THE RELATIONSHIP BETWEEN PREPARTUM EXPECTATIONS ABOUT THE TRANSITION TO PARENTHOOD AND ACTUAL POSTPARTUM EXPERIENCES

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(ABSTRACT)

This study questioned if women who held unrealistic positive expectations concerning the postpartum period, prenatally, would experience more depression and less positive affect than women whose prenatal expectations were more realistic in relation to their postpartum experience. The 45 married women who participated in a LaMaze class completed a questionnaire at approximately seven months prenatal concerning their expectations about the postpartum period (6-8 weeks after delivery), as well as the Beck's Depression Inventory (BDI) and the Affect Balance Scale (ABS). The expectations questionnaire was readministered 6-10 weeks after delivery to compare expectations to actual experience. The BDI and ABS were also readministered at this time to provide a change score between prenatal and postpartum depression and affect.

Positive expectations that proved to be unrealistic were compared with the BDI and ABS change scores. A high discrepancy between positive expectations and postpartum

experience was not significantly correlated with depression on the BDI. However, unrealistic positive expectations were significantly correlated with decreased positive affect, postpartum, on the ABS. Three out of the four positive affect subscales of the ABS were significantly affected by unrealistic positive expectations. That is, prenatal unrealistic positive expectations affected these new mothers' positive emotions of vigor, contentment and joy, rather than their negative affect or depression. A prenatal self report index of child care information also correlated significantly with the discrepancy between expectations and postpartum experience. Participants with less child care information had more unrealistic expectations about the postpartum period.

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THE RELATIONSHIP BETWEEN PREPARTUM EXPECTATIONS ABOUT THE TRANSITION TO PARENTHOOD AND ACTUAL POSTPARTUM EXPERIENCES

Pregnancy, birth and parenthood are still the norm for the large majority of adults in our society (Entwisle & Doering, 1981; Neal, Groat & Wicks, 1989). In 1988 there were 3,913,000 live births in the United States. Even though effective contraceptions have made childbearing more of a choice than at any other time (Neal, Groat & Wicks, 1989), only five to seven percent of the U.S. and Canadian population choose not to have children (McCubbin & Figley, 1983).

Childbirth is often viewed as a desirable event, often joyful, as a time of renewal and growth (Cutrona, 1982). However the first few postpartum months can be quite stressful (Fleming, Flett, Ruble, & Wagner, 1990). Families in the "critical transition" to parenthood are in a state of interaction change and reorganization before they establish more stable patterns of behavior (Aldous, 1990). The mothering process can be intense, preoccupying and time consuming but also growth producing in the weeks and months following the birth of a child (Scarf, 1980).

The transition to parenthood is a normative event, or an expectable change, yet can create more family stress than events considered more negative such as illness or death of a family member (Aldous, 1990). If the stresses encountered are not successfully responded to, old

psychological conflicts may be evoked or new conflicts arise. A state of poorer mental health for the family may be the result (Parad, 1965).

The early postpartum period, for women, constitutes a time of increased psychological distress, especially typified by depression symptoms (O'Hara, Zekoski, Philips & Wright, 1990). Up to 80 percent of new mothers experience some form of postpartum depression (Cutrona, 1982). This is usually experienced as mild forms of dysphoria or depression involving symptoms such as tearfulness, irritability and feelings of inadequacy. This state of dysphoria is usually self limiting at 6 to 12 weeks but may persist for a year or more (Fleming, Flett, Ruble & Wagner, 1990).

Adaptation postpartum has ramifications beyond the mother's health. The ways couples' cope with and adapt to the transition to parenthood can have a long-term negative or positive impact on the quality of their marital relationship (Schuchts & Witkin, 1989). Since the family unit is made up of interdependent members (Aldous, 1990) the quality of the marital relationship in turn affects the quality of their parenting (Schuchts & Witkin, 1989). Postpartum stressors can create tension in other areas of family life which in turn become conflicts themselves (Parad, 1965). The infant may suffer if the mother is so depressed she cannot understand or respond to her baby's needs and rhythms (Kobayashi & Brazelton,

1984). Fleming et al. (1988) reported that even mildly depressed mothers responded in more negative ways toward their infants than did their non depressed counterparts.

The nuclear family's relationships with members of the immediate, extended family and kin networks can also be changed by the introduction of the first newborn (Sussman, 1988). Some researchers have traced potential "ripple effects" of family transitions across several generations (Aldous, 1990).

Many theoretical models of postpartum depression have been proposed and cover a wide range of perspectives. Because of the many disciplines involved it is a topic hampered by lack of consistent definitions and instruments (Whiffen, 1988a).

Multiple explanations of postpartum depression have come from the psychoanalytic viewpoint. These include regression, unresolved oedipal conflict, conflicts with the maternal role; anxiety and neuroticism, and hostility (Affonso & Domino, 1984; Cutrona, 1984; Hees-Stauthamer, 1985; Hopkins, Marcus & Campbell, 1984; Kraus & Redman, 1986; Shereshefsky & Yarrow, 1973).

Personality theorists explain postpartum depression in many ways. The most popular of these propose cognitive styles associated with depression and attributional theory. The postpartum depressed mother has learned to perceive, interpret, or evaluate events or situations in a way that makes the events more stressful or negative for

her (Affonso & Domino, 1984; Blaney, 1985; Cutrona, 1984; Lewinsohn, 1974; Rickel, Gerrard & Iscoe, 1984; Shereshefsky & Yarrow, 1973).

Other explanatory models include the interaction of biophysical demands and adjustments. Proposed causal factors for depression include a genetic predisposition, previous depressive episodes, and a drop in estrogen, progestrone and/or prolactin as well as the neurohoromones. The physiological changes that occur with childbirth in turn affect the psychological health of the new mother, especially for those women who may be sensitive to endocrinological changes (Affonso & Domino, 1984; Ciaramitaro, 1978; Hopkins, Marcus & Campbell, 1984; Leifer, 1980; Rickel, Gerrard & Iscoe, 1984; Scarf, 1981).

Postpartum depression has also been linked to the availability of social support and the type of social support accessible to the new mother (Cutrona, 1984; Hopkins, Marcus & Campbell, 1984; Kraus & Redman, 1986; Rickel, Gerrard & Iscoe, 1984). Research has found a clear relationship between depression and having an impoverished or dysfunctional social network. The direction of causality between the two variables remains in debate (Blaney, 1985).

Marital difficulties and postpartum depression have been associated in several studies (Arizmendi & Affonso, 1984; Cutrona, 1984; Lederman, Raff & Carrol, 1981; Shereshefsky & Yarrow, 1973). Depressed mothers have

reported that both instrumental and emotional support were less accessible to them than to non-depressed mothers. A confiding relationship with the husband was identified as an important variable in a woman's adaptation in the postpartum period (Hopkins, Marcus & Campbell, 1984). The degree to which the husband was able to provide both emotional support and help in caring for the infant and the household were also linked to maternal depression (Leifer, 1980).

Another association that researchers are pursuing is that between postpartum depression and stressful life events. Researchers conceptualize childbirth and the introduction of the infant to the home as an "acute social event", a major stressor that disrupts the previous patterns of living and requires new behavior patterns. The greater the degree of disruption and therefore stress, the greater the vulnerability toward emotional disturbance (Atkinson & Rickel, 1984). Additional stressful life events beyond those associated with childbirth and child care that occur during the course of pregnancy or in the early postpartum period may play a role in the development of a postpartum depressive episode (Cutrona, 1984; Hopkins, Marcus & Campbell, 1984). Specific stressful life events that have been studied include environmental stress, (Hopkins, Marcus & Campbell, 1984), financial strain, bereavement, onset of disease in self, (Cutrona, 1984), a job loss, (Rickel, Gerrard & Iscoe, 1984) and

giving birth to an infant who was at risk due to prematurity or disease (Cutrona, 1984).

In exploring what is stressful about a life event, such as new parenthood, some researchers have examined the extent to which the event is anticipated, and the extent to which individuals felt they had some control over the stressor event. Many of these researchers believe that a critical variable in decreasing stress is the individual's cognitive appraisal of an event, expectations being a component of the appraisal (Weinberg & Richardson, 1981).

It has been stated that the transition to parenthood encompasses many stresses. Just as a supportive social network can be a buffer in the face of stress, being psychologically prepared for a stressor event can mediate its negative effects (Entwisle & Doering, 1981).

Appley and Trumbull (1986) describe preparedness as, "accurate anticipation of an event, accurate information about the substance of and/or likely results of an event and an awareness of the means for reducing the stress or of escaping from it" (p. 42). The level of preparedness can determine the impact of a stressor event. According to this theory the degree of control and/or influence the individual has over that event reduces the level of stress created by the event.

A stressful event can lead to a more negative outcome when positive expectations meet a reality that is not as positive as anticipated. Whenever expectations exceed the

reality but do not reach a balance after a certain period of time the stress of "unattainable expectations" can be experienced (p. 72). This stress can lead to deflated enthusiasm, cynicism, dissatisfaction and illness (Goliszek, 1987).

The transition to parenthood can be difficult yet is is often accompanied by family or individual expectations that do not recognize or validate the new stresses that may occur at this time. It may not be the experience itself that is so overwhelming but the anxiety and guilt generated when the experience deviates from the family expectations (Kraus & Redman, 1986). The idealized image of parenthood burdens new parents to live up to the ideal (Grossman, Eichler and Winickoff, 1980).

In many ways American women are not prepared for the abrupt transition to motherhood. There are several cultural myths and stereotypes about motherhood that contribute to a woman's idealized expectations and serve as potential contributors to postpartum depression (Dix, 1985; Kraus & Redman, 1986).

Steffensmeirer (1982) found the impact and transition to parenthood more difficult for mothers than fathers because of several factors: One being that they experience a greater discrepancy of expectations between reality and the romantic notions of motherhood. Leifer (1980) found that many new mothers had internalized these myths and felt that any difficulties they experienced were

a result of their own limitations, mothers then blamed themselves. If new mothers' emotional reactions do not match their expectations, they may experience guilt and self-doubt, even towards their baby (Reading, 1983).

Typical expectations reported by new mothers illustrate the lack of reality based perceptions of the postpartum period. Only 14% of pregnant women in Mercer's study (1986) presented realistic perceptions of motherhood that incorporated both positive and negative aspects of parenting. Shereshefsky and Yarrow (1973) proposed that if a woman could be helped to see the difficulties inherent in parenthood ahead of time, the impact would be decreased.

The theory of anticipatory socialization and its affect on maternal adaptation during the postpartum period has been studied. Shereshefsky and Yarrow (1973) concluded that if a pregnant woman could visualize herself as a mother she would have more confidence in the maternal role, less anxiety with infant care and would improve her family's chances of overall adaptation.

Maternal postpartum adaptation was also enhanced in Steffensmeirer's study (1982) of anticipatory socialization. Pregnant women had prenatal contact with other new mothers and practiced an imagined rehearsal in the maternal role.

Information seeking during pregnancy has been found to be related to maternal self-definition and self

confidence. Prior child care experience was also found to affect maternal attitudes during the postpartum period (Fleming, Flett, Ruble & Shaul, 1988).

It is obvious that there are multiple tasks, situations and feelings that may not be adequately imagined or considered before becoming a mother. The set of expectations a mother-to-be creates and her own personal experience when she is living the postpartum period may be dissimilar (Sussman, 1988). Stress and difficulties within the family can occur to the extent that the new mother's postpartum period is different from the "script" of how she anticipated the transition to parenthood to be (Schuchts & Witkin, 1989).

Belsky (1985) found that women whose postnatal experiences were worse than they expected, experienced declines in feelings of love and satisfaction with the marriage, and increases in feelings of ambivalence and experiences of conflict. He concluded that the stress of becoming a parent and parenting an infant would be greatest for mothers whose prenatal expectations proved overly optimistic either in overanticipating positive effects or in underestimating negative effects.

The purpose of this study was to examine the relationship between unrealistic positive expectations about motherhood prepartum, postpartum depression and positive affect. Prenatal expectations of mothers-to-be were compared to their postpartum experiences. It was

hypothesized that the more positive expectations that were proved unrealistic, the more depression and less positive affect new mothers would experience.

Methods

Problem Statement

The specific questions addressed by this research follow: Will women with unrealisitic positive expectations prenatally, experience more depression postpartum than those women whose prenatal anticipations were realistic in relation to their postpartum experience?

Specific hypotheses stated in the alternate form include:

1. The more unrealistic positive expectations held by a pregnant woman prepartum, the greater the increase in depression as measured by the Beck's Depression Inventory.

2. The more unrealistic positive expectations held by a woman prepartum, the less positive affect will occur postnatally as measured by the Affect Balance Scale.

A secondary hypothesis:

3. Prenatal child care information, determined by two self report measures, will have a significant negative relationship with prenatal, unrealistic positive expectations.

Design

This research project used a self report questionnaire design administered twice; between seven and eight months prenatally and six to ten weeks postpartum.

The Affect Balance Scale and Beck's Depression Inventory were used for pre and post testing. A questionnaire surveying expectations regarding common topics and concerns of women in the postpartum period was administered during the prenatal period as the third protocol. The same survey was used postpartum with the wording changed to reflect the woman's change in status from expectant to delivered.

