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**A re-examination of stresses experienced by primiparous women
in the first two weeks postpartum**

Franci, Mary Ellen, M.S.

The University of Arizona, 1989

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A RE-EXAMINATION OF STRESSES EXPERIENCED
BY PRIMIPAROUS WOMEN IN THE FIRST
TWO WEEKS POSTPARTUM

by

Mary Ellen Franc1

A Thesis Submitted to the Faculty of the
COLLEGE OF NURSING
In Partial Fulfillment of the Requirements
for the Degree of
MASTER OF SCIENCE
In the Graduate College
THE UNIVERSITY OF ARIZONA

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STATEMENT BY AUTHOR

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Margarita A. Kay

Margarita A. Kay
Professor of Nursing

14 December 1989

Date

To my Mother,
who, tho no longer by my side,
was my inspiration,
and my friend.

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ABSTRACT

A replication of "Stresses Experienced by Primiparous Women in the First Two Weeks Postpartum" (Wolfel, 1986) was undertaken to identify stressors experienced by women in the first 2 weeks postpartum and to compare results with the original study. Because of changes in the standard of care, a study replication was desirable. The replication sample consisted of 20 primiparous women who completed the Postpartum Stress Questionnaire (PSQ), a new tool developed by Wolfel. Descriptive data displayed the existence of stress. Analysis of variance, t tests, and correlation coefficients were used to find significant correlations between demographic characteristics and PSQ responses. Age correlated positively with stress. Married women reported stress in physiological and psychological areas. Women who had a miscarriage were more likely to exhibit postpartal stress. No relationship was found between PSQ and variables of previous experience with child care, length of hospital stay, use of pain medication, or prenatal caretaker.

CHAPTER 1

INTRODUCTION

The puerperium, or postpartal period, is a time of immense change. The new mother faces tasks of physical and mental restoration, adaptation to a new role, and accommodation of a new family member. Women in our society have little formal preparation for these tasks and often face them with minimal support. Coping strategies must be developed and maintained. Support systems must be identified and employed. A new mother is in a state of maturational/situational crisis.

Physical restoration during the puerperium involves the return of the body to its prepregnant state. Uterine involution is a slow, uncomfortable process. Uterine tissue sloughing with vaginal bleeding and discharge occurs intermittently for 6 weeks. Uterine cramping, or continued uterine contractions, enhance this process; these cramps can be very painful and cause considerable physical and mental debilitation. Perineal and vaginal healing also take about 6 weeks and can, depending on the severity of the damaged tissue, also be debilitating. The onset of lactation or the suppression of lactation is an uncomfortable process of glandular swelling accompanied by tenderness, pain, milk engorgement, and sore nipples.

Mental restoration to a prepregnant state is confounded by rapidly fluctuating hormone levels, slow body changes, and chronic

fatigue. Postnatal depression affects at least 10% of women, and in some estimates it affects as many as 80% of postpartal women (Oakley, 1980; Affonso, 1984), many of whom are profoundly affected.

Adaptation to the role of motherhood can cause considerable stress. Young women in our culture are not formally prepared for parenthood. Prospective mothers are led to believe mothering comes naturally. Briggs (1979, p. 69) stated that "parenting is often perceived as a state of being rather than becoming. Certain instinctive infant caregiving skills are believed to emerge spontaneously with the birth of the child, rather than as a learned developmental process."

The accommodation to a new family member may occur slowly depending on the degree of stress a new mother feels. Pain, poor self-image, and insecurity about parenting roles can negatively affect the accommodation of a child to the family.

Overall, poor support systems can enhance or defeat the tasks a new mother faces during the puerperium. It is customary for a new mother's own mother to attend to her after the delivery of the baby. In many cases, due to our mobile society, distances and cost may be a factor preventing such family support. A rising number of single women do not have the support of a partner. Financial worries regarding the cost of mother and baby care, loss of work due to mandatory recovery time, and child care services can strongly influence puerperal stressors.

Statement of the Problem

This study was a replication of Wolfel's "Stresses Experienced by Primiparous Women in the First Two Weeks Postpartum" (1986). The replication was undertaken due to changes in the standards of obstetrical care following a normal vaginal delivery. What are the stressors experienced by primiparous women in the first 2 weeks postpartum, and how do these findings compare to Wolfel's study, especially with respect to current obstetrical practice.

Statement of the Purpose

The purpose of the study was to identify the stressors of primiparous women in the first 2 weeks postpartum and to compare these findings with Wolfel's 1986 study. By definition, a replication is "a duplication of research procedures in a second investigation for the purpose of determining if results can be repeated" (Polit & Hungler, 1983, p. 621). This replication allowed the researcher to compare identified stressors with a previous study and to retest a research tool.

Changes have occurred in the standard of care regarding early discharge from the hospital following a normal vaginal delivery. This study identified stressors experienced by women who were discharged within 24 hours of delivery as well as those women who were not. In addition to the demographic variables elicited by Wolfel, certain demographic data were obtained that revealed information about early discharge. The date and time of baby's birth and the date and time of hospital discharge were asked in order to determine those subjects who

were discharged early. Information about prenatal caretaker was obtained in order to determine the frequency of use of health maintenance organizations (HMOs), private physicians, midwives, and the early discharge patterns of these caretakers. Additionally, this variable revealed subjects who did not receive prenatal care. Information about income was obtained due to the changing population serviced by the research facility; women who qualified for state and federally funded health care were study participants. Use of pain relief medication both during labor and delivery and in the postpartal period was determined in order to discover the current frequency of use. All demographic characteristics were compared to responses about postpartal stressors for the purpose of identifying groups of women who experienced postpartal stress.

Wolfel's Postpartum Stress Questionnaire was used. The tool was developed, according to the author, to specifically meet these objectives:

- To identify the nature of stressors experienced during the puerperium.
- To determine the relationship of the identified stressors with demographic variables.

Research Questions

The following 12 research questions were addressed by the replication study:

1. Do postpartal women experience stress in the first 2 weeks postpartum?

2. What is the nature of postpartal stressors: physiological, psychological, and/or environmental?
3. Do younger or older women experience postpartal stress?
4. Do married, single, or divorced women experience postpartal stress?
5. How does educational level compare with levels of postpartal stress?
6. How does ethnicity relate to postpartal stress?
7. How does pregnancy history (number of pregnancies and deliveries, miscarriages, abortions, and stillbirths) compare to postpartal stress?
8. Does previous experience with child care decrease postpartal stress?
9. Do women with very low annual incomes experience postpartal stress?
10. How does early discharge from the hospital relate to postpartal stress?
11. Does the use of pain medication reduce anxiety and therefore postpartal stress?
12. Does the type of prenatal caretaker (HMO, private physician, or midwife) relate to postpartal stress?

Significance of the Problem

In the recent past a recuperating postpartal women rested 2 to 5 days in the hospital. Here she could receive assistance with activities of daily living (ADL) for both herself and her new baby, extra

sleep while the infant was cared for in the nursery, and lots of extra attention from family members and friends who visited the new mother and baby in the hospital. When a new mother went home, her support systems were in place. A mother or sister moved in for a period of time to assist with ADL, demonstrate infant care skills, and offer comfort.

Rubin (1966) identified these stages of recuperation as "taking-in," "taking-hold," and "letting-go." She additionally assigned a 24- to 72-hour time period for the completion of these stages and thereby the readiness of a new mother to function independently. The process of recuperation is interrupted or delayed by the new policy of early discharge from the hospital. Early discharge after childbirth is now an acceptable standard of care for women who have had a normal vaginal delivery. Early discharge occurs 12-24 hours after the birth of the baby. A new mother's next encounter with her professional caretaker will be between 4 and 6 weeks postpartally, creating a gap of time in which a woman must cope with the enormous tasks and changes of the puerperium.

Hospitals and routine obstetric services do not provide support for women during the early puerperium. Rising health-care costs and attempts by insurance companies and HMOs to contain the cost of pregnancy, labor, delivery, and postnatal care inhibit contact with medical providers. In order to facilitate coping with postpartal stressors, nurses must plan and advise postpartal women in a timely manner. Shorter hospital stays result in fewer teaching and counseling opportunities for nurses.

When a new mother is going home she is still "taking-in"--the stage Rubin (1966) described as passive and restorative. Consequently, nurses must prepare their clients for the puerperium well before the birth of the baby. This teaching can be reinforced with take-home literature at the time of hospital discharge and ideally a home visit by a qualified nurse during the early puerperium.

The literature is noticeably devoid of studies about stressors the first 2 weeks postpartum except for Wolfel (1986), who studied stressors of primiparous women in the first 2 weeks postpartum, and Lemmer (1987), who researched outcomes at 1 week postpartum of primiparous women and their infants after early discharge from the hospital. What is happening to new mothers during the first 2 weeks postpartum? How does early discharge from the hospital affect coping processes? In what ways can nurses provide intervention to facilitate and ease these processes?

This study added clarification to the problem of postpartal stress by identifying stressors encountered during the first 2 weeks and groups of women who experienced stress. It is important for nurses to understand the stressful events experienced by women in the first 2 weeks postpartum. Identification of these stressors can guide and enhance a program of teaching and counseling aimed to facilitate coping with maturational and situational change during the postpartum. Furthermore, it is important for nurses to have a strong research foundation in order to provide effective teaching and counseling due to:

1. Early discharge from the hospital following normal vaginal deliveries.

2. A gap in obstetric health services and contact during the early puerperium.
3. Decreased support due to familial and/or financial factors.
4. Increasing costs of health care and of child care.
5. Significant findings about postpartum depression.

Conceptual Framework

The conceptual framework of this study is based upon the concept of situational stress. The situational stress in this case is postpartal stress.

Stressors are stimuli that produce physical, emotional, and mental tension. Scott, Oberst, and Dropkin (1980) identified stress as arising from a transaction between the individual and the environment, providing the environment is perceived to be a threat; the individual must also perceive the stressor to exceed her personal resources. The authors defined coping as "a process characterized by continuous use of goal-directed strategies that are initiated and maintained over time and across encounters by means of cognitive appraisal and regulation of emotions and physiologic response" (p. 16). Coping behaviors are aimed at neutralizing the stressor and regulating emotional and physiological response in order to preserve one's integrity (Scott et al., 1980).

