; {}^{8}\chi^{2}_{(5, n = 435)} = 5.66, p = 0.34; {}^{h}\chi^{2}_{(5, n = 435)} = 7.52, p = 0.19; {}^{i}\chi^{2}_{(5, n = 435)} = 3.69, p = 0.60; {}^{i}\chi^{2}_{(5, n = 435)} = 3.30, p = 0.65; {}^{i}\chi^{2}_{(5, n = 435)} = 3.69, p = 0.60; {}^{i}\chi^{2}_{(5, n = 435)} = 3.30, p = 0.65; {}^{i}\chi^{2}_{(10, n = 435)} = 15.51, p = 0.12; {}^{8}\chi^{2}_{(5, n = 435)} = 5.66, p = 0.34; {}^{h}\chi^{2}_{(5, n = 435)} = 7.52, p = 0.19; {}^{i}\chi^{2}_{(5, n = 435)} = 3.69, p = 0.60; {}^{i}\chi^{2}_{(5, n = 435)} = 3.30, p = 0.65; {}^{i}\chi^{2}_{(10, n = 435)} = 15.51, p = 0.12; {}^{8}\chi^{2}_{(10, n = 435)} = 15.51, p = 0.51; p =$ ${}^{k}F(5, 429) = 1.86, p = 0.10; {}^{1}\chi^{2}_{(5, n = 435)} = 5.66, p = 0.34.$

Ranking of postpartum stressors

On the Hung PSS, women's mean scores with 2.0 or higher were 39 items in the 1st postpartum week, 34 in the 2^{nd} , 33 in the 3^{rd} , 36 in the 4^{th} , 31 in the 5^{th} , and 30 in the 6th postpartum week. This indicates that these postpartum women perceived these items as being "seldom" to "frequently" stressful. Three items-"the baby getting sick suddenly", "the unpredictability of the baby's schedule", and "the flabby flesh of my belly"-were consistently perceived to be among the top five postpartum stressors by women, regardless of which postpartum week it was (Table 2).

Postpartum women's depression

The BDI-II mean score was 8.43 (SD=5.57) for the women in the 1st, 9.48 (SD=7.60) in the 2nd, 9.49 (SD= 8.19) in the 3rd, 10.38 (SD=8.14) in the 4th, 9.73 (SD= 5.85) in the 5th, and 10.07 (SD=6.89) in the 6th postpartum week. During the 6 postpartum weeks, the majority of the women were categorized as being minimally depressed, with percentage ranging from 71.83% to 81.58% (Table 3).

Ranking of postpartum women's social support

The means of items concerning social support all reached 3.0 or higher, meaning that the use of social support by postpartum women was between "frequently" and "always". The item "I am satisfied with the way my family and I share time together" received the highest social support score among all the women regardless of the postpartum week. The mean scores of this item ranged from 3.69 (SD=0.92) in the 6th postpartum week to 4.00 (SD=0.88) in the 3rd postpartum week.

Postpartum women's health status

The CHQ score ranged from 0 to 7 for women in the 1st, 0 to 9 in the 2nd, 0 to 7 in the 3rd, 0 to 8 in the 4th, 0 to 7 in the 5th, and 0 to 9 in the 6th postpartum week. Of the women, 23 (30.26%), 23 (32.39%), 21 (30.00%), 25 (32.47%), 18 (25.71%), and 22 (30.99%), respectively, in each of the 6 postpartum weeks were in the "case" category for minor psychiatric morbidity (CHQ \geq 3) (Table 3).

	Week (mean \pm SD)						
	1 (<i>n</i> =76)	2 (<i>n</i> =71)	3 (<i>n</i> =70)	4 (<i>n</i> =77)	5 (<i>n</i> =70)	6 (<i>n</i> =71)	
1. The baby getting sick suddenly	2.99±1.11	3.27 ± 1.11	2.99 ± 1.07	3.13 ± 1.04	3.14 ± 1.05	2.93 ± 1.14	
2. The unpredictability of the baby's schedule	2.95 ± 1.12	3.15 ± 1.06	2.90 ± 1.09	3.14 ± 1.12	3.23 ± 1.08	3.00±1.21	
3. The flabby flesh of my belly	2.93 ± 1.29	3.00 ± 1.36	2.97 ± 1.14	$3.19\!\pm\!1.25$	$3.20\!\pm\!1.10$	3.08 ± 1.35	
 Interrupted sleep The wound 	2.84 ± 1.11 2.72 ± 1.18	2.89 ± 1.27	3.01 ± 1.15		2.99 ± 1.25		
6. The baby choking during feeding		2.89 ± 1.15					
7. Not sleeping enough			2.89 ± 1.16	3.03 ± 1.26		2.87 ± 1.24	
8. The shape of the baby's head due to the sleeping position				3.06 ± 1.21	2.90 ± 1.23		
9. My life is constrained						2.93 ± 1.1	