The prenatal set of questionnaires were introduced and administered, in person, in small class groups. The postpartum questionnaires were completed over the telephone.

Subjects

Participants were enrolled in LaMaze childbirth classes at a non profit hospital serving a suburban/rural community. The requirements for the class were that expectant mothers bring their to-be labor coaches and a $50.00 fee.

Every six week class followed the same basic course outline though teachers may have changed. The course included some information concerning the postpartum period including physical and emotional changes and infant care. This information was not presented to the participants until after the prenatal set of questionnaires were completed.

It was decided that volunteer couples would be excluded from the postpartum set of questionnaires if they

had multiple infants, or preterm infants; those born before the 37th week. It was also decided to exclude women who had extensive complications during pregnancy and/or labor and delivery, and those whose infants were at medical risk either at birth or during the postpartum period. Allowed for the research were non-emergency Caesarean sections, forceps and induced labor. Women with babies who had a handicapping condition such as cerebral palsy, respiratory problems or mental retardation were not included in this study. The hospital sponsoring the LaMaze classes used in this study was not equipped to service high risk pregnancies, deliveries, or infants. Those women and/or infants were routinely referred, if possible, during the pregnancy, to a teaching hospital one hour away. None of the above mentioned restrictions occurred with this sample.

There were 52 questionnaires distributed to expectant primiparous mothers prepartum and 45 completed postpartum. There was a response rate of 87%; four could not be contacted by phone postpartum, two were not married and one had had a miscarriage.

The 45 expectant mothers were all married with their husbands as their coach. The average years married was 3.6, with a range of 1 to 12 years. The subjects varied in age from 20 to 39 years with a mean of 25.7 years. From the 45 respondents, 57% had a gross family income between $15,000 and $24,999. Of the expectant women, 72%

were not working outside of the home at the time of the prenatal set of questionnaires. The educational level of the mothers-to-be varied with 55% completing high school and/or up to two years of college, 20% completing three years of college and 25% receiving Bachelor's degrees. Five participants reported a previous history of depression or a history of depression in their family.

Planned pregnancies were reported by 28 subjects. Twenty-three percent of the subjects had complicated pregnancies or had been told they would have a Caesarean section, forceps or induced labor. Most couples (n=37) had been trying a maximum of six months to become pregnant with 33% of those reporting either "not trying" or becoming pregnant the first month.

Results of a birth order question revealed that 4.4% of the mothers were only children, 37.8% were the eldest in their family, 28.9% were in the middle of their siblings, and 28.9% were the youngest in their family. The majority (73.3%) had relatives living nearby.

Instruments

The Beck Depression Inventory is an instrument designed to measure behavioral manifestations of depression. It is a self-report inventory with 21 symptom-attitude categories which are judged to be characteristic of depression. The participant rates him or herself on a series of four point ordinal scales. Scores are summed to produce a total BDI score (Goldberger

and Breznitz, 1982).

A Pearson Biserial r correlation between the BDI and the clinical judgements of depth of depression was reported by Beck (1967) as .67 in two separate studies. When the BDI and the Depression Scale of the MMPI were used as criterion measures, concurrent validity was obtained with a product moment coefficient of .67 with the change scores before and after treatment. Construct validity has been established with other scales such as self concept and hostility, and measures such as sense of humor, masochistic dreams, and response to anti-depressant drugs (Beck, 1967).

The BDI has been used by several researchers as a standardized measure of postpartum depression (Atkinson & Rickel, 1984; Flannery and Wieman, 1989; O'Hara, Zekoski, Philipps and Wright, 1990; Pfost, Stevens and Lum, 1990; Whiffen, 1988b). Whiffen (1988b), however, found the BDI to be insensitive to postpartum women who meet the criteria for minor depression.

In addition, several items on the BDI may be inappropriate because of the physical demands and changes of pregnancy and the postpartum period. These include appetite and sleep patterns, fatigue and effort to work, health concerns and interest in sex. Women's prenatal and postpartum responses to these items may be influenced by normal developmental changes of a physiological nature in combination with the care of a newborn.

O'Hara, Zekoski, Philipps and Wright (1990) found the major element of distress experienced by childbearing women (as compared to non childbearing women) was directly related to the physical changes associated with pregnancy and childbirth. The significant differences between the two populations were found on the Somatic subscale of the BDI.

Because of these possible limitations with the BDI, Derogatis's overall measure of affect, the Affect Balance Scale (Mitchell, 1985) was also administered. New mothers often report experiencing strong positive affect as well as depression. The ABS was selected to tap into both realms of these feelings. The ABS includes four positive affect dimensions and four negative dimensions. It is a forty item adjective instrument that scales mood adjectives on a five point scale from "not at all" to "extremely". Summations across the eight affect dimensions lead to positive and negative affect totals. An overall difference score between the two provides the summary score (Goldberger & Breznitz, 1982). The author has reported test retest alpha coefficients of each subscale ranging from .787 to .944 using 355 psychiatric inpatients (L. Derogatis, personal communication, 1991).

The third instrument, the expectations questionnaire, consisted of 30 items which asked questions covering the topics of social support, including marital quality and support, infant care, obstetric and associated postpartum

expectations, role conflict, maternal feelings and identity and postpartum "blues" or depression. Participants rated these questions on a four point descriptor scale, 0 being "haven't thought about it" to 4 being "a great deal; very much".

This questionnaire was developed for the purposes of this study to assess the expectations of women prior to delivery of a first child. The instrument was developed to have content validity. First, the literature was searched for indications of dimensions which might be relevant. In addition, several focus groups of mothers, not included in the final sample, were convened. From the information gathered from these sessions a preliminary questionnaire was developed. This questionnaire was administered to a second group of mothers and comments were incorporated into a revised instrument. This revision was presented to two independent groups of health care professionals. The final questionnaire was the result of this process.

Since the instrument conceptually consists of related, but partially independent subscales the internal consistency of the instrument was not assessed. There were insufficient subjects available to do a formal test-retest reliablity. However, because of the multiple stages in the development of this preliminary instrument, it appears to have high face validity. An investigation of the properties of the instrument would be of interest

in a future study.

The new mothers were asked the exact set of questions to which they responded prenatally. Response scores postpartum were subtracted from the prenatal scores and a total change score derived.

Procedure

Couples began attending childbirth classes in their seventh and eighth month of preganancy. At the first class they were asked to voluntarily complete the first set of three questionnaires. The participants provided their phone number and projected delivery date. Subjects were contacted six to ten weeks after their delivery date and completed the postpartum set of questionnaires via the telephone. At that time any information that might disqualify the respondent was sought and recorded.

Results

The two major hypotheses involved change scores. The depression change scores were calculated by subtracting the prepartum from the postpartum scores for the BDI. The ABS change scores were derived by subtracting the postpartum ABS Index from the prepartum ABS Index. The difference in total expectations was derived by subtracting the prenatal answers and the postpartum answers on the expectations questionnaire. Means and standard deviations of the three variables; the BDI change score, the ABS Index change score and the Expectations change score are displayed in Table 1.

Table 1

Means and Standard Deviations for the Three Major Variables

	M	SD
BDI Change Scores	.733	6.940
ABS Change Scores	.377	.812
Expectations Change Scores	1.755	6.945

Hypothesis 1 stated: The higher the unrealistic positive expectations prepartum, the higher the depression as measured by the BDI. If this hypothesis were upheld it should be reflected in a positive correlation between change scores for unrealistic positive expectations and BDI change scores. A Pearson's product moment correlation coefficient was calculated between these values to test this hypothesis. The correlation was not significant at the .05 level, One tailed, $r\ (43)=.19$ (see Table 2).

Table 2

Correlations Between the Three Major Variables

	BDI Change Scores	ABS Change Scores
BDI Change Scores	1.000	
ABS Change Scores	-.621 *	1.000
Expectations Change Scores	.199	-.249 *

* $p<.05$

To explore whether the hypothesized relationship might hold only for subjects with more extreme changes in

expectations, the 14 subjects who scored the lowest on difference in total expectations change and the 15 subjects who had the highest scores in difference in expectations change were compared again with the BDI using an independent t-test. Again, the relationship between postpartum depression and unrealistic positive expectations was not significant, ($t(1,27)=-.97$, $p>.30$) (see Table 3).

Table 3

BDI Change Scores for Lowest and Highest Expectations Change Scores

	Low		High		
	M	SD	M	SD	t value
BDI Change Score	-.85	4.76	.86	4.82	-.97

$p>.05$

The mean BDI depression levels of the subjects prenatally and postpartum were within one point of each other. Both prenatal and postpartum means were in the "normal" level of depressive symptomology as indicated on the BDI. The postpartum BDI results revealed a higher level of depression, "moderate depression", experienced by only two subjects (see Table 4).

Hypothesis 2 stated that the more unrealistic positive expectations a woman held prenatally, the less positive affect would be experienced postpartum as indicated on the Affect Balance Scale. A Pearson's

Table 4

BDI Depression Levels

	Prenatal		Postpartum	
	n	%	n	%
normal	36	80.0	37	82.3
mild mood disturbance	7	15.6	4	8.9
borderline clinical	2	4.4	2	4.4
moderate depression	0	0.0	2	4.4
Mean	7.2		8.0	

correlation coefficient between the change in the Affect Balance Scale and the total expectations change score was significant, ($r(43)=-.249$, $p<.05$). As prenatal unrealistic positive expectations increased, changes in Affect Balance Scale scores decreased indicating less positive affect, thus supporting this hypothesis (see Table 2).

To explore which subscales of the ABS were influencing the overall significance of the ABS and unrealistic positive expectations, separate Pearson's correlation coefficients were calculated between the total expectation change score and each of the ten subscale change scores of the Affect Balance Scale. Significant individual subscale negative correlations of the ABS were found on the change in the total positive affect score, ($r(43)=-.39$ $p<.005$), as well as the change in the joy subscale, ($r(43)=-.25$ $p<.05$), the change in the contentment subscale, ($r(43)=-.40$ $p<.005$), and the change in the vigor score, ($r(43)=-.35$ $p<.01$). None of the negative affect subscales (guilt, hopelessness, depression, anxiety), showed a significant relationship with the total expectations change score. The changes in the ABS from prenatal to postpartum were primarily related to decreases in positive affect and not increases in negative affect. Those women whose postpartum experience was not as positive as they expected prenatally, experienced a decrease in positive affect but not an

increase in negative affect (see Table 5).

It follows that the two instruments, Beck's Depression Inventory and the Affect Balance Scale would both measure similar effects in the change in depression/negative affect between the prenatal and the postpartum score. A Pearson's correlation coefficient was used to test this assumption. A significant negative relationship was found between the Affect Balance scale Index change score and the depression change score, ($r(43)=-.62$, $p<.005$) supporting the assumption that both instruments measure the same concepts (see Table 2). The BDI depression change score also correlated significantly with eight out of the ten subscale change scores of the ABS as shown in Table 6. This suggests that changes in the Affect Balance Scale and the BDI measure the same negative affect/depression; but prior results of this study suggest that the ABS is a more sensitive instrument with regards to the relationship between postpartum depression and prenatal expectations. This may be attributed to its ability to measure shifts in positive affect rather than those of negative affect.

Hypothesis 3 stated that there would be a negative relationship between a pregnant woman's child care information and unrealistic positive expectations. The amount of child care information was calculated by using two self-report questions. Respondents chose "very little", "a moderate amount" or "a great deal" to report

Table 5

Expectations Change Score Correlations with ABS Subscale Change Scores

ABS Index	-.24 *
Positive Affect	-.39 ***
Vigor	-.35 **
Contentment	-.40 ***
Joy	-.25 *
Affection	-.20
Negative Affect	.15
Anxiety	.17
Depression	.12
Guilt	-.00
Hopelessness	-.05

* = p<.05, ** = p<.01, *** = p<.005

Table 6

Depression Change Score Correlations with ABS Subscale Change Scores

ABS Index	-.62 ****
Positive Affect	-.29 **
Vigor	-.19
Contentment	-.27 *
Joy	-.38 ****
Affection	-.37 ***
Negative Affect	.65 ****
Anxiety	.39 ****
Depression	.57 ****
Guilt	.62 ****
Hopelessness	-.02

* = p<.05, ** = p<.025, *** = p<.01, **** = p<.005

their amount of child care information. They also indicated how many books they had read concerning child care. A single index of information was calculated by assigning 1 point to the response "very little", 2 points to the response "a moderate amount" and 3 points for "a great deal". A response of one to three books was assigned 1 point, four to six books received 2 points, seven to nine books was given 3 points, and ten books or more was assigned 4 points. The two separate scores; number of books read and amount of child care information, were then totaled. The 13 subjects who had the lowest score on child care information (3 points) and the 17 subjects with the highest scores (5-7 points) were compared by evaluating change in total expectations scores through an independent *t* test . The relationship was significant, t (1,28)=1.77, $p<.04$ (see Table 7). Thus, the amount of child care information mothers-to-be reported was related to the degree to which prenatal positive expectations did not match their postpartum reality. Those with the least child care information experienced higher discrepancy.