Postpartum stress can be categorized as having three distinct origins: physiological, psychosocial, and environmental stress. These categories are subconcepts of the larger concept postpartum stress (Fig. 1). Physiological stressors include pain, fatigue, uterine involution, perineal healing, and lactation or suppression of

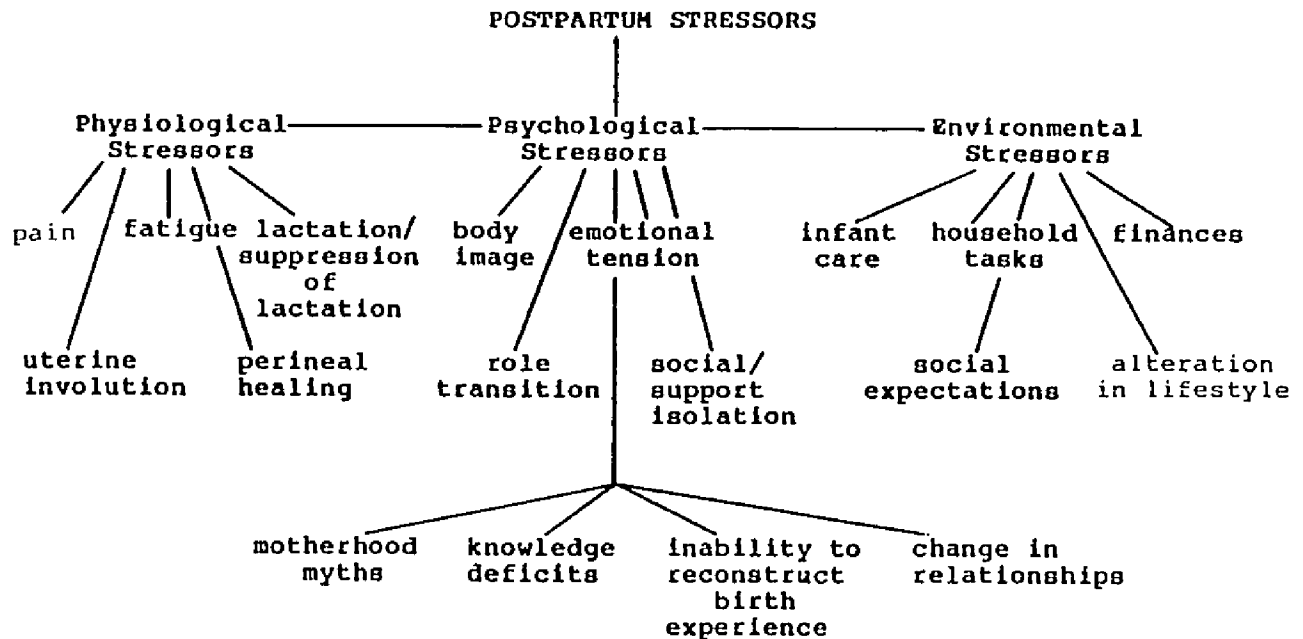


Figure 1. Conceptual framework identifying postpartum stressors.--Taken from Wolfel (1986, Table 1, p. 9).

lactation. Psychosocial stressors include role transition, relationships changes, accommodation of a new family member, knowledge deficits, lifestyle change with social isolation, and myths about motherhood that produce unrealistic cultural expectations. Additionally, body image changes which begin during pregnancy and continue well after the birth of the child produce considerable emotional tension. Environmental stressors include an increased responsibility for the ADL of a new child and family members, and possible decreased support systems, both familial and financial.

Postpartum women experience considerable situational stress that influences their ability to cope with change. It is therefore extremely important for nurses to be aware of the situational stressors that occur during the puerperium.

Identification of postpartum stressors enables nurses to provide effective support and coping strategies. This study identified situational stressors (specifically, physiological, psychological, and environmental) that affect the primiparous woman during the early postpartal period.

Definition of Terms

Primipara--A woman who has given birth to her first child.

Stressors--Stimuli from a physiological, psychological, or environmental source that produce physical, emotional, or mental tension and that tax or exceed the individual's available resources.

Summary

The puerperium, or postpartum period, is a time of immense change. The physical, psychological, and environmental stressors placed on a new mother can inhibit or enhance the mothering experience. Stressors inhibiting the experience can result in less effective coping and poor transition to motherhood. Enhancement can result in greater personal enrichment and growth. Due to rising medical costs and attempts of insurance companies to retain these costs, contact with medical personnel is decreased, as evidenced by the 24-hour early discharge policy. Women furthermore are not seen professionally for

4 to 6 weeks postpartally, creating a gap in obstetric services. This study is a replication designed to identify stressors which occur during the first 2 weeks postpartum, especially with respect to current obstetric practice. Nurses can help to fill the needs of postpartal women by providing teaching, counseling, and support to the childbearing family.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter presents a review of current literature on postpartal stress experienced by women and their families. McGowan (1977) categorized the situational stressors experienced by postpartal women as physiological, psychological, and environmental. For the sake of simplicity and clarity, this review of the literature follows this categorization.

Physiological Stressors

Physiologic changes in the postnatal woman are abundant and at times overwhelming. The woman's body undergoes fluctuating hormonal levels, sleep deprivation, and physical exhaustion from the immense work of childbirth; pain and discomfort associated with healing processes and the onset of lactation. Other stressors may include complications from pregnancy, labor and delivery, postpartum hemorrhage or infection.

Hormonal Fluctuations

Endocrine changes are known to affect emotional states. About 3-4 days postnatally, a sudden drop in estrogen and progesterone accompanied by the onset of lactation and surge of prolactin occurs. A correlation with postpartum blues at about 3-4 days postnatally is noted. Although it is considered normal for women to experience postpartum

blues possibly due to hormonal fluctuations (Prince & Adams, 1987), it is nonetheless considered to be a physically and emotionally draining experience. It is estimated that 10% to 80% of women experience some form of postpartal depression depending on the definition of terms, and about 0.2% of women experience postpartal psychosis (Oakley, 1980; Affonso, 1984).

Pain and Discomfort Associated with Body Change

Metabolic readjustments include uterine involution and lactation or suppression of lactation. Uterine involution is the slow and painful process of uterine contractions, tissue sloughing, and regeneration of the endometrium to restore the uterus to its normal prepregnant size. The process takes about 6 weeks (Moore, 1983). Lochia, or vaginal discharge, is significant in evaluating the process of uterine involution. Initially lochia consists mainly of blood and can be rather copious. The vaginal discharge gradually becomes less sanguinous and more serous, continuing for about 6 weeks. Uterine cramping occurs immediately after the expulsion of the placenta and continues intermittently for 6 weeks. Breastfeeding enhances the release of oxytocin and stimulates uterine cramping (Moore, 1983). These cramps or uterine contractions can be quite painful and the cause of physical debilitation and emotional tension. Perineal healing from vaginal and perineal lacerations, including an episiotomy, also progress slowly; restoration of the vagina to its nulliparous condition does not occur despite healing. Edema and pain are most pronounced within 24 hours after delivery; complete healing occurs within 6 weeks. Hemorrhoids

are a common problem both during pregnancy and the puerperium and can be the source of great discomfort and debilitation. They result from the stasis of blood in the rectal veins; pressure aggravates the condition. Hemorrhoids are usually most painful the first 2-3 days following delivery and subside as the puerperium progresses (Moore, 1983).

The onset of lactation occurs 3-4 days postnatally. The breasts suddenly become larger, firmer, and more tender; this initial onset of tenderness and congestion is referred to as primary engorgement. Engorgement is quite painful and is often accompanied by lassitude, headache, and a slightly elevated body temperature (Moore, 1983). Suppression of lactation by prescribed pharmaceutical agents is not entirely effective and the woman may still experience lacteal secretion. Additionally, lacto-suppressant therapy is not without side effects, including: headache, dizziness, nausea, hypotension, heavier lochial discharge, and rarely, thromboembolic disease (Moore, 1983).

Pain relief during childbirth has long been a controversial subject. Dick-Read (1970) identified childbirth as a dynamic interaction between fear, tension, and pain; he further asserted pain arose from fear and tension. Subsequent studies relating to anxiety, fear, and pain during childbirth indicate a positive and interactive correlation between the three variables; some studies have also correlated anxiety with a difficult and complicated labor and increased neonatal morbidity (Davids, DeVault, & Talmadge, 1961; Crawford, 1968; Winsberg & Greenlick, 1967; Morishima, Pedersen, & Finster, 1981; Myers & Myers, 1979; Lederman et al., 1977, 1978—all as cited in Moore, 1983). Many

perinatal caretakers therefore promote pain-free childbirth in order to reduce maternal anxiety and possible subsequent complications.

Fatigue

Restoration from the physical exhaustion of childbirth preoccupies the first 24-72 hours of the puerperium. Rubin (1984) cited the depletion of oxygen to muscle fibers as a direct result of the labor process; the profoundly fatigued woman has trouble turning or maintaining an upright position unaided during the first 2 postpartal days. The acute phase of fatigue is followed by a more chronic phase. Anemia and hydremia can be causal factors. Sleep deprivation and sleep disruption characteristically occur in the last uncomfortable month of pregnancy; the long process of labor and delivery accentuates the fatigue "so that by delivery there is acute sleep hunger." "Sleep deprivation and sleep hunger are severe in the first month of the puerperium and continue. . ." for as long as the infant requires one or more feedings during the night (Rubin, 1984, p. 114). Sleep deprivation lowers morale and the ability to problem solve; the sleep-deprived new mother can get irritable and depressed and, in extreme situations postnatal fatigue can result in an impulse to infanticide or homicide (Rubin, 1984).

Several researchers found fatigue an inherent and maladaptive theme to the transition to parenthood. Russell (1974) discovered fatigue to be an emergent theme in studies on crisis theory of initial parenthood. Fatigue and interruption in sleep emerged as responses by both new mothers and fathers who experienced a state of slight crisis

in the transition to parenthood. Sollie and Miller (1980) reported fatigue as a negative theme associated with parenthood. The needs of a newborn were associated with loss of sleep, fatigue, and extra household tasks. The new parents reported a tremendous demand of their time to accommodate the infant, especially the mother's time, who in most cases was primarily responsible for meeting the physical and emotional needs of the new baby.

Summary

Physiological stress factors include pain and discomfort due to body changes. These changes include uterine involution, perineal healing, lactation or the suppression of lactation. Hormonal fluctuations may account for changing emotional states including postpartal blues, depression, and psychosis. Fatigue is a major underlying factor in postpartal recovery.

Psychological Stressors

Psychological stressors of the postpartal woman are complex and multifaceted. Stressors identified through research include: role transition difficulties and lifestyle changes, concerns with body image, the accommodation of a new family member, motherhood myths, and knowledge deficits.