Table 3. Comparisons of women's postpartum stress, social support, depression, and health status over the first 6 postpartum weeks (n = 435)

	Week [(mean \pm SD) or n (%)]							
	1 (<i>n</i> =76)	2 (<i>n</i> =71)	3 (<i>n</i> =70)	4 (<i>n</i> =77)	5 (<i>n</i> =70)	6 (<i>n</i> =71)		
Postpartum stress*	128.50 ± 29.49	127.21 ± 28.86	123.11 ± 32.23	128.29 ± 29.21	124.81 ± 30.05	123.18 ± 31.94		
Depression ⁺								
Minimal	62 (81.58)	55 (77.46)	55 (78.57)	57 (74.03)	57 (81.43)	51 (71.83)		
Mild	10 (13.16)	9 (12.68)	6 (8.57)	11 (14.29)	8 (11.43)	13 (18.31)		
Moderate	4 (5.26)	5 (7.04)	6 (8.57)	6 (7.79)	5 (7.14)	7 (9.86)		
Severe	0 (0.00)	2 (2.82)	3 (4.29)	3 (3.90)	0 (0.00)	0 (0.00)		
Social support [‡]	35.53 ± 7.60	35.56 ± 9.16	36.64 ± 6.54	35.23 ± 6.78	34.59 ± 6.81	35.26 ± 6.65		
Health status [§]								
Noncase	53 (69.74)	48 (67.61)	49 (70.00)	52 (67.53)	52 (74.29)	49 (69.01)		
Case	23 (30.26)	23 (32.39)	21 (30.00)	25 (32.47)	18 (25.71)	22 (30.99)		

 ${}^{*}\mathrm{F}(5,429) = 0.49, p = 0.79; {}^{+}\chi^{2}_{(15,\,n \,=\, 435)} = 12.19, p = 0.66; {}^{+}\mathrm{F}(5,429) = 1.10, p = 0.36; {}^{\$}\chi^{2}_{(5,\,n \,=\, 4325)} = 1.03, p = 0.96.$

Comparisons of women's postpartum stress, depression, social support, and health status over 6 postpartum weeks

Differences in the mean scores for women's postpartum stress and social support among the 6 postpartum weeks were determined by one-way analysis of variance and Scheffe posttest. The results showed that the mean scores for postpartum stress and social support did not differ significantly for the women over the 6 postpartum weeks (Table 3).

There was a disparity in the postpartum women's distributions among four levels of depression. Therefore, the postpartum women's depression levels were collapsed into three: (1) minimal depression (total score, 0–13); (2) mild depression (total score, 14–19); and (3) moderate and severe depression (total score, 20–63). The number of women in each depression category was 62 (81.58%), 10 (13.16%), and 4 (5.26%), respectively, in the 1st postpartum week; 55 (77.46%), 9 (12.68%), and 7 (9.86%) in the 2nd postpartum week; 55 (78.57%), 6 (8.57%), and 9 (12.86%) in the 3rd postpartum week; 57 (74.03%), 11 (14.29%), and 9 (11.69%) in the 4th postpartum week; 57 (81.43%), 8 (11.43%), and 5 (7.14%) in the 5th postpartum week; and 51 (71.83%), 13 (18.31%), and 7 (9.86%) in the 6th postpartum week.

Differences in percentage for postpartum women's depression and health status among the 6 postpartum weeks were determined by χ^2 tests. Women with different depression levels over the 6 postpartum weeks did not differ significantly. Women with CHQ score ≥ 3 were categorized as "case" having minor psychiatric disorders, and women with the other score were categorized as "noncase". Women's health status over the 6 postpartum weeks did not differ significantly either.

DISCUSSION

Differences in postpartum stress, depression, social support, and health status were studied in 76, 71, 70, 77, 70, and 71 first-time mothers in each of the 6 postpartum weeks following discharge from the hospital after childbirth. Three items—"the baby getting sick suddenly", "the unpredictability of the baby's schedule", and "the flabby flesh of my belly"—were consistently perceived in each postpartum week to be among the top five postpartum stressors. Maternal role attainment is the mother's acquisition of competence in providing sensitive and skillful care in fostering the infant's development [25]. Becoming a mother is a process of learned behavior. A woman's concerns about "the baby getting sick suddenly", and "the unpredictability of the baby's schedule" could reflect her lack of confidence in mothering behaviors because the woman is an inexperienced primiparous mother. Self-portrayal/perception of a woman's comfort in maternal role competence needs practice and time. The item "the flabby flesh of my belly" was one that women identified as being one of their biggest concerns since fitness and body image/appearance is the focus of today's society. Nurses should be prepared to assist new mothers in diet instruction and progressive exercises, particularly exercises that strengthen the abdominal and pelvic muscles.