Table 7

Expectations Change Scores for the Lowest and Highest Child Care Information

	Information				
	Low		High		
	M	SD	M	SD	t value
Expectations	4.38	5.81	.294	6.59	1.77*

* $p<.05$

Discussion

This study was conducted on the premises that a mother-to-be's psychological preparedness for the postpartum period can include having realistic expectations surrounding this transition, thereby reducing the potential stress she may experience during that time, and that the more unrealisitic positive expectations a mother-to-be holds about the postpartum period the more stress she will feel during that time. It was hypothesized that stress during this transition is often manifested by postpartum depression or negative affect. Thus, expectant mothers who held more unrealistic positive expectations were expected to experience more postpartum depression as measured by the Beck' Depression Inventory and less positive affect as measured by the Affect Balance Scale. The former hypothesis was not supported by the findings in this study but the latter hypothesis was upheld.

There could be several reasons for this lack of support for one of the primary hypotheses. Findings in this study suggest that postpartum depression appeared to be difficult to measure by a scale of general overall depression, such as the BDI. The two measures, BDI and the ABS used in this study were correlated at the .005 significance level, $r(43)=-.62$, yet only the ABS had a significant relationship with unrealistic prenatal

positive expectations. When comparing prenatal unrealistic positive expectations to depression, as measured by the BDI, significance was not found. Yet when unrealistic positive expectations were compared with changes in affect on the ABS the relationship was significant.

Even these findings may not illustrate the complexities between unrealistic, prenatal positive expectations and postpartum adjustment. In this study, a negative shift on the ABS's positive affect subscales; joy, contentment, and vigor related to pregnant women's unrealistic positive expectations. Therefore, prenatal unrealistic positive expectations may have affected these new mothers' positive emotions rather than their negative affect or depression. These new mothers felt less joy, contentment and vigor in the postpartum period if they held prenatal, positive expectations that proved to be unrealistic, than did the mothers-to-be who had more realistic expectations concerning the transition to parenthood.

One dimension of unrealistic positive expectations was thought to be the amount of information on child care a mother-to-be has prior to becoming a mother. It was hypothesized that information would lead to more realistic expectations and psychologically prepare a woman for the stress of caring for a newborn. This assumption was supported in this study. Therefore, one could conclude

that, in this study, the more child care information a pregnant woman had the more realistic her expectations about the transition to parenthood were and the more positive her postpartum experience.

Limitations

The questionnaire formulated to assess prenatal expectations was not assessed for validity or reliability. Potential problems with this instrument exist: The four point descriptor scale may not be sensitive to the changes that occur postpartum. There were several topics covered by the 30 questions which may have led to some topics not being thoroughly addressed.

The sampling procedure was not random in this study. All subjects were married and had the means to pay for the $50 LaMaze class. The couples demonstrated some level of committment to their upcoming parenthood as demonstrated by their enrollment and attendance in this class. Though ethnic origin was not explored, they all came from suburban or rural communities.

As discussed, there are several stereotypes and myths that may contribute to a woman's expectation that becoming a mother is a positive, fulfilling, enjoyable transition in her life. In past research subjects have been inclined to either deny or minimize symptoms or feelings that indicate less than what they expected (Whiffen, 1988b). Admitting to negative or ambivalent feelings may be felt to reflect on the quality of their mothering. Postpartum

women may "normalize" their responses to the BDI (Whiffen, 1988b) and the expectations questionnaire to what they believe to be more socially acceptable answers. This study's findings that prenatal unrealistic positive expectations did not lead to postpartum depression as measured on the BDI may support this possibility. A measure for social desirability of responses should be included for future research.

Conclusions

This study's results support previous literature which questioned whether postpartum depression may not be detected by the use of global measures of depression such as the BDI (Atkinson & Rickel, 1984; Flannery & Wieman, 1989; O'Hara, Zekoski, Philipps & Wright, 1990; Pfost, Stevens & Lum, 1990; Whiffen, 1988b). Any instrument used with the overall population should be scrutinized for its adaptability to the specific symptoms that occur with postpartum depression. This study found that the BDI and the ABS correlated highly. Yet, the findings that only the ABS was significant in relation to prenatal unrealistic positive expectations and postpartum affect supported the possible inappropriateness of the use of the BDI with this group of postpartum women.

High levels of depressive symptoms may not be linked with a diagnosis of depression. Whiffen (1988a) found in studying variables such as marital adjustment, attributions and life stress, that they were related to

symptom levels rather than to diagnosed depression.

Several measures of affect may be more representative of the complexity of affective changes surrounding the birth of a child. Since the new mother experiences many changes in role, relationships and self it is likely that different emotions will be experienced in these new contexts. A variety of affective states may occur in the postpartum period (Fleming, Flett, Ruble & Wagner, 1990).

In studying the risk of nonpsychotic depression for women after childbirth, O'Hara, Zekoski, Philipps and Wright (1990) felt that standard measures for the diagnosis of depression were limited as indices of postpartum emotional stress. They compared non childbearing women and childbearing women in relation to major and minor depression. They found that childbearing women did not have significantly higher levels of depression postpartum than the non child bearing subjects. They did find that childbearing women experienced higher levels of depressive symptomology and social maladjustment during the postpartum period than non childbearing women assessed at the same time.

It could be possible that "postpartum depression" is a misnomer in the traditional context of the definition of depression. New mothers in the postpartum period may experience less positive affect or more negative affect than before their pregnancies though not necessarily

depression as measured by standardized instruments. Postpartum stress may not be described appropriately by using the conventional term "depression".

This study also supported the hypothesis that prenatal expectations played a role in these women's postpartum adjustment. Results of the comparisons of the ABS and pregnant women's expectations about the transition to motherhood revealed the following: Prenatal positive expectations that proved to be unrealistic impacted the postpartum positive affect domain to a greater degree than postpartum depression symptoms or negative affect. The amount of discrepancy between prenatal positive expectations and postpartum experiences determined how positive, rather than negative or depressed, these women felt in the postpartum period. Women who were prepared for the changes a child brought to her own unique life situation formulated realistic anticipations of the postpartum period. A more realistic perspective led to a more positive, fulfilling, less emotionally stressful transition to motherhood.

This study also supports the idea that educating women about child care may lead to more realistic expectations concerning the postpartum period. More information prenatally may help prepare women psychologically for the changes they encounter when they become mothers.

Helpers and educators who work with pregnant women

may incorporate techniques to facilitate women in their perceptions of new parenthood. Each woman will have expectations based on her past experiences and current situation. These past and present influences on a woman's expectations about motherhood should be addressed to facilitate the process of developing an awareness of the realities of the postpartum period. Exploring the etiology behind women's positive unrealistic expectations is important in changing perceptions of the postpartum period so as to enable women to better cope with the normal developmental stresses inherent in the transition to parenthood.

Future Research

Investigators of postpartum depression need to create an instrument that measures postpartum stress/adjustment in a less pathologically oriented manner. This instrument could include overall postpartum adjustment of the new mother, including positive affect. Though the symptomology and stress that are experienced in the postpartum period may not be well documented or revealed by current measures, it nevertheless affects the family. Further research to elucidate what is occurring in the postpartum period is imperative to assist new families in coping with postpartum stress.

Exploring new mothers' emotions, both positive and negative, may be a focus for research in the transition to parenthood. Postpartum depression has traditionally been

an area of study for many researchers yet the positive affect a mother experiences also influences her adjustment in the transition to parenthood. Replication of this study with a larger, random sample of expectant women and their significant others would further encourage the exploration of this relationship.

A social desireablity scale should be used for such a sensitive subject as mothering and parenthood. New mothers especially may feel insecure in their new roles and tasks. With the inclusion of such a measure researchers would be able to determine true responses for measures that are potentially threatening to the subjects.

The relationship between expectations and psychological preparedness is a theoretical one. A more thorough examination of how expectations can prepare a new mother for the postpartum period could include many topics that were not addressed in this study.

Further research into the influence that prenatal knowledge of child care information has on postpartum adjustment needs to be conducted. Standardized measures, rather than a self report index, could lend more credibility to this issue.

The determinants of a woman's postpartum adjustment to motherhood is a critical question. The research gleaned can then be translated in a pragmatic way to assist families in this normative and developmental process.

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APPENDIX A

Review of Related Literature

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Review of Related Literature

Choosing Parenthood

Parenthood is a common event and condition. It is a process which regenerates not only the human race, but can also regenerate the individual through acute confrontation with self, family, and culture (Colman & Colman, 1971).

Only five to seven percent of the United States and Canadian population choose not to have children (McCubbin & Figley, 1983). Pregnancy, birth, parenthood - reproduction is a norm for the large majority of adults (Entwisle & Doering 1981).

The transition to parenthood represents a normative life event and has potential for restructuring the life course of individuals and families. During this period developmental psychology and family sociology meet since development begins for some individuals (the infant), roles are created (mother, father, grandfather etc.) and families are changed from a dyad to triad (Belsky, 1985).

Researchers are attempting to unwind the components and dynamics involved with the common institution of parenthood. What began as a limited area of research has grown into many different perspectives which explain the process of becoming parents (McCarty-Wong, 1986).

As an event, the birth of a child is suitable for studying stress since the event encompasses a range of experiences such as child care and nurturing, change in

life style regarding social contacts and job demands. Childbirth can be an enormous life stress, especially when linked to the desires, needs and expectations that brought the parent to want a child (Dix, 1986). Thus, the event of parenting has the potential of causing multiple underlying dimensions of stress (Weinberg & Richardson, 1981).

The birth itself is a major life change. It is followed by a new assessment of the marital relationship, the learning of the new social role of parent, and possibly by financial difficulities. The very number of changes to be absorbed in a limited period of time can make the transition a challenge (Ciaramitaro, 1978).

Parenthood as a Paradigm Shift

Lederman (1984) calls the transition between a couple without a child to a parent a "paradigm shift", paradigm being understood as a constellation of current self-image, beliefs, values, priorities, behavior patterns, relationships with others, and set of problem-solving skills. A paragigm shift is stimulated when life change occurs that cannot be easily integrated into the old paradigm. It is expected that there will be some personal conflict and critical resistance to change before any fundamental adjustment to the new paradigm takes place. When this developmental step is too large, when the two lifestyles or paradigms are too far apart or cannot be reconciled, a sense of "crisis" can occur.

Grossman, Eichler and Winickoff (1980) studied primiparous women and their husbands and concluded that early parenthood is a crisis of considerable proportions wherein many of the new parents' resources- psychological, sociocultural, physiological, and marital are called upon. Those couples with significant problems in any of these areas seem handicapped in their capacity to successfully navigate the complex tasks involved in having a first child. For them, the crisis may have a less than optimal resolution in terms of their feelings about themselves, their marriages, or their relationships to their new baby. All the parents in their study described the considerable psychological work entailed in adjusting to the child and including the baby in the newly changed family structure. The struggle for growth, the change of becoming a parent with responsiblities, limitations and conflicting emotions are vital parts of the transition to parenthood (Dix, 1985).

Parenthood as Crisis Event

Parenthood has been called an "emotionally hazardous event" that poses coping tasks for individuals, families and groups. Reuben Hill's definition of crisis determines that new behavior patterns are needed immediately in response to a sharp or decisive change. A "crisis situation" mobilizes an individual's or a family's anxiety and disturbs adaptive behavior and interpersonal relationships (Parad, 1965).

The crisis theory has created new problems in understanding parenthood. The term "crisis" implies illness or abnormality. The term also implies that its resolution will bring a return to a more "normal" state. Parenthood is an irrevocable change in an adult's life and in a couple's functioning (Leifer, 1980).

Other writers view parenthood as a "normal crisis". This implies stress is inherent (Leifer, 1980). Rather than crisis, this is a time of transition accompanied by varying levels of stress (Robinson & Barret, 1986). Therefore, many researchers have concluded that it is more appropriate to conceptualize the process of becoming a parent as a transition rather than a crisis (McCubbin & Figley, 1983, Steffensmeier, 1982).

Lederman (1984) has gone farther to conceptualize the normal course of childbearing and parenthood as a task which comes as part of growth, and as a challenge rather than a crisis. This conceptualization better recognizes the complexity and creativity of the event. Studies of the establishment of parenthood indicate the role is associated with stress although the amount of stress is not insurmountable nor unduly severe, and it is tempered with satisfactions. Studies that examined both difficulties and gratifications experienced by new parents have found parenthood to be only slightly to moderately stressful and highly gratifying (McCarty-Wong, 1986).

Parenthood as Role Shift

Still other writers utilize role theory rather than a framework of "crisis" (McCarty-Wong, 1986). Some literature suggests there is a low level of role clarity in regard to parenthood, and problems in adjustment are likely to be the result. The role of parent is not well defined and does not possess a traditional model for parents to follow in today's society (Steffensmeier, 1982).

Parenthood as Life Stage

Theories of adult development are also relevant to understanding pregnancy and motherhood. A number of personality theorists have speculated that pregnancy and parenthood provide a potential for a new stage of personality change, reorganization, and integration (Leifer, 1980). Human growth is seen as occuring when the personality emerges from each crisis with an increased sense of unity, judgement and the capacity to do well according to the person's own standards and the standards of significant others. There is a continual process of change which results in greater adaptation of the individual (Breen, 1975). In the field of adult development the progression of life is a continuous process of change. The major milestones such as marriage and parenthood bring changes in a wide range of psychological charactersitics such as personality and self concept (Leifer, 1980).