Peterson and Mehl (1978) contended that events surrounding labor and delivery can influence the new mother's self-esteem as well as maternal-infant attachment. The researchers conducted interviews and behavior observation sessions both prenatally and postnatally. The sample of 46 middle-class women who had vaginal deliveries was divided

into three groups: Women who had (1) labored and delivered at home, (2) natural childbirth in hospital, and (3) childbirth under epidural anesthesia in the hospital. The investigators correlated a positive birth experience with enhanced maternal-infant attachment; they also contended that maternal-infant attachment is negatively correlated with early maternal-infant separation.

Ramona Mercer (1981) identified one of the first tasks of the puerperium as the need to review the events of labor and delivery, differentiate these real events from her predelivery expectations and to evaluate her performance. Mercer stated that "until the experience is a cognitive whole . . . the experience cannot become congruent with, and a part of self." (p. 341).

Further tasks identified by Mercer (1981) included "grief work," or the relinquishing of prebirth fantasies about the new infant and reconciling the infants own characteristics, i.e., sex, skin and hair color, size, and temperament.

Body image changes which caused anxiety during pregnancy are intensified postpartally when the woman's body does not immediately return to normal. Mercer (p. 342) summed up this feeling by one woman's comment: "I want to feel normal again. I felt different when I was pregnant and near the end I didn't want to be around people. Now I'm tired and leaking milk and I want to go out shopping with my friends."

Role Transition and Lifestyle Changes

A role is a culturally determined set of behaviors that have been acquired through learning and reinforced, both positively and negatively within society. Burr (1972) identified several factors that ease role transition: anticipatory socialization, role clarity, and the degree to which goal attainment is achieved.

Anticipatory socialization is the process of learning role norms or behavior before actually taking on the role. Identification, imaginative rehearsal and practice are methods utilized in anticipatory socialization. A first-time mother begins the process of role transition by identifying with other mothers, especially her own mother. She fantasizes about being a mother and how she will act and how her baby will act. She may or may not be presented with the opportunity to practice these roles with other children. The process of anticipatory socialization assists role clarity by defining role expectations.

The attainment of a personal and cultural goal such as motherhood, will also ease role transition. The degree to which the motherhood goal is valued will correspond positively to the ease of transition.

In contemporary society, parenthood is experienced by approximately 80% of the population, placing the transition to motherhood as a key phase in most women's lives (Oakley, 1980). Transition is a time of both gain and loss; so it is with the transition to motherhood. Losses include change of lifestyle to one of social isolation, loss of

gainful employment and career, the couple's relationship, and control over her own body (Oakley, 1980). Oakley interviewed 55 women before and after the birth of a child to learn how they viewed the transition to motherhood. The women in the study associated motherhood with a restrictive lifestyle. A little over one-third of the women reported monotony and social isolation, four-fifths of the women felt "tied down," and two-thirds complained of having no free time for themselves.

Sollie and Miller (1980) studied 120 middle-class parents to identify change factors in transition to parenthood. The parents identified four positive and four negative themes associated with their new role. The positive themes were:

1. emotional benefits
2. family cohesiveness
3. self-enrichment and development
4. identification with the child.

The negative themes included:

1. physical demands of infant care
2. strains on the husband-wife relationship
3. emotional costs
4. opportunity restrictions.

Roberts (1983) studied 64 primiparous couples at 1-month postpartum. The investigator compared the relationship of infant obligatory behavior and the parents perception of their transition to parenthood as well as their perception of their infant. It was discovered that the more demanding and obligatory behavior the infant

displayed, the more difficult was the transition to parenthood; additionally, the more obligatory the infant behavior, the more negatively was the infant perceived by the caretakers.

Motherhood Myths

Motherhood myths are closely tied to the way in which a new mother fantasizes and perceives the role of motherhood. Motherhood myths are culturally proscribed ideas about what a mother should be. Kitzinger (1979, p. 259) said "our society has sentimentalized motherhood and imbued it with a madonna-and-child sweetness which is impossible for any flesh and blood woman to live up to." Mothers are supposed to always have loving tender feelings about their babies. Imagine the feelings of guilt a new mother feels when she first experiences feelings of anger and hostility toward her demanding infant.

Oakley (1980) found through her transition to motherhood project a gap in expectations and the reality of pregnancy, childbirth, and motherhood. On the whole, these experiences were negatively rated. Four-fifths (n = 55) said they had once held unrealistic expectations about the transition to motherhood, pregnancy was perceived as different from expected for 82% of the sample, birth for 93%, and social motherhood for 91% of the sample. Oakley's research indicated that unrealistic expectations were a set up for depression once reality hit. Primiparous women in her study stated there was more pain during childbirth than anticipated and there were more medical interventions (episiotomy, forceps, anesthesia) than expected. Based upon

these findings, Oakley suggested more realistic antenatal preparation in conjunction with boosting a woman's confidence. Oakley cited motherhood myths as a cultural theme generated by a male dominant society. Men idealize the motherhood role for women, asserting that the nature of women particularly qualifies them for childbearing and childrearing. Childrearing is culturally viewed as a woman's greatest achievement despite its low social ranking in terms of monetary gratification. This cultural dichotomy predisposes a new mother to confinement, depression, and familial dysfunction (Oakley, 1980).

Body Image

The results of many studies indicate that puerperal women, multiparous and primiparous alike, are concerned with body image. There seems to be a preoccupation of "return of the figure to normal." Gruis (1977), Moss (1981), and Russell (1974) studied women in the early postpartal period and found the overwhelming concern to be "return of the figure to normal." Rubin (1984, p. 122) explained "there are no fantasies or dreams in pregnancy elaborating the image of the body-self postpartally. . . ." The expectation that the woman's body weight, mass, and girth gained during pregnancy would disappear with the birth of the baby is not met. Rather than being freed of the burden of pregnancy, a woman finds herself beleaguered with pain, a uterus the size of a 6-month gestation and relatively little actual weight loss. Oakley (1980) stated that slimness is the stereotypical image of a sexually attractive woman in our culture. Again the dichotomy between adhering to the feminine standard (not getting fat)

and conforming to it (having a baby) present personal difficulty to many women.

Knowledge Deficits

Several researchers have identified knowledge deficits, particularly as related to infant care, as a major stressor for postpartal women. Sumner and Fritsch (1977) documented 270 telephone calls of new parents to a health-care facility. Both primiparas and multiparas called; she noted that mothers of male infants had a higher rate of questions until the 4th week postpartum. Questions concerning infant characteristics and care and parenting anxiety were recorded. The highest percentage of questions (31%) were about infant feeding. It was also noted that questions were most frequent in the first 2 weeks postpartum.

Moss (1981) also reported concerns of postpartal women related to infant care, growth and development, safety, being a good mother, and feeling close to the baby. The sample consisted of 56 middle-class mothers who were 3 days postpartum. Each participant sorted index cards, in order of priority, which contained phrases pertaining to common concerns. Concerns which emerged were how the child at home would react to the new baby; the woman's weight; return of the figure to normal; infant behavior; safety; growth and development; being a good mother; and feeling close to the baby. The three groups of women who had the most questions were: (1) women having one other child at home, (2) women under 20 years old, and (3) women of male infants.

Lemmer (1987) studied primiparous women who were discharged from the hospital within 24 hours of their child's birth. She compared the postpartal needs, questions, and medical contact of the early discharge group with a long stay group of primiparous women. The long stay group remained in the hospital more than 24 hours. Women of both groups (n = 21 and n = 21, respectively) were highly concerned about infant care and the physical needs of the mother. Infant care items of high interest were feeding practices, physical care, and signs of illness. Women expressed concerns regarding return of the figure to normal, being a good mother and exercise habits. Lemmer concluded from her study that for low-risk middle-class primiparous women, early discharge does not have adverse effects, medically or psychologically, at 1 week postpartum.

Golas and Parks (1986) conducted an experimental study to determine the effectiveness of teaching primiparous mothers about infant behavior. The experimental group (n = 17) received an edited version of the Brazelton Neonatal Behavioral Assessment Scale when they were 2 weeks postpartum. Contrast mothers (n = 16) received a newborn Information Checklist, also at 2 weeks postpartum. The control group (n = 13) of mothers received no intervention. At 4 weeks postpartum, the experimental group exhibited more knowledge about infant behavior than either the contrast or the control group. It was concluded by the investigators that teaching interventions, designed to educate primiparous women, may initiate changes in maternal behavior. Mothers in the study expressed interest in learning more about the complexities of

infant behavior and reported that the teaching intervention was both worthwhile and helpful.

Summary

Psychological stressors during the early postnatal period have been identified by scholars as complex and multifaceted. Role transition, lifestyle changes and the accommodation of a new family member are stressors often confounded by cultural motherhood myths, disparity with personal goals, and role identity. Coming to terms with a new body image is a task for which most women are unprepared. Return of the figure to normal is a predominant concern of women in the early postpartal period. Knowledge deficits have also been cited as a postpartal stressor. Questions about infant behavior, care, and feeding are highly recurrent.

Environmental

Environmental stressors are categorized broadly into two areas: (1) decreased support, both financial and familial and (2) responsibilities of the Activities of Daily Living (ADL) for one's self, new infant and other family members.

Support Needs

Perhaps the single-most influential factor in postpartal coping is that of added support during the puerperium. Support here is defined as those systems which enhance recovery, uphold self-esteem, and assist in day to day tasks. Many studies have been conducted about support during labor, but few studies have focused on support during

the puerperium. Several studies have indicated that the need for support during the puerperium exists and frequently remains an unfulfilled need.

Gruis (1977) reported concerns of postpartal women at a time when support from health-care professionals was not available. In the early postpartal period, women reported seeking help from their husbands. However, they did not seek help for 22% of their identified concerns. These concerns included delegating and regulating household responsibilities, family planning and sexual and marital relations.

In a study by Entwistle and Doering (1981), most of the women in their sample received either full- or parttime help at home, especially the first week postpartum. The helpers varied, but most help was offered by the woman's mother. About 33% of women reported things did not go well at home the first week and 38% the second week. More women were alone the second week. They cited infant behavior and feeding problems, nervousness, fatigue, and physical discomfort as sources of their anxiety. The authors additionally noted that previous baby-care experience did not seem to alter the "birth crisis."