Depression may represent a need for help in the struggle to maintain health. Most women had a depression score from 0 to 13, and were categorized as having minimal depression with 71.83% in the 6th week to 81.58% in the 1st week. The percentage of women with moderate or severe depression was 5.26%, 9.86%, 12.86%, 11.69%, 7.14%, and 9.86%, respectively, in each of the 6 weeks. Because of the lack of concept analysis on postpartum depression, the reported prevalence of depression varied widely depending on the measuring instruments used, the time period assessed, and the study sample measured.

Increased social support was positively related to decreased depression [26]. Access to support was related to satisfaction in the parenting role and infant care [9]. Women in the study perceived a high level of social support and their greatest amount of support was from family. In Pillsbury's studies [27,28], a direct bearing upon mental wellbeing and familial relationships is recognized from the firmly rooted traditional Chinese ritual of Tso-Yueh-Tzu. "Not only is '*doing the month*' efficacious in many ways with regard to the women's health status but it is instrumental with regard to her social status in the household and that of her household in society in general as well" [28]. Overall, family support seemed especially important for Taiwanese postpartum women's health.

A range of women from 25.71% in the 5th week to 32.39% in the 2nd week of postpartum was categorized as having minor psychiatric morbidity. Compared to Hung and Chung's study [20] of 526 postpartum women including primipara and multipara, 29.7%, 41.4%, and 41.1% in the 1st, 3rd, and 5th

week postpartum, respectively, had CHQ scores in the "case" category of minor psychiatric morbidity. The morbidity rates have slightly decreased in this study and this could be explained as due to primipara only being included in this study or unknown changes may have occurred in our society context.

Changes that occur in postpartum stress, depression, social support, and health status during the postpartum period are maternal responses to the complex psychosocial transitions and concomitant concerns about maternal role attainment, negative body changes, and lack of social support. The psychosocial factors involving postpartum stress, depression, social support, and health status were found to be only slightly variable during the 6-week postpartum period (Figure) and no statistically significant changes over time were found. Since recovery from childbirth takes at least 3–6 months [29], for future study, it is necessary to explore postpartum women's psychosocial factors for a longer time span within 1 year after childbirth instead of only 6 postpartum weeks.

The time immediately following childbirth and extending into the weeks and months following is an important period in the process of development for new mothers. Effective in-hospital education of new mothers is difficult with short stays, and availability and utilization of postdischarge services are limited.

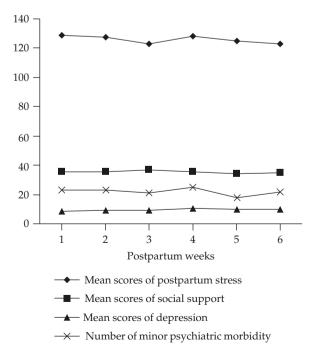


Figure. Women's psychosocial consequences over 6 postpartum weeks.

Insight into the results of this study provides a framework for additional research where a longitudinal design is needed from immediate childbirth to 1 year postpartum in order to explore the fluctuations of women's psychosocial factors.

ACKNOWLEDGMENTS

This study was supported in part by a grant from the National Science Council, Taiwan (NSC 92-2314-B-037-013).

REFERENCES

- 1. Lynn G. Lack of preparedness: experiences of first-time mothers. *Am J Matern Child Nurs* 2006;30:251–5.
- 2. McVeigh C. Motherhood experiences from the perspective of first-time mothers. *Clin Nurs Res* 1997;6:335–48.
- 3. Hung CH. Predictors of postpartum women's health status. *J Nurs Scholarsh* 2004;36:345–51.
- Affonso DD. Postpartum depression: a nursing perspective on women's health and behaviors. *Image J Nurs Sch* 1992;24:215–21.
- 5. Beck CT. The lived experience of postpartum depression: a phenomenological study. *Nurs Res* 1992;41:166–70.
- 6. Horowitz JA, Damato E, Solon L, et al. Postpartum depression: issues in clinical assessment. *J Perinatol* 1995;15:268–78.
- Beck CT. The effects of postpartum depression on maternal–infant interaction: a meta-analysis. *Nurs Res* 1995;44:298–304.
- 8. Stern G, Kruckman L. Multidisciplinary perspectives on postpartum depression: an anthropological critique. *Soc Sci Med* 1983;17:1027–41.
- 9. Reece SM. Social support and the early maternal experience of primiparas over 35. *Matern Child Nurs J* 1993; 21:91–8.
- Brooten D, Roncoli M, Finkler S, et al. A randomized trial of early hospital discharge and home follow-up of women having cesarean birth. *Obstet Gynecol* 1994; 84:832–8.
- 11. Hung CH. Measuring postpartum stress. J Adv Nurs 2005; 50:417–24.
- Chen SY. Manual for Beck Depression Inventory–II (Beck AT, Steer RA, Brown GK, Trans.). Taipei: The Psychological Corporation, 2000. [Original work published in 1996].
- 13. Beck AT, Steer RA, Ball R, et al. Comparison of Beck Depression Inventories-IA and -II in psychiatric outpatients. *J Pers Assess* 1996;67:588–97.
- 14. Steer RA, Ball R, Ranieri WF, et al. Dimensions of the Beck Depression Inventory-II in clinically depressed outpatients. *J Clin Psychol* 1999;55:117–28.