More severe anxiety is likely to occur around

periods of psychological growth when a new identity, such as mothering must be adopted. Anxiety may be an expression of the simultaneous readiness and fear to change and grow (Colman & Colman, 1971).

Developmental processes accompanying motherhood occur simultaneously and equally on social, biological, emotional, and cognitive levels (Mercer, 1986, Breen, 1975). It seems justified to look upon the birth of a child, especially a first child, as a turning point leading to a new developmental stage for the adults involved (Breen, 1975).

Shereshesky and Yarrow (1973) found that during the year of pregnancy and first year of motherhood there is an increase in the woman's level of nurturance. This increase was rated as improvement in the level of personality integration which provides some evidence that processes of developmental change are set in motion or accentuated by pregnancy and maternity.

Pregnancy and parenthood as distinct developmental phases must include psychological and social consequences that occur in relation to the changed status and the reorganization of relationships. Certain processes and internal events must be mobilized if parenthood is to stimulate developmental growth (Hees-Stauthamer, 1985).

Parenthood-choosing or accepting to have, nurture and provide for a child-is a primary adult committment. Parenthood becomes developmental to the extent that the

parents are engaged in it. Parenthood commands generativity when the parental identity is made real. Parents assume the occupation of caring; psychologically, physically, and emotionally, for children (Daniels & Weingarten, 1980).

Different Impact on Fathers and Mothers

Traditionally the impact of parenthood, the transition to it and the experience of it, has been dramatically different for women than for men (Daniels & Weingarten, 1980). The sources of stress in becoming a parent differ for women than for men (Robinson & Barret, 1986; Weinberg & Richardson, 1981). Women have been, and still are to a great degree, the primary caretakers of children in our society (Daniels & Weingarten, 1980).

Steffensmeirer (1982) found the degree of difficulty in the transition to parenthood was greater for mothers than fathers because women were more likely than men: to experience greater changes in life styles, personality and social relationships, to have a higher self investment in the parenting role with greater disappointment, and to experience a greater discrepancy of expectations between reality and the romantic notions of motherhood. She found that sex had a significant positive direct effect on parental responsibilities and restrictions.

For women, there is a cultural pressure to bear children, which is accompanied by the message that motherhood confirms one's status as an adult. Motherhood

is often seen as a normal culmination of the socialization process of a girl (Leifer, 1980).

In one study, the majority of women described themselves as having grown up with the clear expectation that they would have children. They perceived parenthood as entrance into adulthood and expressed a sense of growth and self expansion. However, few women felt unqualifiedly positive about their sense of increased maturity. Many were ambivalent about this life stage. Yet to remain childless was regarded as leading to a stagnated marriage and preoccupation with themselves. Coping with the stresses and challenges of motherhood contributed to a sense of greater strength and self-esteem. Any changes brought about that might be defined negative were often evaluated as positive (Leifer, 1980).

Most women enter the role optimistically with high expectations and the belief that motherhood will bring personal fulfillment. They find they are unprepared for the realities and are forced into a reevaluation of their goals and themselves (Leifer, 1980). The mothering process can be intense, preoccupying and demanding in the weeks and months following birth (Scarf, 1980). It requires a change in perception of themselves as well as accompanying environmental, familial and social changes (Lederman, 1984, Mercer, 1986).

Becoming a mother means taking on a new identity. Taking on a new identity involves a complete rethinking

and redefining of the total self system: the ideal image or who the woman would like to be like; the self-image or how the woman sees herself at this time; and the body image or how she defines her body in terms of pregnancy and childbearing (Mercer, 1986).

American society does not traditionally provide training or preparation for this abrupt and irrevocable transition to motherhood. As a result, new mothers may view even normal transitional problems as a result of their own limitations (Leifer, 1980).

The change of status related to becoming a mother can be cause for crisis and/or adjustment. The new role marks the entry to new tasks and expectations. This can be called a "vital role" to distinguish it from transitory roles. Vital roles are both time extensive and emotionally extensive (Breen, 1975).

Five characteristics which may mediate how the experience of mothering affects the personal development of a woman have been delineated by Rickel, Gerrard and Iscoe (1984). One, the timing of her children affects how prepared she is emotionally and financially. Two, the degree of fulfillment within the marital relationship provides a base of support in securing the mother role. The woman's relationship with her own mother also impacts on her experience concerning the mothering role. The availability of practical and emotional support is crucial to the new mother in minimizing a sense of isolation or

dependency. Support can reduce feelings of being trapped in a "baby centered" world, be a source of reinforcement and a factor in a woman's sense of success as a mother. Fifth, the characteristics of the infant and the mother's ability to adapt to her infant's needs affects her sense of competency. Leifer (1980) found most women took credit or blame for their child's response pattern, unaware of temperment differences.

The period immediately after a birth is often maximally disruptive and difficult because all of the adjustments, physical and emotional, follow so closely after another draining and difficult time, the last months of pregnancy and the delivery. Although a woman has been preparing herself for the impending birth for many months, the last stages of pregnancy, labor, and delivery are difficult times during which her emotional energy is often turned toward herself. In contrast, the postpartum period requires her to turn her energy outward, toward the new baby and toward the rearrangement of other family relationships. At a time of maximal fatique and physical strain, this redirection of her emotions can indeed be a difficult undertaking (Grossman, Eicher, and Winickoff, 1980; Mercer, 1986).

Myths and Stereotypes

Most couples idealize the joys of parenthood and do not recognize the new stresses an infant brings (Kraus & Redman, 1986). To compound this, American society holds

several cultural myths and stereotypes about motherhood that serve as potential contributors to a "crisis" feeling during the early months of parenthood. One portrayal is the "good" mother who is totally loving, endlessly coping and engrossed in her child's needs. Those women who internalize this view find it difficult to cope with ambivalent, angry feelings that can be evoked by the infant or the situation surrounding the infant (Leifer, 1980).

Societal assumptions about women could include many aspects of mothering. A woman's biological destiny and ultimate fulfillment lie in bearing a child. Once the baby is born, a women's "maternal instinct" will enable her to fulfill the infant's every need. Any woman who does not want a child doesn't know how to love and care for one. It may even be considered "unnatural" not to want to have children (Ciaramitaro, 1978). The "instinct" theory of motherhood is one of the most vulnerable points for women. Mothering is and should be a learning process (Dix, 1985).

During pregnancy the important qualities of motherhood are often seen by the woman in idealistic terms. After birth the maternal constructs that are verbalized, decrease in terms of emotions and relationships and have an increasing focus on the more practical aspect of mothering. This discrepancy points out the idealized cultural conception of motherhood versus

the reality of the postpartum period. In addition, the self and ideal mother is described less similarly postpartum. This seems to reflect an increased self criticalness in relation to the maternal role (Breen, 1975).

Recently, the birth experience itself has been given much attention. Expectations of having a perfect, natural childbirth and the ensuing disappointment when this does not occur can trigger a sense of personal failure (Dix, 1985).

The cultural myths of "blissful motherhood" may hinder new parents from acknowledging how difficult and potentially painful the adjustment to parenthood can be. There can be little opportunity to learn parenting skills and roles before parenthood, and few available supports once parenthood is reached. The literature on postpartum disturbance and depression demonstrates that research and programs designed to facilitate postpartum adjustment for the entire family are essential to mental health (Rickel, Gerrard & Iscoe, 1984).

Definitions

Knowledge of postpartum depression is widely scattered and unevenly shared among the disciplines. Postpartum depression remains unclear in definition and etiology. This, and differing diagnostic criteria, account for startling and different prevalence statistics. Individual variation in depressive symptomatology of

postpartum women is becoming recognized and confounds these problems (Affonso & Domino, 1984; Hopkins, Marcus & Campbell, 1984). Depending on their research interests, authors settle individually on how severe the depression must be to be included in their study (Rickel, Gerrard & Iscoe, 1984). The lack of quantitative, normative data makes it difficult to differentiate normal from abnormal reactions to childbirth (Hopkins, Marcus & Campbell, 1984). Rather than look at specific postpartum adjustment problems researchers may use gross measures of emotional adjustment or disturbance. Thus, postpartum depression is often included along with other emotional problems (Rickel, Gerrard & Iscoe, 1984).

Contributing to the problem of lack of quantitative data is the vaccum of professional care in a consistent, holistic manner for women, after childbirth. Women see their obsetrician only if they are having a physical problem. The pediatrician is competent only in the area of the infant's health. Many women suffer anxiety and depression without consulting any professional (Dix, 1985).

Dix (1985) delineates two principal syndromes of postpartum depression. They are determined by time of onset and severity. The early depression syndrome starts during the first three weeks, and ranges from mild to moderate blues to severe psychosis. The late syndrome begins after three weeks, and is mainly depressive and

also ranges from mild to severe.

Scarf (1981) refers to three general time frames for postpartum depression. The first ten days after delivery, the first three months, or the wider six month boundary. Even the six month boundary for onset of depression has been extended to over a year (PreNatal Educator, 1988).

Dix (1985) has concluded that after birth there is a latent period of three days. From day three to day fifteen, two conditons may develop; (1) the "blues", a short lived mild syndrome or (2) puerperal psychosis. From the twentieth to fortieth day postpartum the late onset subsyndromes begin with mild to moderate depression.

There is a major definitional issue of what is meant by "depression." Two possible referents has been discussed. An affective state and a pathological condition. The distinction is based not so much on depth but on duration. Affective states are relatively brief and self-limiting, while pathological conditions are more persistent and intractable. Any demarcation between them is likely to be arbitrary (Blaney, 1985). For this reason the following definitions were used throughout this study.

1. Postpartum period or puerperium refers to the first six to eight weeks following birth.

2. Postpartum psychosis or puerperal affective psychosis is a condition that manifests itself as hallucinations, delusions, great agitation, either severe

depression, mania or changes from one to another. The patient usually needs medication or hospitalization within the first three weeks after birth (Cutrona, 1982).

Psychoses may be either affective or schizophrenic. Affective disorders are two to five times more prevalent (Cutrona, 1982). Some investigators have concluded that patients with a postpartum depressive psychosis demonstrate many of the same signs and symptoms as those with an acute non-puerperal psychosis. Yet there are some qualitative differences in the delusional content of postpartum depressions that reflect common themes associated with childbirth and related conflicts (Hopkins, Marcus, & Campbell, 1984).

Postpartum psychotics appear to have a genetic or familial predisposition for psychosis. There is no concrete evidence to support a specific genetic predispositon to postpartum psychosis per se (Cutrona, 1982).

The most widely used definition of postpartum psychosis requires that onset occur within six weeks of delivery. If the condition is not severe it may merge into the depressed conditon of postpartum depression (Cutrona, 1982).

Fewer than ten women in one thousand are estimated to suffer postpartum psychosis (Affonso & Domino, 1984). Colman and Colman (1971) sites one case in every 3,000 births. Approximately 15% to 20% of women who become

psychotic following delivery have had a prior psychotic episode. Thirty percent to 40% of women who have had an episode of postpartum psychosis were found to experience at least one subsequent non-puerperal psychotic episode (Cutrona, 1982).

3. Postpartum depression, also known as neurotic postpartum depression, nonpsychotic postpartum depression or puerperal depression, is a disorder comparable to a major or minor depressive episode. Features that contrast with those of nonpostpartum depression include mood worsening in the morning rather than evening, and early, rather than late, insominia. Symptoms reported also include tearfulness, despondency, labile mood, and feelings of inadequacy and inability to cope, particularly with the baby. Depression is almost always accompanied by anxiety about the baby or hypochondriacal concerns (Hopkins, Marcus, & Campbell, 1984). Other researchers have reported edema, loss of hair, irritability, and fatigue (Dix, 1985). Appetite disturbances, a marked lack of interest in activities both social and sexual, and guilt are almost always present. Yet, feelings of hopelessness or despair are rarely expressed (Cutrona, 1982).

Postpartum depression develops after the woman leaves the hospital and lasts a minumum of two weeks and may continue for several months (Cutrona, 1982) or up to a year (PreNatal Educator, 1988). There is a lack of

information on the duration and course of this disorder. Some evidence suggests the average duration may be between six and eight weeks (Hopkins, Marcus & Campbell, 1984).

The incidence of postpartum depression has varied widely, ranging from 7% to 30% (Hopkins, Marcus & Campbell, 1984). Eight to 15% of new mothers fall within the clinical definition of depression (PreNatal Educator, 1988). Research, (using the Beck's Depression Inventory) studying women seen routinely by a general practitioner-obstetrician found incidence rates of 3 percent for severe depression, 10 percent for moderate depression and 30 percent for mild depression (Rickel, Gerrard & Iscoe, 1984).

How a researcher assesses the incidence of depression in postpartum women is important. Researchers suggest that using the criterion of seeking treatment to define clinical depression is not appropriate. Few postpartum women actually seek help (Dix, 1985; Hopkins, Marcus & Campbell, 1984). Postpartum depression is less visible than either the "blues" or postpartum psychoses because symptoms usually develop after the woman is discharged from the maternity ward, and are seldom brought to the attention of medical or psychiatric personnel. Delusions, hallucinations, and suicidal ideation are not part of this syndrome, so hospitalization is rare (Cutrona, 1982).