Cronenwett (1985) studied the relationship among social network structure, social support, and psychological responses to parenthood. Fifty primigravid couples comprised her sample. She used the Social Network Inventory and the Postpartum Self-Evaluation Questionnaire to elicit information for this exploratory study. She found that the social network for both men and women was dominated by relatives. At 6 weeks postpartum, men reported the quality of the relationship to their spouse that was directly correlated with the percentage of kin in their

network, network size, and boundary density. "A pattern seemed to persist in that greater access to emotional support and kin were also important for men in predicting their satisfaction with parenting and infant care" (p. 98). However, these same factors were not found to be important for women.

Lemmer (1987) studied 21 primiparous women who had chosen early discharge from the hospital after the birth of their baby. Women who went home early reported more sources of support from family members at home; they additionally stated financial concerns entered into the decision to go home early.

Similarly, Patterson (1987) studied early and traditional discharge groups among hospital delivered postpartal women. Patterson outlined five factors which have contributed to the trend of early postpartum discharge of:

1. Patient safety: Studies over the last 40 years have repeatedly demonstrated the safety of early discharge for both mother and infant who are both in the low-risk category of care.
2. Patient satisfaction and enhanced family well-being associated with early discharge: The literature frequently cites as desirable the early opportunity for family togetherness, increased involvement of the father in infant care, and "the facilitation of family bonding, extended family participation and increased comfort in a familiar environment. . ." (p. 365).
3. Changes in attitudes: Mother and infant care have shifted from an illness to a wellness orientation.

4. **Cost containment:** Early discharge not only helps to control hospital crowding and staffing problems, but insurance companies now advocate early discharge as a way of cutting the cost of specialized health care.
5. **Availability of home care:** A growing trend in home care for postpartal women and infants has resulted in the availability of teams of health care professionals who, at a lower cost than a hospital stay, can offer skilled care to postpartal women and their new infants at home.

Patterson examined the relationship between early discharged women and their newborns and the attributes and attitudes of the postpartum population. Early discharge in this study was defined as discharge from the hospital 24-40 hours after the delivery of the baby. The sample was comprised of both women who were discharged early and those who chose to be discharged after 40 hours. The sample consisted of 183 women who returned a mailed questionnaire. Patterson found fewer women who were primiparous chose to go home early. Those women who did go home early were more self-reliant, more interested in rooming-in, and bottle fed their babies. The late discharge group felt the hospital was the best place to rest, while having a knowledgeable staff nearby.

ADL Responsibilities

A number of studies note that many postpartal women expressed concerns regarding the added household burdens and tasks they encountered after their child's birth. For some women these burdens

represented additional factors in the ease in transition to motherhood, social isolation, marital discord, less free time for themselves and overall increased anxiety (Gruis, 1977; Sollie & Miller, 1980; Moss, 1981; Russell, 1974; Oakley, 1980; Roberts, 1983).

Wolfel (1986) studied 60 primiparous women using a Postpartum Stress Questionnaire and open-ended questions at 2 weeks postpartum. Wolfel found the highest percentage (71%) of stress to be in the area of environmental stress, i.e., support needs and management of the activities of daily living. However, these stressors were followed closely by both psychological and physiological stressors (64% each). Women frequently expressed concerns about parenting roles, especially when they had to return to work. Physiological stressors included constipation, weight loss, healing, and contraception concerns. Informational needs were cited by all of her respondents especially regarding infant care and the identification of illness in a newborn. Wolfel concluded that the study exemplifies postpartum stress in all three areas-- physiological, environmental, and psychological. The author recommended postpartum follow-up by nurses including telephone calls and home visits. She states reinforcement of teaching, especially in infant care, needs to be addressed.

Low-income mothers and infants who were discharged early from the hospital studied by Norr, Macion, and Abramson (1987). The authors studied three groups of low income women in order to evaluate the "health impact of a nursing managed simultaneous discharge program for a low-income population" (p. 134). (1) women discharged at 24-47 hours postpartum without the infant (n = 94), (2) mothers and infants

discharged together at 48-72 hours postpartum (n = 115), and (3) mothers and infants discharged together at 24-47 hours after delivery with a home followup within 3 days (n = 124). Only low-risk mothers and babies were sampled; all women had prenatal care and uncomplicated vaginal deliveries. Mothers and babies returned to the research site after 2 weeks postpartum for interviews and physical assessments. Norr et al. determined a program of early discharge in conjunction with home care follow-up for low-income, low-risk mothers and infants represented a safe and cost-effective option of health care. Women who were discharged simultaneously with their infants exhibited more maternal-infant attachment and more maternal satisfaction. The authors noted that although early discharge did not increase the health problems of low-income mothers and babies, their study sample still had unmet health needs in the first month postpartum regardless of discharge time. The authors therefore recommended early simultaneous discharge with a close home follow-up program during the first few weeks postpartum.

Summary

Lack of support both financial and familial profoundly affect the recovering postpartal woman and her family. Studies have indicated that the geographic isolation of the nuclear family as well as the dependence on two incomes clearly affects the young family. Increased household tasks, primarily the burden of the postpartal woman, result in anxiety and the inability to cope with change.

Studies indicate that programs of early discharge from the hospital work most beneficially in meeting health-care and psychosocial needs when close home care follow-up is conducted.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter presents the research study design, sample, setting, and instrument used for data collection. Methods of research, data, analysis, and limitations of the study are also presented.

Research Design

A descriptive research design was used to delineate the stressors experienced by primiparous women during the first 2 weeks postpartum.

The Research Setting

The study was conducted in the homes of the postpartum women who comprised the study sample. The women in the study lived in a mid-sized southwestern city. The women in the study all delivered in the same private hospital and all were cared for by physicians.

The Sample

The convenience sample was comprised of 20 postpartal women. Participants were recruited for the study within 24 hours after the delivery of their child. Qualifications for the study were:

1. primiparity
2. normal vaginal delivery of a child within 2 weeks
3. English as a primary language.

Because this study was a replication in order to compare results primiparity was chosen as a constant variable. Delivery within 2 weeks gave the researcher a constant time period as well as insight into a period of time when postpartal stressors are not well researched. The need to have all participants speak English as their primary language increased control and decreased confounding factors such as translation and cultural implications.

Protection of Human Subjects

The study was reviewed and received prior approval by the College of Nursing Human Subjects Committee, University of Arizona (Appendix A). The study was approved by the Human Research Committee at the hospital where the study sample was chosen (Appendix B). Each study participant received a subject consent (Appendix C). Each woman was advised that her participation in the study would not affect or alter her care either during her hospital stay or with her physician. Confidentiality and anonymity of questionnaire responses were assured. Each participant was informed she could withdraw from the study at any time.

Data Collection Procedure

The postpartum unit manager served as clinical liaison and permission was obtained from each physician prior to subject recruitment. The unit manager requested that recruitment of postpartal women for the study take place only between the hours of 3:00 PM and 8:00 PM. Several physicians refused to give permission to approach their patients; however, all the health maintenance organizations (HMOs)

agreed to the use of their patients for the study as did many private physicians. Because of these restrictions, many women who qualified for the study were not approached, and several women were missed because they went home within 12 hours of their delivery time.

Subjects for the study were recruited while they were in the hospital after the delivery of their baby. Subjects were approached by the investigator within 24 hours of delivery. Subjects were given an explanation of the purpose of the study, the study requirements, and the subject's consent form was reviewed. The subject's name and address were provided by the respondent on the subject disclaimer form so that the questionnaire could be mailed to her. The subject was instructed to complete the PSQ when she received it and to return it in the stamped envelope provided. Questionnaires were mailed on the subject's 12th postpartal day so they would be received at 14 days postpartum.

The Instrument

The Postpartum Stress Questionnaire (PSQ) used in this study was developed by Wolfel (1986). The PSQ is presented as Appendix D. The tool was used in this replication because it tested well for reliability and validity and elicited information about the nature of stressors early in the puerperium. The PSQ consisted of three subscales:

1. Physiological subscale
2. Psychological subscale and
3. Environmental subscale.

The items within each subscale were chosen by Wolfel and were based on the literature, clinical experience, and interviews with postpartal women. The physiological subscale included items related to pain, fatigue, onset/suppression of lactation, uterine involution, and perineal healing. The psychological subscale included items related to body image, role strain, emotional tension, changes in spousal or partner relationships, motherhood myths, knowledge deficits, and social isolation. The environmental subscale included items related to meeting the infant's needs, household tasks, changes in lifestyle, social expectations, and finances. Positive and negative statements about stressors were scattered throughout the scale.

The PSQ contained 50 items or statements that were rated according to a 4-point Likert Scale. The subject chose one of the following: strongly agree, agree, disagree, or strongly disagree. The highest possible score for each response of the 50 items in the PSQ was as follows:

Strongly agree (4 points)	= 200 points
Agree (3 points)	= 180 points
Disagree (2 points)	= 100 points
Strongly disagree (1 point)	= 50 points.

A high score correlates directly with a high stress response, and a low score correlates directly with a low stress response. The stress response scores can thus be categorized as:

181-200 points	= strongly positive stress response
101-180 points	= positive stress response

51-100 points = negative stress response

50 or < points = strongly negative stress response.

Demographic questions (Appendix F) included: subject's age, marital status, educational background, income, ethnicity, pregnancy history, previous child-care experience, length of hospital stay, use of medication for pain control, and type of prenatal caretaker. The additional demographic variables obtained for the current study were: income, length of hospital stay, use of pain control medication, and type of prenatal caretaker.

Three open-ended questions about postpartal concerns and informational needs were included for enhancement of the tool (Appendix F). Wolfel (1986) used the first of these three questions in her research. The questions were:

1. What other concerns or information needs do you have at this time?
2. If you were discharged from the hospital within 24 hours of your baby's birth, do you think the early discharge made your recovery more difficult? Less difficult? Please be specific.
3. How have your visits to the pediatrician's office helped you during these first 2 weeks postpartum?

Question 1 was asked in order to elicit information using a format to which some women might be more responsive; i.e., writing out or listing specific concerns in a more personalized manner. These responses can then be compared to Wolfel's 1986 study.

Question 2 specifically dealt with the issue of early discharge and how that condition may have affected the responses about postpartal stress.

Question 3 was developed in response to the concern of a pediatrician who sat on the Human Research Committee at the research facility. The pediatrician pointed out that she and her office staff engaged in much supportive teaching and counseling regarding not only infant care issues but issues regarding marital relationships, role, integration, and self-esteem. She described many tearful events at the 2-week postnatal baby check during which women looked to the pediatrician for emotional and psychological support. She also stated that she and her staff engaged in teaching activities such as breastfeeding, infant care, and how to determine if the baby is sick. The 2-week baby check-up must therefore be recognized as a time when postpartal women are in contact with health-care professionals and often receive supportive guidance.