- Steer RA, Ball R, Ranieri WF, et al. Further evidence for the construct validity of the Beck Depression Inventory-II with psychiatric outpatients. *Psychol Rep* 1997;80: 443–6.
- 16. Smilkstein G. The family APGAR: a proposal for a family function test and its use by physicians. *J Fam Pract* 1978;6:1231–9.
- 17. Smilkstein G, Ashworth C, Montano D. Validity and reliability of the family APGAR as a test of family function. *J Fam Pract* 1982;15:303–11.
- Hung CH, Chang SH, Chin CC. Correlates of stressors perceived by women during puerperium. *J Public Health* 1993;20:29–45.
- 19. Hung CH, Tseng YF, Cheng HR. Effect of group teaching projects on women's stress during postpartum hospitalization. *Kaohsiung J Med Sci* 1995;11:205–12.
- 20. Hung CH, Chung HH. The effects of postpartum stress and social support on postpartum women's health status. *J Adv Nurs* 2001;36:676–84.
- 21. Cheng TA, Williams P. The design and development of a screening questionnaire (CHQ) for use in community studies of mental disorders in Taiwan. *Psychol Med* 1986; 16:415–22.

- 22. Chong MY, Wilkinson G. Validation of 30- and 12-item versions of the Chinese Health Questionnaire (CHQ) in patients admitted for general health screening. *Psychol Med* 1989;19:495–505.
- 23. Cheng TA. A pilot study of mental disorders in Taiwan. *Psychol Med* 1985;15:195–203.
- 24. Hung CH, Chung HH. The effect of husband's childbirth participation on perinatal couples' psychological responses. *Kaohsiung J Med Sci* 1998;14:791–9.
- 25. Mercer RT, Ferketich SL. Experienced and inexperienced mothers' maternal competence during infancy. *Res Nurs Health* 1995;18:333–43.
- 26. Logsdon CL, McBride AB, Birkimer JC. Social support and postpartum depression. *Res Nurs Health* 1994;17: 449–57.
- 27. Pillsbury BL. Doing the month: confinement and convalescence of Chinese women after childbirth. *Soc Sci Med* 1978;2:11–22.
- 28. Pillsbury BL. Doing the month: confinement and convalescence of Chinese women after childbirth. *Tradit Pract Affecting Health Women Children* 1982;2:21–32.
- 29. Tulman L, Fawcett J, Groblewski, et al. Changes in functional status after childbirth. *Nurs Res* 1990;39:70–5.

產後不同時段婦女之心理社會狀況

洪志秀

高雄醫學大學護理學系 高雄醫學大學 護理學系

本研究目的在於比較初產婦出院之後六週期間之產後壓力、憂鬱程度、社會支持和 健康狀況。於高雄市的醫院和婦產科診所招募 435 位初產婦。以探討產婦於六週 產褥期間之產後壓力、憂鬱、社會支持和健康狀況的變化。研究結果顯示「嬰兒突然 生病」、「嬰兒的生活作息無法預期」和「腹部肌肉鬆弛」是初產婦於產後六週期間五項 最高產後壓力源中持續出現的三項。大部分婦女屬於極低憂鬱程度,人數比率介於 71.83%(產後六週)至 81.58%(產後一週)。她們感受到高度的社會支持,尤其來自 家人方面。有 25.71% 婦女(產後第五週)至 32.47% 婦女(產後第二週)為陽性的精 神個案。然而產後六週期間婦女的產後壓力和社會支持平均分數並沒有呈現統計上差 異。同樣的,產婦於六週內的憂鬱程度與健康狀況在統計上也沒有呈現差異。本研究 結果提建議未來可以採用縱貫性研究法以生產之後至產後一年的期間探討產後婦女在 心理社會方面之變異。

> 關鍵詞:憂鬱,健康狀況,產後壓力,初產婦,社會支持 (高雄醫誌 2007;23:71-9)

收文日期:95 年 3 月 22 日 接受刊載:95 年 9 月 29 日 通訊作者:洪志秀副教授 高雄醫學大學護理學系 高雄市807三民區十全一路100號