The Diagnostic and Statistical Manual of Mental Disorders (1980) for puerperal depression follows:

A. Four or more of the following symptoms present every day for at least two weeks:

1. Loss of energy or fatigue,

2. Psychomotor agitation or retardation,

3. Feelings of worthlessness, self-reproach, or unreasonable guilt,

4. Evidence of diminished ability to think or concentrate, indecisiveness,

5. Recurrent thoughts of death or suicide, or attempt at suicide,

6. Poor appetite with significant weight loss, or over-eating with significant weight gain,

7. Insomnia or hypersomnia and/or,

8. Loss of usual interests or decrease in sexual activities.

B. Depression, anxiety, or irritability as a dominant mood.

C. The symptoms of depression above must be distinguished from delusional, schizophreni-form, and hallucinatory incoherence, marked looseness of associations, and paranoia, any of which may signal postpartum psychosis.

4. Postpartum blues, maternity blues, transitory syndrome or three day blues are a transient alteration in mood usually characterized by tearfulness and episodes of crying. Crying episodes associated with the blues are not necessarily synonymous with sadness or

depression but are also associated with poor sleep, tension, anger and irritability (Hopkins, Marcus & Campbell, 1984). Many women report that the crying is provoked by incidents that would not normally make them cry. Continuous crying spells of two hours or more are not uncommon. Insomnia, and mild confusion without impaired performance is also reported (Cutrona, 1982). Symptoms may be reactions to social or environmental stresses (Affonso & Domino, 1984). The blues is apparently more common in primiparous women and may, therefore, be associated with the adjustment to parenthood (Hopkins, Marcus & Campbell, 1985). Fatigue, anaesethetics used in delivery or hormones have been discussed but not thoroughly researched as causal (Cutrona, 1982).

The "blues" has an early onset of two to four days postpartum and lasts one to ten days (Affonso & Domino, 1984). Peak onset is on day three. For most women, symptoms are present for all or part of one to three days (Cutrona, 1982).

Prevalence estimates range between 50% and 80%. In one study, 85% of women who developed moderate clinical depression had earlier suffered from the "blues" (Hopkins, Marcus & Campbell, 1984). However, another study found no relationship between "blues" and prolonged depression. It is not known whether postpartum depression represents failure to recover from initial "blues" symptoms or

whether "blues" and postpartum depression are two independent syndromes (Affonso & Domino, 1984; Cutrona, 1982).

5. Postpartum masked depression is a response to parenthood with symptoms that seem unrelated to the birth of a child. It affects both men and women. Symptoms include unprovoked hostility, outbursts of anger, unexplained irritability, decreased sexual activity, and deterioration of the relationship between the parents (Affonso & Domino, 1984). One or both parents may try to distance him/herself from the family or give vent to unprovoked hostility. Often extramarital affairs and/or detachment from one or more of the children occur (Lesse, 1974). Family disturbances can continue for several years. A careful history of the period following childbirth is important because it may reveal the onset of postpartum masked depression which has remained unresolved for years (Affonso & Domino, 1984).

Epidemiology

Research on the frequency of postpartum depression and the "blues" as a function of demographic variables has failed to reveal consistent epidemiological patterns. Most studies have found no relationship between postpartum depression and socioeconomic status. However, Grossman, Eichler and Winickoff (1980) found that higher socioeconomic status was associated with fewer symptoms throughout the pregnancy, better pregnancy adaptation late

in the pregnancy and less anxiety and depression at two months and one year. Socioeconomic status did not affect the quality of the woman's mothering. In contrast non-puerperal depression has been found to have higher prevalence rates among lower socioeconomic groups. Racial differences have not been found with respect to frequency of postpartum depression. However, few multiracial samples have been studied (Hopkins, Marcus & Campbell, 1984).

Results are mixed with regard to postpartum depression and maternal age. Most researchers have found no relationship between age and postpartum depression, while others have found a higher rate of depression among younger mothers. However, most of these studies were conducted over a decade ago when childbirth was likely to occur in a more restricted age range than is currently the case (Hopkins, Marcus & Campbell, 1984).

Results are also mixed with respect to parity. Most studies have found no relationship between number of children and postpartum depression (Cutrona, 1982). Multiparae as a group are thought by some to be more physically and or mentally healthier after giving birth than primiparae and thus less apt to experience postpartum depression. From the opposite view, having more than one young child may increase the amount of stress placed on the mother and therefore susceptibility to depression (Rickel, Gerrard & Iscoe, 1984). Results of several

studies are mixed regarding "blues" and it's prevalency among primiparae (Cutrona, 1982). Evidence does suggest that after an initial episode of a postpartum disorder, there is high probability of recurrence (Hopkins, Marcus & Campbell, 1984).

There are few studies concerning the relationship between marital status and postpartum depression. Most studies have included only married women. Some investigators have failed to find any association between these two variables. But, one recent study found a significant relationship between divorced status and puerperal depression (Hopkins, Marcus & Campbell, 1984).

The majority of studies of postpartum depression suggest that there is an association between previous nonpostpartum psychiatric history and postpartum depression (Affonso & Domino, 1984; Atkinson & Rickel, 1984). There are few empirical studies about the family history of women who suffer from postpartum depression but there does seem to be a higher incidence of family disruption or emotional problems in the family of women who were reported as showing postpartum emotional problems or sought psychiatric help during this period (Arizmendi & Affonso, 1984; Cutrona, 1984).

Other variables such as pregnancy complications, obstetrical complications, educational level and immigrant status can not be concluded as relating to postpartum disturbance. Again, few studies have been conducted with

these variables (Hopkins, Marcus & Campbell, 1984).

Significance

Choosing to parent is an expectable, ordinary decision made by women in response to different motivations. New mothers often are unaware or unwilling to recognize the marital, familial, personal, financial and social realities that occur during the transition to parenthood. By the mounting evidence and prevalence rates, early motherhood is experienced as a period of emotional stress by significantly large numbers of normal American women. The requirements of the mothering role often provide a test of a woman's emotional resources. Mothers have reported their general mood as more negative and intense postpartum than prior to pregnancy (Leifer, 1980).

Since the postpartum period appears to be one of increased risk for the development of depression, further study of this event-linked disorder may help explain why women appear to have an increased vulnerability to depression during this time. Postpartum depression is worthy of study in it's own right since it affects a significant proportion of women and may have an adverse effect on their infants. Further study of postpartum depression may elucidate the interrelationships among stress, social support and the development of psychiatric disorders (Hopkins, Marcus & Campbell, 1984).

Parents' psychological functioning and family and

social environment, may be important factors contributing to children's health and functioning. Parental psychological disturbance, particularly parental depression, may increase the risk of disturbances in the social, emotional, cognitive, behavioral, and physical functioning of children (Rickel, Gerrard & Iscoe, 1984).

There is some clinical evidence that suggests maternal depression has a negative effect on the mother-child relationship. Systematic research is needed to assess and compare the mother-infant relationship in depressed and nondepressed postpartum women (Hopkins, Marcus & Campbell, 1984).

Hall and Farel (1988) found that maternal everyday stressors, life events and depressive symptoms were positively associated with child behavior problems. Maternal everyday stressors were associated with maternal depressive symptoms. Stress affected maternal health, perceptions of the child's behavior and/or the child's response to the home setting. Fleming et al. (1988) reported that even mildly depressed mothers responded in more negative ways toward their infants than did their non-depressed counterparts.

Mothers have a significant influence on the well being of their children through their performance of a variety of health related roles such as primary caregiver and gatekeeper of entry into the health care system. Responding to the demands of young children requires

considerable emotional and physical resources which may be compromised in the presence of stress. There are many potential implications of daily stress for families with young children (Hall & Farel, 1988).

Severe postpartum depression can be a contributing factor in a number of childhood problems such as hyperactivity, or child abuse or neglect. Depression in the mother during the first year of the child's life can potentially result in her psychological unavailablity to her infant. Affectional deprivation may then be expressed in a variety of ways depending on the degree of postpartum depression, the child's temperment, and other available supports for the child (Ciaramitaro, 1978). The infant may suffer if the mother is so depressed she cannot understand her baby's need for psychophysiological rhythms or learn how to nurture her baby (Kobayashi & Brazelton, 1984).

Postpartum depression combined with the normal changes brought about by parenthood, can add to a strained marital relationship (Ciaramitaro, 1978). The impact of the child on the marriage in the early postnatal period is potentially very disruptive. Even at the six month mark, postnatal rating reflect a lower level of marital adaptation than during pregnancy (Shereshefsky & Yarrow, 1973).

Postpartum pressures can be an initial cause that creates tensions in other areas of family life which in

turn become conflicts themselves (Parad, 1965). Such considerations can make the early-nurturing phase a highly problematical period. In addition, it is difficult for the new parents to view the pressures of the postpartum period as transient. They often read more significance in the problems than warranted (Leifer, 1980)

The nuclear family's relationships with members of the extended family and kin networks can also be changed by the introduction of the first newborn (Sussman, 1988). Some researchers have traced potential "ripple effects" of family transitions across several generations (Aldous, 1990).

Theoretical Models

There are many theories as to the etiology of postpartum disturbances. They can be grouped into several categories that often have separate hypotheseses within that content area. The theories are diverse and originate from many different areas of study.

Psychoanalytical Theories

The first category holds the theory that there is no specific mental disorder which occurs in relation to childbirth. Women are diagnosed and treated by standard psychiatric methods (Kraus & Redman, 1986). This model suggests that the psychiatric syndromes which occur in the postpartum period do not differ phenomenologically from those occurring at any other time (Shereshefsky & Yarrow, 1973). There are many psychoanalytic theories as to the

cause of postpartum depression which are included in this category:

1. "Frustration of dependency and oral needs during pregnancy",

2. "Pregnancy as a regressive, narcissistic state which escalates into anxiety and depression",

3. "Pregnancy creating regression of the ego and disturbance of ego control",

4. "Perceived loss of the symbiotic relationship with the fetus through birth",

5. "Unresolved oedipal conflicts with introjected hostility to one's mother and conflicts over the mothering role" and/or

6. "Narcissistic identification with one's mother accompained by hostility and depression (Affonso & Domino, 1984).

Psychoanalytic studies view the acceptance of the maternal role as symbolizing healthy adjustment to pregnancy and infant care. This constitutes the central task of psychosexual feminine maturity (Hees-Stauthamer, 1985).

Psychoanalytic perspectives of Postpartum depression are based on the theory that regression occurs during pregnancy and may reevoke earlier conflicts with a maternal role model. Depression then results from unresolved conflicts about motherhood or the feminine role (Hopkins, Marcus & Campbell, 1984).

Another psychoanalytic view assesses anxiety during pregnancy as a predictor of postpartum depression since anxiety is a central feature of all neuroses, including depression. Results exploring this perspective have been mixed (Cutrona, 1984).

Personality Theories

These theories constitute another category of etiology models of postpartum depresssion. In essence, something within the personality of the mother, cognitions, attributions, predispose her to postpartum depression. One personality theory purports that the postpartum distressed mother has a type of cognitive vulnerablity. The woman has learned to perceive, interpret, or evaluate events or situations in a way that makes the events more stressful or negative (O'Hara, Neunaber & Zekoski, 1984). These cognitive errors in logic could be made by minimizing success, overemphasizing failures or making conclusions with insufficient data (Affonso & Domino, 1984).

Included in these personality as causal approaches is the self-control model. This model posits that individuals evaluate their behavior only when they make an internal attribution for the case of a particular outcome. An individual who inaccurately makes an internal attribution for a negative event goes on to feel guilty or engages in self-deprecation and an individual who inaccurately makes an external attribution for a positive

event never gets to the self-reinforcement stage. Therefore, inaccurate attributions lead to high levels of guilt and self-deprecation and low rates of behaviors like positive self-statements (O'Hara, Neunaber & Zekoski, 1984). Findings supporting a relationship between a depressive attributional style and postpartum depression have been contradictory (Arizmendi & Affonso, 1984; O'Hara, Neunaber & Zekoski, 1984).

Somewhat related to the attributional theory is locus of control. Persons having an external locus of control are more severely affected by mild stressors than persons with an internal locus of control. The literature, though not conclusive, favors slightly the claim that internality does in fact serve as a stress buffer (Blaney, 1985).

Other personality variables seen as causal include women who are anxious, obsessional, overcontrolled, or over-compliant, are predisposed to postpartum depression. An individual with an inadequate personality structure, with neurotic coping styles, emotional immaturity, low self-esteem, or personal insecurities would more likely experience postpartum depression (Affonso & Domino, 1984).

Hees-Stauthamer (1985) found two factors associated with postpartum emotional difficulties; a personal insecurity factor, originating from previous life experiences, and a role conflict factor. Sheresfsky & Yarrow (1973) found that ego strength and nurturance were

peronality factors that predicted maternal adaptation.

Role Theory

Parenthood is viewed as a role transition, suggesting that role theory can be used as a frame of reference. Role confict is defined as the degree of perceived incompatiblity among expectations for parental, marital and related roles. How certain or vague these expectations are defined refers to the role clarity. Role clarity has been found to be a determinant of role adjustment (Steffensmeier, 1982).

Conflict with the female or maternal role, resulting in ambivivalence or role rejection has been found to be associated with postpartum depression (Affonso & Domino, 1984). Rickel, Gerrard and Iscoe (1984) found intercorrelations between attitudes toward several areas of feminine development and functioning such as menstruation, childbearing, breastfeeding and maternal adaptation. Hees-Stauthamer (1985) found that good maternal adaptation in the postpartum period could be predicted for women who had an early interest in children, and who adapted well at each pregnancy stage.