Method of Data Analysis

A point value was assigned to each choice in order to obtain a measurable score:

SA = 4 points

A = 3 points

D = 2 points

SD = 1 point

The highest possible score was therefore 200 points, and the lowest score was 50 (or less points if the item was unanswered).

Data analysis was conducted using of the SPSS program. Items 2, 7, 8, 9, 17, 18, 22, 23, 27, 28, 35, 41, 42, 44, 46, and 50 were reversed. These items are inverse statements that indicate no stress. The remainder of the items in the PSQ indicate the presence of stress.

Summary or descriptive statistics were used to examine each response to the PSQ as well as to examine the demographic data and open-ended questions. Frequencies, percentages, mean scores, and ranges were determined. The use of these statistics allowed the researcher to obtain an overall picture of the data (Rosner, 1986; Burns & Grove, 1987).

Analysis of Variance (ANOVA) tested for differences between mean scores (Burns & Grove, 1987). ANOVA is a flexible means of bivariate analysis because it can examine data from two or more groups. One-way ANOVA was used to compare the variance of the three subgroups of marital status (married, single, divorced) with each of the tool's three subscales and the total score of the PSQ. ANOVA was also used to analyze the variance between Previous Experience with Childcare, which contains three subgroups (none, limited, extensive), to the PSQ subscale and total scores.

Post hoc tests such as the Tukey HSD procedure were developed to reduce the incidence of error when utilizing ANOVA statistics (Burns & Grove, 1987). The Tukey HSD procedure was performed on each of the above ANOVA calculations.

The t test is used to test for significant differences between two samples and is particularly useful for small samples (Burns &

Grove, 1987). The t test is a test of variance of two means and is used when the explanatory variable has only two categories (Iverson & Norpoth, 1987). The t test was performed on two groups within the category of Income (\$5,000 or less, and more than \$5,000) and the PSQ subscales and the total scale scores. Likewise, t tests were used to compare the PSQ with education (high school or less, and more than high school), length of hospital stay (24 hours or less, and over 24 hours), and use of pain medication (yes or no).

Pearson's Product Moment Correlation Coefficients are used to describe the relationship between two variables without the inference of prediction (Rosner, 1986). Pearson's coefficients were obtained for age and for pregnancy history of each respondent in relationship to the PSQ subscales and total scale scores.

Reliability and Validity

The internal consistency measure of a tool for estimating an instrument's reliability is a widely used method. "An instrument may be said to be internally consistent or homogenous to the extent that all of its subparts are measuring the same characteristic" (Polit & Hungler, 1983, p. 389). The coefficient alpha (Cronbach's alpha) was used to determine the reliability of the tool. An index of reliability was obtained for each of the tool's three subscales as well as for the total questionnaire. Pearson's Product Moment Correlation Coefficients were also obtained to test the internal consistency of subscale to subscale and subscale to scale.

Wolfel used Cronbach's alpha coefficient to determine internal consistency of the PSQ; an alpha \geq .70 (Nunnally, 1978; Polit & Hungler, 1983) was established as the criterion for the internal consistency of each subscale and of the total scale. The PSQ met the total scale requirement for internal consistency with an alpha of .83. The physiological subscale met the criterion with an alpha of .70, the alpha for the psychological subscale was .78, and the alpha for the environmental subscale had a value of .71 (Table 1; Wolfel, 1986).

Wolfel (1986) also conducted item analysis of the PSQ for item to item, subscale to subscale, and subscale to scale using Pearson's correlation coefficients. The criterion for subscale to subscale was

Table 1. Subscale and total scale reliabilities for the postpartum stress questionnaire (N = 60).--From Wolfel (1986, Table 8, p. 61).

Scale	Cronbach's Alpha
<u>Subscale</u>	
Physiological Stress	.70
Psychological Stress	.78
Environmental Stress	.71
Total Scale	.83

set at .50 to .70 (Table 2). All three subscales had a subscale-to-scale coefficient of $> .70$ (Table 2). The psychological and environmental as well as the total scale exceeded the .70 criterion; the physiological subscale met the criterion at .68.

Wolfel established content validity of the PSQ by using a panel of nurses and nurse-midwives, all who held advanced degrees in nursing science and who were currently practicing in the community. The nurse-midwives made home visits at 3 days postpartum and were therefore aware of early postpartal complaints. Items were retained in the questionnaire if 75-100% agreement was achieved. The PSQ met this criterion for all items (Wolfel, 1986).

Table 2. Pearson correlation coefficients for subscale to subscale and subscale to total scale for the postpartum stress questionnaire (N = 60).--Taken from Wolfel (1986, Table 7, p. 59).

Stressors	Physiological	Psychological	Environmental	Total
Physiological	1.00			
Psychological	.52	1.00		
Environmental	-.33	-.72	1.00	
Total Scales	.68	.93	.86	1.00

Reliability of the replication was tested for the scale as a whole and for each subscale. The internal consistency of the tool and each subscale was measured by using Cronbach's alpha. The normal range of values for a reliability coefficient is between 0.0 and +1.00, and higher values indicate a higher degree of internal consistency (Polit & Hungler, 1983). However, if the coefficient value were 1.00, each item would be measuring the same thing; "a slightly lower coefficient (0.8 to 0.9) indicates an instrument that will reflect more richly the fine discriminations in levels of the construct" (Burns & Grove, 1987, p. 293). A coefficient of 0.7 or higher is acceptable for a new tool; therefore, Cronbach's alpha coefficient of .7 or > was set as significant. The Physiological Subscale indicated an alpha = 0.74, the Psychological Subscale had an alpha = 0.90, and the Environmental Subscale resulted in an alpha = 0.80 (Table 3). The entire scale tested out with an alpha coefficient of 0.93.

Table 3. Subscale and total scale reliabilities of the PSQ
(n = 20)

Subscale	Cronbach's Alpha
Physiological	.74
Psychological	.90
Environmental	.80
Total Score	.93

Pearson correlation coefficients were also calculated for subscale to subscale and for subscale to scale. Correlation coefficients > 0.5 indicate a strong correlation. The subscales correlated strongly with each other as well as with the total scale as indicated in Table 4. The correlation coefficient of .28 between the Environmental Subscale and the Physiological Subscale is indicative that the subscales are measuring different stressors.

Limitations of the Study

Due to time constraints, the sample size was small ($n = 20$); the probability of error is reduced with a larger sample size (Polit & Hungler, 1983). The sample was a convenience sample, and as such selection bias cannot be eliminated. Random sampling would have eliminated researcher bias and given the sample a more heterogenous character (Polit & Hungler, 1983).

Table 4. Pearson's correlation coefficient for subscales and total scale of the PSQ ($n = 20$)

	Physiological	Psychological	Environmental	Total
Physiological	1.00			
Psychological	.72	1.00		
Environmental	.28	.72	1.00	
Total Scale	.74	.97	.82	1.00

Due to constraints of the research setting and physician reluctance to allow their patient's participation, many women who qualified for the study were not approached. Women who delivered their babies in the evening and were discharged the following morning were missed.

Limitations in control regarding when the postpartal woman responds to the questionnaire were noted. Although the questionnaire was mailed to the study participant on the 12th postpartum day, with the expectation of a 2-day mailing time, there was no way of controlling or determining on what postpartum day the questionnaire was filled out. This issue could be addressed in further research by eliciting information about the date of questionnaire completion; further control can be obtained by deleting these questionnaires not filled out by a specified postpartal date.

The research may also have been affected by the Hawthorne effect; that is, the tendency to respond differently due to participation in a study. The social response set is another study limitation; this influence changes responses in order that they appear more socially acceptable. Subjects want to appear in a favorable manner, and so many change their true responses to fit a mode they feel is acceptable.

Summary

A descriptive research design was used to identify stressors experienced by primiparous women in the early puerperium. A convenience sample was used and subjects were recruited from a private hospital in a mid-size southwestern city.

Wolfel's Postpartum Stress Questionnaire was administered to the sample at 2 weeks postpartum. The questionnaire contained 50 items with three subscales to measure physiological, psychological, and environmental stressors. A Likert Scale was used to score stress levels.

The internal consistency of the PSQ and its subscales was established using Cronbach's alpha coefficients. Interitem reliability was established using Pearson's Product Moment Correlation Coefficients. Content validity was also established by Wolfel (1986) using a panel of nurse experts.

The statistical procedures used to answer the research questions were reviewed.

Study limitations included sample size and lack of random sampling. Many qualified participants were missed due to recruitment constraints. Response bias via the Hawthorne effect or the social desirability response set was also a possible limitation.

CHAPTER 4

PRESENTATION OF DATA

This chapter presents the study results. The demographic characteristics of the postpartum sample are presented. Findings about responses to the PSQ are discussed. Relationships between demographic variables and the PSQ are discussed. Lastly, responses to the open-ended questions are presented.

Characteristics of the Sample

The convenience sample included 20 postpartal women. Their mean age was 25.3 years with a range in age of 17 years and a standard deviation of 5.6 years. Subjects who were 20 years or younger in age represented 25% of the sample. Subjects who were between 21 and 34 years in age represented 60% of the sample. Finally, subjects who were 35 and older represented 15% of the sample. Table 5 depicts the distribution of the subjects by age.

Table 5. Age in years (n = 20)

Value	Frequency	Percent
≤ 20	5	25.0
21-34	14	60.0
≥ 35	3	15.0

Marital status, ethnicity, educational background, income, and prenatal caretaker are displayed by frequency and percentage in Table 6. Of the population, 70% were married, 25% were single women, and 5% were divorced.

The variable educational background was divided into two groups: (1) those who completed high school or had less education and (2) those who had more than a high school education. The sample (n = 20) indicated that 25% belonged to Group 1 and 75% belonged to Group 2. The sample is skewed toward higher education. Of the sample, 45% are of Anglo-American ethnic derivation, 35% are Mexican-American, 10% reported Black derivation, and 10% reported "other"—specifically, 5% Asian and 5% Puerto-Rican.

Income was reported by 18 of the 20 subjects. The mean income was slightly higher than \$25,000 annually. Of the population, 15% reported incomes of \$5,000 or less while 20% of the sample reported incomes of \$40,000 or more annually.

Prenatal care was most often provided by a health maintenance organization (HMO). These cost-conscious health-care groups encourage short hospital stays. Of the sample, 65% reported an HMO as their primary source of prenatal care, 30% reported private physicians, and there was one subject who did not specify (5%).

Pregnancy history was determined by eliciting information about the number of pregnancies, miscarriages, abortions, stillbirths, and deliveries. For 80% of the sample the current pregnancy was their only pregnancy. Thirty percent reported being pregnant more than once although 100% of the sample reported only one delivery of a viable

Table 6. Summary statistics of selected demographic variables
(n = 20)

Variable	Frequency	Percent
<u>Marital Status</u>		
married	14	70
single	5	25
divorced	1	5
<u>Education</u>		
≤ high school	5	25
high school	15	75
<u>Ethnicity</u>		
Anglo-American	9	45
Mexican-American	7	35
Black	2	10
Other	2	10
<u>Income</u>		
< \$5000	3	15
\$5-15,000	4	20
\$15-25,000	4	20
\$25-40,000	3	15
> \$40,000	4	20
(missing)	2	10
<u>Prenatal Caretaker</u>		
HMO or clinic	13	65
Private MD	6	30
(missing)	1	5

infant. Abortion represented 20% of these uncompleted pregnancies, miscarriage 5%, and stillbirth 5%. Table 7 displays the descriptive statistics of pregnancy history.

The variable previous experience with child care was assigned three groups: (1) none, (2) limited, and (3) extensive. Most women reported limited or no child-care experience (75%). Table 8 displays the data.

Length of hospital stay was calculated by time and date of the baby's birth to time and date of hospital discharge (Table 9). The length of stay variable contained two groups: 24-hour hospital stay or less and 24-hour hospital stay or more. It was found that despite the early discharge policy for normal vaginal delivery, 75% of the sample stayed in the hospital over 24 hours after the birth of their baby. Information about the use of pain medication during labor and delivery was elicited (Table 9). It was found that 80% of the sample reported the use of pain relief measures during labor and delivery. Of those 80%, most (55%) used epidural anesthesia. The remainder used intravenous pain relief medications, and one subject used both intravenous medication and epidural anesthesia. Postpartally, pain relief medication was used by 65% of the population. Of these, 35% used Tylenol with Codeine, 10% used plain Tylenol, and 20% used something else.

Table 7. Pregnancy history (n = 20)

	Value	Frequency	Percent
Number of Pregnancies	1	16	80
	2	2	10
	3	1	5
	4	1	5
Number of Miscarriages	0	19	95
	1	1	5
Number of Abortions	0	16	80
	1	2	10
	2	2	10
Number of Still Births	0	19	95
	1	1	5

Table 8. Previous experience with child care (n = 20)

	Value	Frequency	Percent
Previous Experience	none	3	15
	limited	12	60
	extensive	5	2

Table 9. Length of hospital stay and use of pain medication
(n = 20)

Value	Frequency	Percent
<u>Length of Hospital Stay</u>		
24 hours	5	25
> 24 hours	15	75
<u>Use of Pain Medication during Delivery</u>		
Yes	16	80
No	4	20
<u>Use of Pain Medication Postpartally</u>		
Yes	13	65
No	7	35

The PSQ as an Indicator of Stress

The PSQ was used as an indicator of postpartal stressors by determining the frequency, percentage, mean, standard deviation, and range of the response scores. Table 10 represents descriptive statistical findings according to the three subscales as well as the total scale.

The Physiological Subscale (Items 1, 2, 3, 4, 6, 8, 9, 10, 12, 14, and 15) revealed a score relevant to physical or bodily discomfort as a source of stress. The mean score for the 20 participants was 27.7 points with a standard deviation of 5.8 and a range of 17-37.

Table 10. Descriptive statistics of the three subscales and total scale (n = 20)

	Mean	SD	%*	Range
Physiological (13 items)	27.7	5.9	62	17-37
Psychological (21 items)	48.5	11.2	57	24-70
Environmental (18 items)	43.8	8.1	60	31-57
Total Scale (50 items)	120.0	21.8	60	72-16

*% of total possible score

The Psychological Subscale delineated mental/emotional stressors and was indicated in 21 items: 5, 7, 11, 16-25, 27-31, 42, 43, and 48. The mean for this subscale was 48.5 with a standard deviation of 11.2 and a range of 24-70.

The Environmental Subscale contained 18 items that related to stressors about the activities of daily living and social support. These items were: 13, 26, 32-41, 44-47, 49, and 50. The mean score for this subscale was 43.8 with a standard deviation of 8.1 and a range of 31-57.

The measure of postpartum stress in the total scale was computed. The mean score was 120, with a standard deviation of 21.8 and a range of 72-160.

According to the scoring categorization (p. 42), these scores indicated a positive response to the presence of postpartal stress. The percentage of mean scores in relation to the highest possible score for each subscale and for the total scale was computed (Table 10). The Physiological Subscale revealed the highest percentage of responses about stressors at 62%. The Environmental Subscale was next highest at 60%, and the Psychological Subscale indicated a 57% response to questions about stressors. The percentage of the total scale response to postpartal stressors was 60%. A scored response percentage which is indicative of no stress or of low stress fell in the 51% or less range. The data received from the postpartum sample therefore indicated the presence of stress in each subscale area as well as for the whole scale.

Measures of Significance between Groups

A one-way ANOVA was performed on the variables of marital status and previous experience with child care with the responses of the three subscales and the total scale. A post-hoc Tukey HSD procedure was also utilized for each set of variables. Significance was set at the .05 level.

For the variable, marital status, only the women who were married reported significant amounts of stress in the Physiological Subscale and the Psychological Subscale. Married women also responded

to all questions about postpartal stressors (total scale) significantly.

Previous experience with child care did not significantly vary with any of the subscales or with the total scale.

A t test was performed for the variables of income, education, length of hospital stay, and pain medication usage with the three subscales and the total scale. None of these variables were significant at the .05 level of significance.

Pearson correlation coefficients were obtained for age and obstetric history, as related to the three stress subscales and the total scale. Age correlated positively with all three subscales and with the total scale indicating that as age increased, so did postpartum stress. The variable miscarriage correlated positively with stressors relative to the Psychological and Environmental subscales; this finding indicates that the experience of previous miscarriage resulted in higher levels of postpartum stress.

Open-ended Questions

Three open-ended questions followed the PSQ. These questions dealt with (1) issues of unresolved concerns, (2) early discharge, and (3) pediatrician's support. Themes were extracted from the written answers and frequencies were determined. This information is presented as Table 11. Open-ended questions revealed themes of concern related to finding child care when the mother returns to work, establishing a routine for ADL, breastfeeding, and infant care skills. Four out of five women who were discharged early from the hospital would have liked

Table 11. Frequencies of themes extracted from open-ended questions (n = 20)

<u>Frequency</u>	
<u>Unresolved Concerns</u>	
Child care when return to work	5
Establishing a routine for ADL	4
Breastfeeding	2
Blues	2
Infant care	1
Worries about how business is doing without her	1
<u>Early Discharge</u>	
Discharge less than 24 hours but would have liked to stay longer due to weakness and fatigue	4
Liked early discharge because had a lot of support	1
<u>Pediatrician's Helpfulness</u>	
Offered reassurance and confidence about infant's well-being	12
Infant care teaching done	8
Breastfeeding teaching done	2
No help	1

to stay longer due to weakness and fatigue. Many women stated their 2-week visit to the pediatrician gave them reassurance and confidence about the baby's well-being, as well as additional infant care and breastfeeding teaching.

Summary

Characteristics of the sample were determined by using descriptive statistics. The mean age of the sample ($n = 20$) was 25.3 years. Most of the sample were married (70%) while there were 25% single women and 5% were divorced. Single women reported incomes of less than \$5,000 annually. The sample was skewed toward a higher educational level. Most women (65%) used HMOs as their prenatal caretakers. Twenty-five percent of the sample were discharged from the hospital within 24 hours of their baby's birth. Most women used pain medication both during labor and postpartally.

The PSQ scores indicated the existence of postpartal stress in all three subscale areas--Physiological, Psychological, and Environmental--as well as for the whole scale. Measures of significance between groups revealed significant correlations between age, marital status, and previous miscarriage with the PSQ. Married women reported more stress in the physiological and psychological areas. Women who had previous miscarriage reported significantly more stress in the psychological and environmental areas.

Chief concerns of postpartal women revealed by the open-ended questions were: finding childcare when mother returns to work, establishing a routine for ADL, gaining reassurance and confidence about the

infant's well-being, and infant caregiving skills. Other concerns were breastfeeding issues, the blues, and fatigue.

CHAPTER 5

DISCUSSION OF FINDINGS AND CONCLUSIONS

The purpose of this replication was to (1) identify stressors experienced by women in the first 2 weeks postpartum and (2) compare results with the original study: "Stresses Experienced by Primiparous Women in the First Two Weeks Postpartum" by Wolfel (1986). This chapter presents a discussion about the study results and the research questions. Comparisons by Wolfel's findings are noted. Further research and duplication for nursing practice are discussed.

Study Results and the Research Questions/ Comparisons to Previous Findings

1. Do postpartal women experience stress in the first 2 weeks postpartum?

The findings of both the replication and Wolfel's 1986 study indicated that postpartal women experienced stress in the first 2 weeks postpartum. The instrument used to measure postpartal stressors, the PSQ, tested well for reliability in both studies. The mean scores of the samples were 120 and 124.96, respectively. Percentages based on mean scores and total possible scores for the subscales and for the total scale were computed and compared to Wolfel's (Table 12). The results indicated the presence of postpartal stress approximately 60% of the time.

Table 12. Percentage of perceived stressors compared

PSQ	1989 Study	1986 Study
Physiological	62%	64%
Psychological	57%	64%
Environmental Scale	60%	71%
Total Scale	60%	62%

2. What is the nature of postpartal stressors?

Based on the literature, stressors were categorized accordingly: physiological stressors, psychological stressors, and environmental stressors. A discussion and review of the literature about each of these areas of stress is presented in Chapters 1 and 2. The PSQ was developed so that each of these areas of stress could be measured. Based on the findings, sources of postpartal stress are present on each of these three general categories or areas of stress (Table 10). Women additionally cited sources of stress in their responses to open-ended questions (Table 11); these responses revealed that the nature of postpartal stressors were categorizable into the three areas of stressors.