In studying women's acceptance of the maternal role, the process of prenatally visualizing self as mother, was significantly related to maternal adaptation postpartum and to infant alertness at one month and six months, birthweight, husband-wife adaptation, and overall family adaptation (Shereshefsky & Yarrow, 1973).

Steffensmeier (1982) found similar results in her study of anticipatory socialization affecting the maternal role adaptation in the postpartum period.

The significance of the pregnant woman's relationship with her mother has been emphasized in the literature as an important factor in adaptation to the role of mother. A woman's ability to identify with her motherhood role may depend on the availability of good models and on her own experience of mothering (Lederman, 1984).

Breen (1975) found in her study of well adjusted mothers in the postpartum period that this group saw themselves as more similar to their own mother's after the birth of their child than they did early in pregnancy. This group of mothers changed their perception of themselves to become more like their own mothers, either adding more personality traits they viewed as positive or subtracting the ones viewed as negative.

While depression may arise when such identification with the good mother image is impossible or problematic, on the the other hand, other researchers have found that it is primarily the integration of good and bad mother images, as opposed to simple identificaton with the mother, which yields a positive maternal adaption. Well adjusted women may actually reconstruct the mothering role rather than identifying with their own mother (Hees-Stauthamer, 1985).

The woman's current relationship to her mother may

be important in the role theory concerning postpartum depression. Three components have been found to be important in a woman's relationship with her mother as it related to maternal adaptation; easy availability, the relationship as mutual--adult to adult--, and establishing a new maternal identity with assistance (Lederman, 1984).

This emphasis in the literature on the significance of the mother-daughter relationship in the woman's adaptation to motherhood has not been borne out in statistical analyses. There is suggested an indirect role by the influence a woman's own mother has on her self-confidence (Shereshefsky & Yarrow, 1973).

Some investigators believe that attitudes about the maternal role are related to sociocultural factors (Rickel, Gerrard & Iscoe, 1984). Roles are culturally defined and specificity is often lacking for the mothering role in the United States. Thus, the mothering role lacks clarity, specificity and consensus, all of which make transition to any role more difficult. The ease of moving into the mothering role is affected by a woman's level of commitment to the role, felt competency in the role, conflict of the maternal role with her other roles or personal values, power within the role, value of the role in society and to the individual, earlier socialization for the role, and resources available (Mercer, 1986).

Culturally diminshed parenting skills and lack of

validation for the role of child care giver can contribute to a new mother's stress. Preparation for parenthood has decreased along with family size, and the support of extended family. The career role is taking precedence, over mothering, for many families (Kraus & Redman, 1986). Role expansion in which the mother attempts to be all things to all people can lead to burnout and dissatisfaction with other roles (Mercer, 1986). These are all potential contributors to postpartum stress (Kraus & Redman, 1986).

Physiological Theories

Biophysical theories constitute the third set of models explaining postpartum depression. The science of endocrinology is attempting to find links between depression and chemical imbalances and disorders. These links include a genetic predispositon, previous manic depressive, or psychotic episodes and a drop in estrogen, progesterone, and/or prolactin (Affonso & Domino, 1984).

A history of depressive symptoms, or previous postpartum depression is indicative of postpartum depression (Affonso & Domino, 1984; Cutrona, 1984). The recurrence rate of 25-33 percent is reported (Affonso & Domino, 1984). Many with a history of depressive symptoms or previous postpartum depression will again become depressed (Affonso & Domino, 1984). Atkinson and Rickel (1984) found the strongest predictor of postpartum depression was prepartum depression. Arizmendi and

Affonso (1984) found that a previous history of depression in the woman or her family, or depression during pregnancy were positively correlated with postpartum depression. Researchers have questioned whether postpartum depression is merely a continuation or exacerabation of a previous emotional disturbance (Rickel, Gerrard & Iscoe, 1984).

There is evidence that a history of affective symptoms is a better predictor of postpartum depression than a history of non-affective symptoms. It may be that women who have a predisposition towards depression become depressed in response to the stress of pregnancy. Women who may have a less potent predisposition towards depressive disorders may be able to withstand pregnancy, but become depressed in the face of child care and stresses associated with parenthood. Women with both stress and previous symptoms are the most likely of all to become depressed. This suggests that the time of symptom onset may be an important variable in postpartum depression research (Cutrona, 1984).

Other researchers feel that postpartum mental illness is a distinct entity and that women who become disturbed postpartum share common characteristics, differing from those becoming disturbed antepartum (Rickel, Gerrard & Iscoe 1984). Further research is required to establish whether psychologically "normal" women are as likely to develop the transient "blues" symptoms as women who have suffered from emotional difficulties in the past (Cutrona,

1984).

Relative to the genetic factor is that heredity does appear to play a role in puerperal depression. Thirty-two percent in one study and 65% in another indicated the genetic role in postpartum disorders (Rickel, Gerrard and Iscoe, 1984).

There is a decreased risk of general mental illness among pregnant females. While women are more likely to develop a psychiatric disturbance after the birth of a child they are less likely to do so during pregnancy. This leads researchers to wonder if the shifting risk rate is linked to internal physiological factors (Scarf, 1981).

After childbirth, there is a drop in estrogen and progesterone and the thyroid levels falls with a decrease in pituitary function occurs. At the same time women undergo massive blood loss and a drop in body fluid. There are altered levels of adrenal steroids, corticosteriods, and goandotrophins. As these levels drop the flow of neurohormones will be reduced. The vigor and quantity of the neurohormones at the synapses is known to be the key to mood stabilization (Dix,1985). Rickel, Gerrard and Iscoe (1984) found a significant correlation between decreased norepinephrine in the bloodstream and increased depressive self reports of postpartum depression compared to controls.

The hormone progesterone has been singled out for scientific interest since it appears to have some

analgesic effects. Progesterone as well as prolactin and other hormones may act as internally produced sedatives. Progesterone drops rapidly after childbirth from its pregnancy level of ten times higher than the highest non-pregnant state (Scarf, 1981).

There is indirect evidence of an association between menstrual difficulties and postpartum mood alterations. These type of findings have led to the hypothesis that postpartum depression results from a failure to adjust physiologically to massive hormonal changes following delivery (Hopkins, Marcus & Campbell, 1984). Breen (1975) found that women with postpartum depression or the "blues" reported an early menarch, greater menstrual difficulties and prolonged menstrual flow. Rapid shifts of hormone levels in puerperium many accentuate the metabolic abnormalities of these women, though subsequent studies have not found a relationship between menstrual difficulties, levels of estrogen and/or progesterone, or in the rate of change of hormonal levels (Hopkins, Marcus & Campbell, 1984, Leifer, 1980). In a recent study, no difference was found between childbearing women and nonchildbearing women with respect to rates of minor or major depression after delivery (O'Hara, Zekoski, Philipps & Wright, 1990).

What has been suggested is that postpartum depression and/or "blues" is a biologically induced state similar to withdrawal. In this case women are believed to experience

female hormone withdrawal (Scarf, 1981). Women who experience difficulty in physiologically compensating for minor hormonal changes of the menstrual cycle, or who are sensitive to subtle endocrinological stimuli will have greater difficulty adjusting to the dramatic decrease in placental steroid output during parturition (Hopkins, Marcus & Campbell, 1984).

Some researchers have proposed that postpartum depression is a result of combined lack of rebound from the biochemical levels of pregnancy and environmental stress. A women's biochemical makeup undergoes massive change and stress after childbirth, which leads to a temporary breakdown in the normal flow of brain chemicals that creates a natural state of mental balance (Dix, 1985). These internal physical changes can make a woman less able to cope with stress and less flexible in her interactions (Scarf, 1981).

The metabolic shifts in hormone and fluid balances that occur postpartum seem to bring about psychological vulnerable states. New mothers are four times more likely to develop a psychological illness in the first three months after delivery than women in general. This could be reflecting an altered physiological state (Scarf, 1981).

Leifer (1980) felt that social stresses associated with motherhood exaggerated the effect upon the mother who is already lacking an ability to rebound physiologically. She emphasized that physical factors are important in

creating emotional stress. The new mother is typically in a state of physical and emotional exhaustion following delivery. Recovering from the birth process is stressful in itself, but there are added stresses of sleep deprivation, interrupted family routines, and new roles and relationships to establish. Too many changes in a short amount of time exhaust a body's ability to adjust.

Psychological stresses can add to existing and ongoing physical ones (Dix, 1985). Any sole physiological exploration of postpartum depression is likely to be insufficient. There appears to be an interaction between physiological and psychological factors that needs to be explored further (Rickel, Gerrard & Iscoe, 1984).

Social Support Theories

This category of theories evaluates the adequacy of the mother's social support since social support has been studied as a stress moderator. Social support has been described as an individual's access to emotional, intellectual, and material assistance from other persons. There is a clear relationship between depression and having an impoverished or dysfunctional social network but research does not address the direction of causality between the two variables (Blaney, 1985).

One factor significantly correlated with postpartum depression is the deterioration or termination of the marital relationship or the perception of the woman of inadequate emotional support from her spouse (Arizmendi

& Affonso, 1984). Women who felt more positive about their marriages reported feeling less anxious and depressed in late pregnancy, two months and one year postpartum (Grossman, Eichler & Winickoff, 1980).

Shereshefsky and Yarrow (1973) found a statistical relationship to confirm their clinical observations on the role of the husband in the transition from a dyadic to triadic family unit. A new mother's spousal support in the postpartum period was associated with the quality of mother-infant interaction observed at one month and four months postpartum (Hopkins, Marcus & Campbell, 1984).

The degree to which husbands were able to provide both emotional support and help in caring for the infant and household appears to be a crucial factor in the degree of emotional upheaval experienced by the mothers. The husbands who had a less rigid perception of their fathering role, and had flexible schedules to permit more child care responsiblity made the adjustment to motherhood easier for their wives (Leifer, 1980). In families where husbands did not undertake added functions for their wives or infants; were unable to tolerate disruption; competed with the infant for nurturant care from his wives; or attempted to prove their superior capacity in caring for the infant, mothers and infants had more problems in working out a positive relationship between themselves (Shereshefsky & Yarrow 1973).

Lederman et al. (1981) found the quality of the

marital relationship was contingent upon the active interest and involvement of the father as a parent. Thus, each relationship and role appears to affect the other.

Marital difficulties and postpartum depression have been associated in several studies (Cutrona, 1984). Depressed subjects reported that both instrumental and emotional support was less accessible than that of the controls. They were less satisfied with the support from their husbands and other network members (Cutrona, 1984).

In studies of social factors and postpartum depression, a lack of help from relatives discriminated between emotionally upset and normal postpartum women. Women who became friends with other couples with young children and obtained help in the postpartum period fared better emotionally than did their counterparts (Cutrona, 1984; Hopkins, Marcus & Campbell, 1984). New families with child rearing friends have reported fewer adjustment problems (Lederman, Raff & Carrol, 1981).

Rickel et al. (1984) hypothesized that the new family may rely on relatives for guidance and support and that close friends assume many support functions of extended family if family is unavailable. Leifer (1980) found that a recent geographic move, and a lack of outside help increased the liklihood of emotional difficulties. She found that by increasing the amount of social support available in the form of a preventative program in which advice and guidance were provided to new mothers,

postpartum depression decreased significantly.

Cutrona (1984) found social support was a significant predictor of depressive symptoms two and eight weeks after delivery. Her results showed that deficits in two categories of relational provisions were predictive of depression at the later postpartum assessment. The first category of deficits were assistance-related provisions which were defined as having others upon whom the new mother could rely on for practical supports such as babysitting, financial assistance or childrearing advice. The second category were the provisions associated with group membership, social integration and reassurance of worth. New mothers suffered less depressive symptoms if they had a group they could relate to, share their mothering concerns, and enjoy recreation. This group was important to the mothers for mental stimulation, stress reduction and a sense of self confidence about themselves and their mothering role.

Even with these results social support may not act as a buffer for women with a high degree of stress. Social support showed a progressively weaker relationship to depression as the level of stress increased. A multidimensional view of social support is needed to ascertain the social support processes connected with postpartum adjustment (Cutrona, 1984).

Stressful Life Events

Another direction that research is pursuing in

linking variables and postpartum depression is that of stressful life events. Researchers conceptualize childbirth and the introduction of the infant to the home as an "acute social event", a major stressor that disrupts the previous patterns of living and requires new behavior patterns. The greater the degree of disruption and therefore stress, the greater the vulnerability toward emotional disturbance and the greater the likelihood of disordered behavior (Atkinson & Rickel, 1984).

Life stress theory suggests that postpartum disturbance is a function of how much old behavior patterns are disrupted by the new demands of infant caretaking. External factors, such as the demand of child care, rather than internal or physiological variables, are believed to be the primary determinants of postpartum disturbance (Atkinson & Rickel, 1984).

Besides the stress of labor and delivery and the stressful events that accompany child care in the first few months postpartum, additional stressors that occur during the course of pregnancy or in the early postpartum period may contribute to the development of a postpartum depressive episode (Cutrona, 1984; Hopkins, Marcus and Campbell, 1984). Thus an additive model of stress is proposed. In this model, the arrival of an infant adds to pre-existing strain, exceeds the individual's coping abilities and leads to depression (Cutrona, 1984).