Themes extracted from the three open-ended questions indicated the existence of stress especially in the areas of obtaining child care when the mother returns to work and establishing a routine for the activities of daily living. Both of these themes fit into the area of environmental stress, but the child-care issue carries a component of psychological stress as well. One mother expressed concern about finding child care as "there just aren't that many good people to care for infants."

In regard to activities of daily living (environmental stress), mothers wondered if there would ever be any kind of routine reestablished in their lives; frequently women expressed concerns about the wakefulness of their infants during the night, and wanted to know how to deter their playfulness at that hour.

Often times, a postpartal woman's first encounter with a health-care professional after her hospital discharge is with the baby's pediatrician. The pediatric staff often help women with breastfeeding and infant-care skills. Many women reported they gained confidence and reassurance about their baby's well-being when they visited the pediatrician at 2 weeks postpartum. Women reported that they also received help with specific infant-care issues such as feeding, cord care, and infant colic. These concerns fit into the environmental psychological area.

Depression is a component of stress, which can be categorized in both the physiological (fluctuating hormones) and the psychological (emotional tension) areas of stress. Two women expressed feelings of "depression" and "baby blues." Postpartal depression is an important

and understudied issue of postpartum care and affects 10-80% of women. Because of the anonymity of the subjects, follow-up on these potential calls for help was not possible.

3. Do younger or older women experience postpartal stress?

The current study indicated that as age increases, postpartal stress increases. Furthermore, responses about stressors are significant for each subscale as well as for the total scale when correlated with the variable of age. Wolfel's study did not find a relationship between age and postpartum stress.

4. Do married, single or divorced women experience postpartal stress?

According to the data, married women were more likely to respond to questions about stressors in the areas of physiological and psychological stress. This is to say that in the area of psychological stress married women experienced more conflicts with role transition, lifestyle and relationship changes, knowledge deficits, and body image. A married woman is not alone; she has a partner who must also cope with postpartal stressors. Perhaps the difficulty and increased stress in this area was due to the changing and the reciprocative relationship of the couple. Sollie and Miller (1980) reported marital strain in conjunction with lifestyle changes during the puerperium as a major source of stress. Oakley (1980) also cited losses experienced after the birth of a baby as: change in lifestyle to one of social isolation and the loss of the couple's (previous) relationship. Married women also scored high in responses about physiological stressors. This area of stress includes bodily discomfort and fatigue. It is not clear

why married women had more stress than single or divorced women in this area. However, it is interesting to note that in Wolfel's 1986 study, married women handled stress better than single women in only one area: environmental stress. This is the one category that is absent of significant responses about stressors for married women in the current study.

5. How does educational level compare with levels of postpartal stress?

The sample of the current study was skewed toward higher education, that is, education past high school, while the sample that Wolfel (1986) studied was not. Neither study revealed a relationship between educational levels and perceived postpartal stressors.

6. How does ethnicity relate to postpartal stress?

Ethnicity was found to be unrelated to postpartal stress in both the current study and in Wolfel's 1986 study.

7. How does pregnancy history (number of pregnancies and deliveries, miscarriages, abortions, and stillbirths) compare to postpartal stress?

Miscarriages correlated significantly with stress in the areas of psychological and environmental stress. Perhaps women who had a miscarriage entered motherhood with higher anxiety than did women who had not experienced miscarriage. Wolfel (1986) did not find a relationship between pregnancy history and postpartal stress.

8. Does previous experience with child care decrease postpartal stress?

Wolfel cited Gordon and Gordon (1965) as identifying previous experience with child care as a variable which may affect the ease of role transition and hence the level of postpartal stress a woman may experience. She included this variable in her demographic data, and found that most women (77%) in her sample reported limited or no prior experience with child care. She also discovered a relationship between previous experience with child care and postpartal stress in the areas of psychological and environmental stressors as well as for the total scale. In the current study, 75% of the sample reported limited or no prior experience with child care. However, the current study did not indicate a significant correlation between previous experience with child care and responses about stress on the PSQ. This finding compares with Entwistle and Doering (1981) who also found no significant relationship between previous baby-care experience and postpartal stress.

9. Do women with very low annual incomes (<\$5,000) exhibit more postpartal stress?

It was discovered that three of the five single women (15%) reported incomes of less than \$5,000 annually, placing them at the poverty level and possibly qualifying them for state- and federally-funded health care. Although poverty might be expected to correlate with high levels of stress, the income variable did not correlate significantly with the PSQ. This finding compares with the findings of Norr et al. (1989) in the study about outcomes of early discharge of low-income women and their infants (Chapter 2, p. 36).

10. How does early discharge from the hospital relate to postpartal stress?

Length of hospital stay was a variable of particular interest to this study. The current standard of care is that hospital discharge occurs within 12-24 hours of the baby's birth by normal vaginal delivery; this policy was not a standard of care in 1986 when Wolfel conducted her study. This standard is not only wellness-oriented but is cost effective and has been enthusiastically adopted by cost-containing HMOs. It was discovered, however, that although 65% of the sample received prenatal care from HMOs, only 25% of the sample were discharged 12-24 hours after their baby's birth. Women who left the hospital within 12 hours of birth were often missed due to subject recruitment restraints of the institution, and this may account for the disparity of results. Additional information about early discharge was obtained via the open-ended question about early discharge. Four of the five women who were discharged within 24 hours of giving birth wrote that they would have liked to have stayed longer due to weakness and fatigue. One woman was happy to go home early, but stated it was because she felt comfortable at home and had a "visiting nurse" sent by her HMO. The visiting nurse taught her infant-care skills and helped her to feel more confident handling her baby. Lemmer (1987), Patterson (1987), and Norr et al. (1989) concluded that early discharge for low-risk mothers and babies is a safe option, providing there is support at home.

11. Does the use of pain medication reduce anxiety and therefore postpartal stress?

Most women in the sample used pain control medication both during labor and delivery and postpartally. This variable did not correlate significantly with responses about stressors on the PSQ. This study, therefore, did not indicate a relationship between use of pain medication (either during labor and delivery or postpartally) and postpartum stress.

12. Does the type of prenatal caretaker (HMO, private physician, or midwife) relate to postpartal stress?

Most women (65%) in the study obtained their health care from health maintenance organizations (HMOs). Type of prenatal care cannot only make a difference in length of hospital stay, but it could possibly increase stress levels due to the participation of care of several physicians (instead of just one physician or one midwife and the uncertainty of which physician would deliver the baby). Prenatal caretaker did not, however, correlate significantly with responses about stress on the PSQ.

Further Research

The tool, in adjunct with demographic variables and open-ended questions, demonstrated its usefulness in eliciting the nature of postpartum stressors and groups at risk for significant amounts of stress.

Some items in the tool were not geared for single women. Both research studies demonstrated that a significant portion of the sample was single women. Perhaps the items which refer to "my partner" can be changed to "my mother" or "my main helper." These changes in terminology could quite possibly result in differences in the PSQ

scores; some single women in the study did not answer those items referring to "my partner."

A more varied sample would provide more foundation for support and greater generalizability of findings. Multiparous as well as primiparous women could be used; women who have had births by caesarian section may also be included. Women of low-income and low-educational status should be sampled. Further testing should also utilize a large sample size for more reliable results.

Implications for Practice

Implications for nursing practice are:

1. prenatal and in-hospital teaching and counseling programs which, based on research, focus on the prevention of postpartal stressors
2. development of home-care programs for early discharge follow-up for both mothers and babies
3. continued research

A large percentage of women from both Wolfel's 1986 (77%) and the current replication (75%) reported little or no previous experience with child care. This variable was significant in Wolfel's study for increased levels of stress postpartally. Prenatal and in-hospital teaching programs can alleviate some postpartal stress by focusing more on infant-care skills. These skill classes can range from specific caretaking skills such as feeding, bathing, and circumcision care to more general issues such as signs of a sick infant or how to establish a routine of care. Many women cited disruption of the routines of ADL

as stressful; time management and stress management are therefore important components of prenatal and postnatal education. Prenatal programs must be widely available and free of cost. Single mothers exhibited stress in Wolfel's study; evidence from the replication indicates they are often from low income brackets and cannot afford to pay for classes. Nurses must work to expand the availability of free prenatal classes; nurses must also utilize research findings to target areas of need, keeping in mind that postpartal women exhibit physiological, psychological, and environmental stress.

Short hospital stays decrease teaching and counseling opportunities; home care follow-up provides additional supportive care. Women in the study who were discharged within 24 hours indicated they did not feel fully recovered when they left the hospital. One woman cited the benefit of a home visit by a nurse who helped her to feel more comfortable with the baby and with her own ability to care for the infant. Many women said the 2-week pediatric visit was reassuring and several infant-care questions were answered. Some women needed help with breastfeeding at 2 weeks postpartum and the pediatric staff intervened. A home-care visit by a maternal/newborn nurse would fill the need for extra reassurance, information needs, and help with the early establishment of breastfeeding. Nurses can develop, manage, and staff these home-care programs.

Continued research in the area of preventive medicine and health-care maintenance is an important though somewhat new role for nurses. Practitioners of nursing frequently rely on academia or centers of epidemiology to conduct research about health care. Who

better than the practitioner in the field, armed with the day-by-day strategies of filling areas of need, is equipped to make assessments and to collect data? Practicing nurses must prepare themselves to be research competent and open the sphere of their practice to research. Research in the area of maternal-child health is sorely needed. Government spending on prenatal preventative health care is given low priority despite indications that good prenatal care prevents morbidity (and increased spending). In the long run, continued research on postnatal stressors and programs of intervention can greatly diminish stressors encountered and reduce serious consequences to the well-being of our families.

The replication of "Stresses Experienced by Primiparous Women at Two Weeks Postpartum" (Wolfel, 1986) clarified the nature of postpartum stress and identified groups at risk. It is clear that women experience postpartal stress. Married women experience more stress in the areas of psychological and physiological stress while single women experience more stress in the environmental area (Wolfel, 1986). The majority of primiparous women reported limited or no previous experience with child care. Significant portions of the primiparous women are unmarried and fall within the poverty level for income. This information helps nurses tailor programs of education and care in order to prophylactically diminish postpartal stress.

The tool developed by Wolfel tested well for reliability and can be used confidently to measure postpartal stress in further research. One use of the tool might be as a screening device for postpartal women to evaluate stress levels and the need for continued

supportive services. It can also be used to document the presence of stress and hence the rationale for further supportive care.