Both stressful events and ongoing stressful

conditions have been examined in relation to postpartum depression. Studies that have assessed recent stressful events in the mother's life have found a significant relationship between number of undesirable events and postpartum depression (Cutrona, 1984, Hopkins, Marcus & Campbell, 1984). The probablity of becoming depressed following childbirth was found to be about three times greater if a significant stressful event had recently occurred than with the absence of such an event (Cutrona, 1984). The degree of postpartum emotional upset was positively associated with the amount of environmental stress (Hopkins, Marcus & Campbell, 1984). Stressful conditions of ongoing financial strain and inadequate housing were also associated with postpartum depression. Bereavement, or the onset of disease in self or a family member have also been associated with postpartum depression (Cutrona, 1984). A job loss of either spouse increases the chance of women developing depression in the postpartum period (Rickel, Gerrard & Iscoe, 1984)

Stress related to the newborn has been examined but not thouroughly. It was found that women whose babies cried or vomited more than average were more likely to be depressed. Giving birth to an infant who was at risk due to prematurity or disease was strongly realted to postpartum depression (Cutrona, 1984).

Many women who have experienced recent stress do not become depressed. It is important to consider factors

that may operate in conjunction with stress to cause depression, and to consider factors which may serve a protective function in preventing or buffering stress and subsequent depression (Cutrona, 1984).

Expectations

In exploring what is stressful about a life event, such as new parenthood, some researchers have examined the extent to which the event is anticipated, and the extent to which individuals felt they had some control over the stressor event. Events over which the individual feels they have some control are more likely to evoke problem solving coping responses rather than emotional reactive responses (Moos, 1986).

Cognitive researchers conceptualize that a critical variable in the level of stress experienced following a stressor is the individual's cognitive appraisal of the event. Expectations are considered a component of the appraisal (Weinberg & Richardson, 1981). Cognitive theorists argue that reactions to a stressful event can be understood by evaluating the perspective of the individual's own history, values and expectations (Everly & Sobelman, 1987).

It has been stated that the transition to parenthood encompasses many stresses. Just as a supportive social network can be a buffer in the face of stress, being psychologically prepared for a stressor event can mediate its negative effects (Entwisle & Doering, 1981).

Perception and interpretation of stressful events can make an individual either tolerant of or prone to the effects of stress reactions (Goliszek, 1987).

Appley and Trumbull (1986) describe preparedness as, "accurate anticipation of an event, accurate information about the substance of and/or likely results of an event and an awareness of the means for reducing the stress or of escaping from it" (p. 42). These factors can determine the stressfulness of a stressor event by introducing a sense of control and/or influence the individual may have over that event.

Goliszek (1987) hypothesized that a negative outcome to a stressful event can be the result of adjusting positive expectations to meet a reality that is not as positive as anticipated. Whenever expectations exceed the reality, but do not reach a balance after a certain period of time, the stress of "unattainable expectations" can be experienced (p. 72). This stress can lead to deflated enthusiasm, cynicism, dissatisfaction and illness. If expectations are so high that they are never attained in any modified form, then perceptions and subconscious images may be built that reinforce and shape attitudes and behaviors. Expectations need to be modified with reality so as to perceive and accept the stressful event in a constructive way and thus avoid chronic stress.

The transition to parenthood is often accompanied by family or individual expectations that do not recognize or

validate the new stresses that may occur at this time. It may not be the experience itself that is so overwhelming but the anxiety and guilt generated when the experience deviates from the family expectations (Kraus & Redman, 1986). The idealized image of parenthood burdens new parents to live up to the ideal (Grossman, Eichler & Winickoff, 1980).

Steffensmeirer (1982) found the impact and transition to parenthood more difficult for mothers than fathers because of several factors. Mothers experience a greater discrepancy of expectations between reality and the romantic notions of motherhood. Leifer (1980) found that many new mothers had internalized the stereotypes and myths of motherhood. They did not feel anger or betrayal by the discrepancy between the myths and their own experiences. They felt that any difficulties they experienced were a result of their own limitations. Such mothers blamed themselves. If new mothers' emotional reactions do not match their expectations they may experience guilt and self-doubt, even towards their baby (Reading, 1983).

Typical expressions reported by new mothers illustrate the lack of reality based perceptions of the postpartum period. Only 14% of pregnant women in Mercer's study (1986) presented realistic perceptions of motherhood that incorporated both positive and negative aspects of parenting. Shereshefsky and Yarrow (1973) proposed that

if women could be helped to see the difficulties inherent in parenthood ahead of time, their impact would be decreased.

Expectations then can be as powerful as perceptions. If a mother-to-be expects the postpartum period to be positive and it is not, she may view the transition to parenthood in a negative way (Goliszek, 1987). Changing either the appraisal of a transition, or providing inormation to alert women to the tasks they will confront can create potential coping strategies for managing the stress (Moos, 1986).

Information seeking during pregnancy has been found to be related to maternal self-definition and self confidence. Prior child care experience was also found to affect maternal mood, attitudes and responsiveness toward their infant during the postpartum period (Fleming, Flett, Ruble & Shaul, 1988). Moos (1986) hypothesized that knowledge about the probable effects of children, both positive and negative and a less romantic definition of the postpartum period might help new parents adjust more easily to the usual stresses during this life event.

It is obvious that there are multiple tasks, situations and feelings that may not be adequately imagined or considered before becoming a mother. The set of expectations a mother-to-be creates and her own personal experience when she is living the postpartum period may be dissimilar (Sussman, 1988). Preparation for

parenthood through educational means or caring for infants may increase the expectant mother's feelings of preparedness and self confidence, but no amount of preparation and rehearsal can fully simulate the often overwhelming demands of the postpartum period (Moos, 1986).

Stress and difficulites within the family can occur to the extent that the new mother's transition is different from the "script" of how she anticipated the transition to parenthood to be (Schuchts & Witkin, 1989). All parents to be are not equally accurate in forecasting the actual effect the child will have on their family or themselves. Variation in the transition to parenthood is determined by multiple factors such as; infant temperament, supportiveness of the family's social netork, traditionalism of the household division of labor and occupational stresses (Belsky, 1985).

In an overall study of postnatal problems encountered by mothers in adjusting to parenthood, Belsky (1985) found a high correlation between prenatal expectations and postnatal reports. Women whose postpartum experience was more negative than they expected experienced declines in feelings of love, satisfaction with marriage and increases in feelings of ambivalence and experiences of conflict. He concluded that the stress of becoming a parent and parenting an infant would be greatest for mothers whose prenatal expectations proved overly optimistic either in

overanticipating positive effects or in underestimating negative effects.

Specific expectations that have been studied include those surrounding the childbirth experience. With the introduction of LaMaze, Bradley, and other childbirth techniques, Hees-Stauthamer (1985) found that the physical experience held a potential effect on the self esteem of the mother. The ability to retain a sense of control over their physiological stress was perceived important. This researcher expressed concern that childbirth may be becoming linked to high standards which women are finding difficult to fulfill. Dix (1985) also felt that women may have negative emotions about the childbirth experience if they did not perform as they had been taught in childbirth classes.

Other researchers have found discrepancies between prenatal expectations and postpartum experiences. Mothers expected that their activities would not be restricted by the infant and they would spend more time interacting directly with their infant than what they reported postpartum (Leifer, 1980). Whiffen and Gotlieb (1989c) found maternal depressive symptoms related to the mothers' perceptions of their infants as temperamentally difficult. Infants may be evaluated as difficult because their behavior conflicts with maternal expectations. Depressive symptoms were predicted by several factors in her study, one being optimistic expectations for the infant.

Belsky (1985) also found that women's prenatal views were overly positive about how the baby would influence their relationships with friends and neighbors. In the postpartum period women expressed monotomy with child care, isolation and lack of development in other areas of their lives (Leifer, 1980).

Summary

Pregnant women often hold positive expectations surrounding the issues of new motherhood. Positive expectations held prenatally that are proven unrealistic may hinder a woman's adjustment to postpartum changes. A woman who holds more realistic expectations before her child is born may be better prepared for the changes that will occur in her life. The degree of discrepancy between positive expectations and actual experience could determine how well a woman copes with the stresses of motherhood and mothering. A more realistic perspective of motherhood could lead to a more positive, fulfilling, less emotionally stressful transition to motherhood which in turn would impact the entire family.

The purpose of this research was to explore whether prenatal positive expectations about the postpartum period that were found to be unrealistic postpartum would affect a new mother's level of postpartum adjustment. Postpartum adjustment parameters were defined as postpartum depression and affect both positive and negative. It is suggested in this study that women who hold more

unrealistic positive expectations will suffer more postpartum depression and less positive affect than the women who hold expectations that prove to be more realistic in relation to their postpartum experience.

Related to the theory that realistic expectations prepare women for the postpartum stresses is the secondary premise of this research. The more child care information, women hold prenatally, the more realistic will be their expectations about infant care in the postpartum period.

Child care information gathered while pregnant may assist women in the task of formulating expectations about infant behavior. By increasing child care knowledge women may also become more aware of the potential stresses involved with caring for a newborn. Those stresses may lose some intensity because they were either anticipated or provided for. Those women who have higher levels of child care information will not have a high degree of discrepancy between their prenatal expectations and their postpartum experience, as compared with the women who hold lower levels of child care knowledge.

Recently, researchers examining postpartum adjustment have concluded that global measures of depression used with the general population may be inappropriate to use with women in the postpartum period. Several reasons have been put forth. Women may "normalize" their responses to such clinical indices (Whiffen, 1988b). Whiffen (1988a)

found that conventional diagnostic measures did not measure the construct "postpartum depression". Secondly, diagnosis of depression is only one index of psychological distress. The criteria often used for diagnosis is one whose purpose is to define a major psychological disorder in need of treatment, rather than a wider range of psychological distress (Fleming, Flett, Ruble & Wagner, 1990; O'Hara, Zekoski, Philips and Wright, 1990). Since the new mother experiences many changes in roles, relationships and self, it is likely that different affects will be experienced in these new contexts. Fleming et al. (1990) found that the existance of a new baby evoked a growth of positive feelings in new mothers, yet there was a decline in such feelings in relation to their spouse.

Thirdly, a major element of the distress experienced by pregnant and postpartum women appears to be related to many of the physical changes associated with pregnancy and childbirth. Variables of adjustment such as marital satisfaction or somatic complaints may be influenced by the physical changes that often accompany the postpartum period. Maritial satisfaction may be influenced by the the prohibition of sexual relations. Somatic complaints that often typify depression may be due to the demands of newborn care and the biophysical changes that occur after childbirth (O'Hara, Zekoski, Philipps & Wright, 1990).

Standardized assessment procedures to report rates of

major and minor depression have also been reexamined (O'Hara, Zekoski, Philipps and Wright, 1990: Whiffen, 1988b). Whiffen (1988a) found that variables of marital ajustment, attributions, expectations and life stress were related to symptom levels rather than depression. She concluded that depressive symptomology postpartum is not synomymous with a standard diagnosis of depression. Symptom levels appeared to reflect the stress inherent in the postpartum adjustment process rather than clinical depression.

Similar findings were reported by O'Hara et al. (1990). They compared non childbearing and childbearing women in relation to depression. Childbearing women did not have significantly higher levels of depression postpartum than non childbearing subjects. They did find that childbearing women experienced higher levels of depressive symptomology during the postpartum period than non childbearing women assessed at the same time.

It could be concluded that "postpartum depression" in the traditional context of the definition of depression is not an effective term to characterized postpartum adjustment. Postpartum stresses may not be described accurately by the conventional methods of diagnosis of depression. Research is needed to further elucidate what is occuring during the transition to parenthood. By exploring postpartum adjustment, families can be assisted in coping with the transition to parenthood.

This research described how expectations held about the transition to parenthood, prenatally, differ from actual experience. It addressed the issue of whether unfulfilled maternal expectations were correlated with postpartum depression and lowered positive affect. Since postpartum adjustment affects the development of all the members of a family, ensuring an emotionally stable prenatal and postpartum environment is the first step in producing emotionally healthy individuals (Rickel, Gerrard & Iscoe, 1984).

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APPENDIX B

Instruments

PRENATAL EXPECTATIONS QUESTIONNAIRE

Below are a series of questions that ask you about events, thoughts and feelings before your baby is born. Please read each question carefully and select one of the numbered descriptors that correspond with your experience.