Summary

Postpartal primiparous women exhibit physiological, psychological, and environmental postpartal stress as indicated by responses to the PSQ. Demographic variables are not definitively linked to responses about stressors as demonstrated by the varying findings between Wolfel's 1986 study and the current study. Based on the studies, married women exhibit stress in psychological and physiological areas, while single women exhibit stress in the environmental area. The PSQ is a reliable tool to elicit information about postpartal stress and further use of the tool is warranted. More information about postpartum stress can be obtained by conducting research with a more varied and larger sample. Nursing implications include the expansion of current prenatal and in-hospital teaching and counseling programs, the focus of which is based in research. Home care follow-up programs for mothers and babies are a new facet and much needed area of supportive care. Nurses can function in program development and management positions as well as in-home caretakers. Continued research by nurses, particularly in the field of maternal/newborn health maintenance and disease prevention is needed for the well-being of our families.

APPENDIX A

HUMAN SUBJECTS COMMITTEE APPROVAL



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF NURSING

MEMORANDUM

TO: Ms. Mary E. Francl

FROM: Linda R. Phillips, PhD, RN, FAOP
Associate Dean for Research *L.R.P.*

DATE: February 28, 1989

RE: Human Subjects Review: "A Re-Examination of Stresses Experienced by
Primiparous Women in the First Two Weeks
Postpartum"

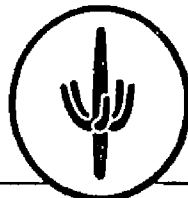
Your project has been reviewed and approved as exempt from University review by the College of Nursing Ethical Review Subcommittee of the Research Committee and the Director of Research. A consent form with subject signature is not required for projects exempt from full University review. Please use only a disclaimer format for subjects to read before giving their oral consent to the research. The Human Subjects Project Approval Form is filed in the office of the Director of Research if you need access to it.

We wish you a valuable and stimulating experience with your research.

LRP/ms

APPENDIX B

FACILITY LETTER OF APPROVAL



Tucson Medical Center
Team • Technology • Tradition

May 8, 1989

Mary Francl
3275 East Pima
Tucson, Arizona 85716

Dear Ms. Francl,

You have been granted access to Tucson Medical Center to conduct your research project entitled, "A Reexamination of Stresses Experienced by Primiparous Women". Your proposal materials have been reviewed and approved by administrative staff of the division of Patient Care Resources and Human Research Committee (HRC). (Please see attached correspondence from HRC).

To facilitate your data collection activities and to minimize the impact of these activities on the unit, Roberta Latham, Patient Care Manager, has been designated as your clinical liaison contracts.

Attached are the data collection policies and procedures which you are expected to follow. Upon completion of your study, you are expected to provide us with a formal copy of your study and to present your findings to interested staff. Accordingly, guidelines for presentation are also attached. Additionally, you may be asked to provide us with a brief written synopsis of your study for potential publication in the Patient Care Digest, a TMC newsletter.

We wish you a successful research experience, and we look forward to your sharing your results with us.

Sincerely,

Guadalupe S. Olivas
Guadalupe S. Olivas, RN, PhD
Coordinator
Publications and Research

GSO:rlo

Attachments

cc: Roberta Latham
D. Reimer/A. Poore

APPENDIX C
SUBJECT CONSENT

A REEXAMINATION OF STRESSES EXPERIENCED BY
PRIMIPAROUS WOMEN

Nurse Researcher: Mary E. Francl, R.N. Phone: 323-8159
Master's Degree Candidate, University of Arizona

Disclaimer Form

The purpose of this study is to identify stresses and concerns that women experience in the first few weeks after having a baby. I am being asked to voluntarily participate in this study because I have had my first baby by normal vaginal delivery.

If I agree to participate, a Postpartum Stress Questionnaire will be mailed to my home at about two weeks after my baby's birth. I will be asked to respond to questions about my experiences and feelings after having a baby. The questionnaire requires about 15 minutes to complete. After filling out the questionnaire, I will be asked to mail it in a stamped envelope addressed to the researcher.

I understand that all information will be kept confidential. Only the nurse researcher or authorized representative will have access to the data. The results of the study will be presented in group form and individuals will remain anonymous in any formal or published report.

No apparent risks are involved in this study. Although there are no direct benefits, my participation may help nurses to plan patient teaching and postpartum follow-up. This may improve my future maternity care and that of other women.

If I have any questions or concerns which I would like to discuss, I may contact the nurse researcher who will answer them. I am free to answer some or none of the questions and can withdraw from the study without any illwill.

I will receive no money to participate, nor will there be any charge. My participation or nonparticipation will not affect the health care that I receive. My signature below indicates that I am willing to voluntarily participate in this project. I may have a photocopy of this consent, if desired.

Date: _____ Subject: _____

Witness: _____

Please mail questionnaire to this address:

Name _____
Address _____

APPENDIX D

POSTPARTUM STRESS QUESTIONNAIRE

POSTPARTUM STRESS QUESTIONNAIRE

The following statements pertain to your adjustment to having a new baby. Please circle the letter(s) that best indicate your feelings since the birth of your baby.

SA--Strongly agree with the statement
 A---Agree with the statement
 D--Disagree with the statement
 SD--Strongly disagree with the statement

1. I have been uncomfortable with uterine cramping.	SA	A	D	SD
2. I feel that I am getting enough sleep.	SA	A	D	SD
3. I am concerned about my uterus contracting back to its normal size.	SA	A	D	SD
4. My breasts have been sore.	SA	A	D	SD
5. I worry about my appearance.	SA	A	D	SD
6. I am concerned about how to care for my episiotomy (stitches) area.	SA	A	D	SD
7. I do not feel that motherhood has restricted me from work or school opportunities.	SA	A	D	SD
8. I have felt relaxed since the birth of my baby.	SA	A	D	SD
9. My episiotomy (stitches) has not been painful.	SA	A	D	SD
10. I am concerned about my vaginal bleeding.	SA	A	D	SD
11. My partner and I spend less time together as a couple.	SA	A	D	SD
12. I feel tired during the day.	SA	A	D	SD
13. I worry about providing care for my baby when I return to work.	SA	A	D	SD

- | | | | | | |
|-----|---|----|---|---|----|
| 14. | I worry that my vaginal and episiotomy area will not heal correctly. | SA | A | D | SD |
| 15. | I would like to know how to relieve the discomfort of sore breasts. | SA | A | D | SD |
| 16. | Being a mother is not as I imagined. | SA | A | D | SD |
| 17. | I feel that I have enough information to care for my baby. | SA | A | D | SD |
| 18. | I can recall my entire labor and delivery experience. | SA | A | D | SD |
| 19. | I am concerned about my figure returning to normal. | SA | A | D | SD |
| 20. | I feel that motherhood has restricted me from school or work opportunities. | SA | A | D | SD |
| 21. | I have felt emotional tension since the birth of our baby. | SA | A | D | SD |
| 22. | I feel closer to my partner since the birth of our baby. | SA | A | D | SD |
| 23. | Motherhood is more rewarding than I expected. | SA | A | D | SD |
| 24. | Adjusting to my baby has been stressful for me. | SA | A | D | SD |
| 25. | I would like more information regarding infant care. | SA | A | D | SD |
| 26. | I feel socially isolated from my friends. | SA | A | D | SD |
| 27. | I am satisfied with my appearance. | SA | A | D | SD |
| 28. | Now that I am a mother, I feel fulfilled. | SA | A | D | SD |
| 29. | I feel confined to my home. | SA | A | D | SD |
| 30. | I do not remember parts of my labor and delivery experience. | SA | A | D | SD |
| 31. | My expectations of motherhood were too romantic. | SA | A | D | SD |
| 32. | I worry that I am not being a good mother. | SA | A | D | SD |

33.	Changes in daily routines, such as eating and sleeping, have been bothersome.	SA	A	D	SD
34.	I did not realize the demands of parenting until I had my baby.	SA	A	D	SD
35.	It is easy to meet the needs of my baby.	SA	A	D	SD
36.	The increased amount of work is stressful.	SA	A	D	SD
37.	My partner does not help me around the house.	SA	A	D	SD
38.	I worry about my financial obligations (paying the bills).	SA	A	D	SD
39.	I am expected to put the needs of my baby before my own.	SA	A	D	SD
40.	I dislike being separated from my friends and fellow workers.	SA	A	D	SD
41.	My partner helps me care for our baby.	SA	A	D	SD
42.	I enjoy being at home with my baby.	SA	A	D	SD
43.	It was difficult to establish a relationship with my baby.	SA	A	D	SD
44.	I am comfortable with my financial status.	SA	A	D	SD
45.	Meeting the needs of my infant is difficult.	SA	A	D	SD
46.	My partner helps me around the house.	SA	A	D	SD
47.	Now that I have a baby, I have more responsibilities.	SA	A	D	SD
48.	I feel that I do not have enough time for myself.	SA	A	D	SD
49.	After the birth of the baby, I realized that my life would never be the same.	SA	A	D	SD
50.	My relatives have been helpful with baby care.	SA	A	D	SD

APPENDIX E

DEMOGRAPHIC DATA

1. Age: _____
2. Marital Status: Married _____
 Single _____
 Divorced _____
 Separated _____
3. Education: Eighth Grade or less _____
 Some High School _____
 Completed High School _____
 Trade/Business School _____
 Some College _____
 Completed College _____
 Graduate Education _____
4. Ethnic Background: Anglo-American _____
 Mexican-American _____
 Black _____
 Indian _____
 Other (Please Specify) _____
5. Pregnancy History:
 Number of: Pregnancies _____ Miscarriages _____
 Deliveries _____ Abortions _____
 Stillbirths _____
6. Previous experience with child care:
 None _____ Limited _____ Extensive _____
 Please specify: _____

7. Family income per year
- \$5,000 or less _____
- \$5-15,000 _____
- \$15-25,000 _____
- \$25-40,000 _____
- \$40,000 or more _____
8. Time/date of baby's birth _____
- Time/date of hospital discharge _____
9. Did you have anything for pain control during your labor? Yes _____ No _____
- If yes, _____ IV pain reliever _____ epidural
(Nuhain, Demerol) _____ other
- Did you need pain relief medication postpartally? _____ Yes _____ No
- If yes, _____ Tylenol with codeine _____ plain Tylenol
_____ other
10. Where did you receive your prenatal care?

APPENDIX E

OPEN-ENDED QUESTIONS

What other concerns or information needs do you have at this time?

If you were discharged from the hospital within 24 hours of your baby's birth, do you think the early discharge made your recovery more difficult? Less difficult? Please be specific.

How have your visits to the pediatrician's office helped you during these first 2 weeks postpartum?

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