Descriptors	0 = Haven't thought about it 1 = A great bit 2 = A moderate amount 3 = Very little 4 = None

1. To what degree do you and your husband hold the same philosophy about child rearing? _____

2. How much can you depend on your husband to "help" you cope after the baby is born? _____

3. How much do you think time alone with your husband will change? _____

4. Overall, how much do you think your marital relationship will change? _____

5. How much do you think your working life will change? _____

6. How much do you think you'll need "help" the first weeks after delivery? _____

7. How much do you think you'll enjoy having this "help"? _____

8. How much do you think you'll enjoy having company to see you and the baby? _____

9. How much do you think the decrease of freedom for yourself will bother you after the baby is born? _____

10. How much isolation/loneliness do you think you will feel? _____

11. How much concern do you think you will feel afterwards about your labor and delivery? _____

12. How fulfilled do you think you'll feel after the baby is born? _____

13. How important will the support of other mothers be to you after the baby is born? _____

14. How much do you think time with other adults for recreation will change after the baby is born? _____

15. How much do you expect to have problems with your baby such as; feeding problems, sleeping problems or illness? _____

16. To what degree do you think your own identity will change i.e. feel different about yourself? _____

17. To what degdree do you think you'll feel conflict in your different role? (mother, wife, employee etc.) _____

18. Overall, how much stress will it be taking care of your baby? _____

19. How much confidence do you feel about becoming a parent for the first time? _____

20. How satisfied do you think you'll be with husband's support during labor, delivery and during your hospital stay? _____

21. How much confidence do you think you'll feel about leaving your baby with a sitter? _____

22. How easy will it be to manage a daily routine with your baby? _____

23. How upsetting or bothering do you think it will be when your baby cries? _____

24. How satisfied do you think you'll be with your doctors? _____

25. Do you think you will have the "blues" or "postpartum depression"? yes no maybe

26. If you experience this, do you think you can control it? yes no maybe

27. How soon do you think you'll be wearing your regular wardrobe? 2 weeks, 4 weeks, 6 weeks, 8 weeks, after 8 wks

28. When do you think your baby will sleep through the night? 4 weeks, 6 weeks, 8 weeks, 10 weeks, after

29. When do you think you will return to your regular sexual activity? 3 weeks, 4 wks, 6 wks, 8 wks, 10 wks, after 10 weeks

30. What do you think are the symptoms or "blues" or

"postpartum depression"?

Age _____
Years Married _____
Planned pregnancy? yes no
Problems connected with the pregnancy?_____
Previous history of depression in your family? yes no
Preference as to sex of child? yes no
if yes what sex? _____
Presently working? yes no
Continue working after the birth? yes no
Due Date _____
Have you been told you may need a C section, forceps or induced labor? yes no
Number of brothers and sisters _____
Where are you in the birth order? _____
How many books do you think you've read on parenthood and child care? _____
How much information do you think you have on parenthood and child care?
a great bit a moderate amount very little none
How long have you tried to get pregnant? _____
Do you have relatives nearby? yes no
if yes please explain

_____

_____

Your comments are welcome! Please use this space to express any thoughts or ideas you have. Thank You!

POSTPARTUM EXPECTATIONS QUESTIONNAIRE

Below are a series of questions that ask you about events, thoughts and feelings after your baby was born. Please read each question carefully and select one of the numbered descriptors that correspond with your experience.

Descriptors	0 = Haven't thought about it 1 = A great bit 2 = A moderate amount 3 = Very little 4 = None

1. To what degree do you and your husband hold the same philosophy about child rearing? _____

2. How much did your husband "help" you cope after the baby was born? _____

3. How much did time alone with your husband change? _____

4. Overall, how much did your marital relationship change? _____

5. How much did your working life change? _____

6. How much did you need "help" the first weeks after delivery? _____

7. How much did you enjoy having this "help"? _____

8. How much did you enjoy having company to see you and the baby? _____

9. How much did the decrease of freedom for yourself bother you after the baby was born? _____

10. How much isolation/loneliness do/did you will feel? _____

11. How much concern did you feel afterwards about your labor and delivery? _____

12. How fulfilled do you feel? _____

13. How important is the support of other mothers? _____

14. How much has time with other adults for recreation changed? _____

15. How much problems have you had with your baby such as; feeding problems, sleeping problems or illness? _____

16. To what degree do you think your own identity has changed i.e. feel different about yourself? _____

17. To what degree do you feel conflict in your different roles? (mother, wife, employee etc.) _____

18. Overall, how much stress is it taking care of your baby? _____

19. How much confidence do you feel about being a parent for the first time? _____

20. How satisfied were you with your husband's support during labor, delivery and during your hospital stay? _____

21. How much confidence do you feel about leaving your baby with a sitter? _____

22. How easy is to manage a daily routine with your baby? _____

23. How upsetting or bothering is it when your baby cries? _____

24. How satisfied were you with your doctors? _____

25. Did you have the "blues" or "postpartum depression"?
yes no maybe

26. If you experienced this, could you can control it?
yes no maybe

27. How soon will you be wearing your regular wardrobe?
2 weeks, 4 weeks, 6 weeks, 8 weeks, after 8 wks

28. When did your baby will sleep through the night?
4 weeks, 6 weeks, 8 weeks, 10 weeks, after

29. When did you return to your regular sexual activity?
3 weeks, 4 wks, 6 wks, 8 wks, 10 wks, after 10 wks

30. What do you think are the symptoms or "blues" or "postpartum depression"? (use back)

AFFECT BALANCE SCALE

(ABS)

:: _____ PATIENT NO.: _____ TECHNICIAN: _____

ATION: _____ VISIT NO.: _____

: _____ SEX: M__ F__ DATE: _____ REMARKS: _____

SAMPLE DO NOT DUPLICATE

INSTRUCTIONS

Below is a list of words that describes the way people sometimes feel. We would like you to tell us whether you have been having any of these feelings during the past _____ including today. Please indicate the degree to which you have felt each emotion by filling in one of the numbered spaces that best describes your experience. Mark only one numbered space for each emotion and do not skip any items.

	never	rarely	sometimes	frequently	always
NERVOUS	=0=	=1=	=2=	=3=	=4=
SAD	=0=	=1=	=2=	=3=	=4=
REGRETFUL	=0=	=1=	=2=	=3=	=4=
IRRITABLE	=0=	=1=	=2=	=3=	=4=
HAPPY	=0=	=1=	=2=	=3=	=4=
PLEASED	=0=	=1=	=2=	=3=	=4=
EXCITED	=0=	=1=	=2=	=3=	=4=
PASSIONATE	=0=	=1=	=2=	=3=	=4=
TIMID	=0=	=1=	=2=	=3=	=4=
HOPELESS	=0=	=1=	=2=	=3=	=4=
BLAMEWORTHY	=0=	=1=	=2=	=3=	=4=
RESENTFUL	=0=	=1=	=2=	=3=	=4=
GLAD	=0=	=1=	=2=	=3=	=4=
CALM	=0=	=1=	=2=	=3=	=4=
ENERGETIC	=0=	=1=	=2=	=3=	=4=
LOVING	=0=	=1=	=2=	=3=	=4=
TENSE	=0=	=1=	=2=	=3=	=4=
WORTHLESS	=0=	=1=	=2=	=3=	=4=
ASHAMED	=0=	=1=	=2=	=3=	=4=
ANGRY	=0=	=1=	=2=	=3=	=4=

	never	rarely	sometimes	frequently	always
21. CHEERFUL	=0=	=1=	=2=	=3=	=4=
22. SATISFIED	=0=	=1=	=2=	=3=	=4=
23. ACTIVE	=0=	=1=	=2=	=3=	=4=
24. FRIENDLY	=0=	=1=	=2=	=3=	=4=
25. ANXIOUS	=0=	=1=	=2=	=3=	=4=
26. MISERABLE	=0=	=1=	=2=	=3=	=4=
27. GUILTY	=0=	=1=	=2=	=3=	=4=
28. ENRAGED	=0=	=1=	=2=	=3=	=4=
29. DELIGHTED	=0=	=1=	=2=	=3=	=4=
30. RELAXED	=0=	=1=	=2=	=3=	=4=
31. VIGOROUS	=0=	=1=	=2=	=3=	=4=
32. AFFECTIONATE	=0=	=1=	=2=	=3=	=4=
33. AFRAID	=0=	=1=	=2=	=3=	=4=
34. UNHAPPY	=0=	=1=	=2=	=3=	=4=
35. REMORSEFUL	=0=	=1=	=2=	=3=	=4=
36. BITTER	=0=	=1=	=2=	=3=	=4=
37. JOYOUS	=0=	=1=	=2=	=3=	=4=
38. CONTENTED	=0=	=1=	=2=	=3=	=4=
39. LIVELY	=0=	=1=	=2=	=3=	=4=
40. WARM	=0=	=1=	=2=	=3=	=4=

SAMPLE DO NOT DUPLICATE

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BECK'S DEPRESSION INVENTORY(prenatal)

As you fill out the questionnaire read each item carefully and circle the number next to the answer that best reflects how you have been feeling during the last six to ten weeks. Make sure you circle one answer for each of the questions. If more than one answer applies to how you have been feeling, circle the higher number. If in doubt, make your best guess. Do not leave any questions unanswered.

1. 0 I do not feel sad.
   1 I feel sad.
   2 I am sad all the time and I can't snap out of it.
   3. I am so sad or unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
   1 I feel discouraged about the future.
   2 I feel I have nothing to look forward to.
   3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
   1 I feel I have failed more than the average person.
   2 As I look back on my life, all I can see is a lot of failures.
   3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
   1 I don't enjoy things the way I used to.
   2 I don't get real satisfaction out of anything anymore.
   3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
   1 I feel guilty a good part of the time.
   2 I feel quite guilty most of the time.
   3 I feel guilty all of the time.

6. 0 I don't feel I am being punished.
   1 I feel I may be punished.
   2 I expect to be punished.
   3 I feel I am being punished.

7. 0 I don't feel disappointed in myself.
   1 I am disappointed in myself.
   2 I am disgusted with myself.
   3 I hate myself.

8. 0 I don't feel I am any worse than anybody else.
   1 I am critical of myself for my weaknesses or

mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.

11. 0 I am no more irritated by things than I ever am.
1 I am slightly more irritated now than usual.
2 I am quite annoyed or irritated a good deal of the time.
3 I feel irritated all the time now.

12. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

13. 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

14. 0 I don't feel that I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

15. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17. 0 I don't get more tired than usual.
    1 I get tired more easily than I used to.
    2 I get tired from doing almost anything.
    3 I am too tired to do anything.

18. 0 My appetite is no worse than ususual.
    1 My appetite is not as good as it used to be.
    2 My appetite is much worse now.
    3 I have no appetite at all anymore.

19. 0 I haven't lost any weight, if any, lately.
    1 I have lost more than five pounds.
    2 I have lost more than ten pounds.
    3 I have lost more than fifteen pounds.

20. 0 I am no more worried about my health than usual.
    1 I am worried about physical problems such as aches and pains, or upset stomach, or constipation.
    2 I am very worried about physical problems and it's hard to think of much else.
    3 I am so worried about my physical problems that I cannot think about anything else.

21. 0 I have not noticed any recent change in my interest in sex.
    1 I am less interested in sex than I used to be.
    2 I am much less interested in sex than I used to be.
    3 I have lost interest in sex completely.

BECK'S DEPRESSION INVENTORY(postpartum)

As you fill out the questionnaire read each item carefully and circle the number next to the answer that best reflects how you felt during the first 4 weeks after the birth of your baby. Make sure you circle one answer for each of the questions. If more than one answer applies to how you felt, circle the higher number. If in doubt, make your best guess. Do not leave any questions unanswered.

1. 0 I do not feel sad.
   1 I feel sad.
   2 I am sad all the time and I can't snap out of it.
   3. I am so sad or unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
   1 I feel discouraged about the future.
   2 I feel I have nothing to look forward to.
   3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
   1 I feel I have failed more than the average person.
   2 As I look back on my life, all I can see is a lot of failures.
   3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
   1 I don't enjoy things the way I used to.
   2 I don't get real satisfaction out of anything anymore.
   3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
   1 I feel guilty a good part of the time.
   2 I feel quite guilty most of the time.
   3 I feel guilty all of the time.

6. 0 I don't feel I am being punished.
   1 I feel I may be punished.
   2 I expect to be punished.
   3 I feel I am being punished.

7. 0 I don't feel disappointed in myself.
   1 I am disappointed in myself.
   2 I am disgusted with myself.
   3 I hate myself.

8. 0 I don't feel I am any worse than anybody else.
   1 I am critical of myself for my weaknesses or

mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but would not carry them out.
2 I would like to kill myself.
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    2 I have lost more than ten pounds. (other than the initial loss after delivery)
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VITA

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EDUCATION: Master's candidate in Child Development and Family Studies, Virginia Tech
B.S. in Special Education, (Emotional Disturbance), James Madison University, Harrisonburg, VA, 1979
I.D.E.A. (Infant Development and Edcuation Association), teacher training

EMPLOYMENT: 1989 to current
Rappahannock Area Office on Youth
Program Specialist
Creates, implements and assists programs that reduce juvenile delinquency and foster wholesome youth development, grant writing, needs assessment, information and referral, community awareness

1979 to 1986
Prince William County Public Schools
Teacher of the Emotionally Disturbed
Was responsible for writing, implementing, and evaluating Individual Educational Programs, directed an aide in classroom duties, counseled on a group an individual basis, conducted teacher inservices and parent conferences

1986 to current
Mary Washington Hospital
Instructor
Teaches S.T.E.P. parenting classes, Stress Management for Children, Discipline for Toddlers, Sibling Class, Postpartum Class, Understanding Your Adolescent

1981
Arlington Parks and Recreation
Director of Summer Fun Program
Responsible for Summer Fun Program for 50 children, ages 5 to 13, directed two playground supervisors

OTHER: Attended various workshops: Reality Therapy, Dual Diagnosis, C.O.A., Art Therapy, Adolescent Pregnancy, Abused Children