

NIH Public Access

Author Manuscript

J Am Board Fam Med. Author manuscript; available in PMC 2015 January 01

Published in final edited form as:

J Am Board Fam Med. 2014; 27(1): . doi:10.3122/jabfm.2014.01.130126.

The Relationship between Maternal Depressive Symptoms, Employment, and Social Support

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Abstract

Purpose—To characterize the relationship between maternal depressive symptoms and employment and whether it is mediated by social support.

Methods—We used data from a nationally-representative sample of 700 U.S. women who gave birth in 2005 and completed two surveys in the *Listening to Mothers* series, the first in early 2006, at an average of 7.3 months postpartum, and the second at an average of 13.4 months postpartum. A dichotomous measure of depressive symptoms was calculated from the 2-item Patient Health Questionnaire, and women reported their employment status and levels of social support from partners and others. We modeled the association between maternal employment and depressive symptoms using multivariate logistic regression, including social support and other control variables.

Results—Maternal employment and high support from a non-partner source were both independently associated with significantly lower odds of depressive symptoms (Adjusted Odds Ratio (AOR)=0.35, p=0.011; AOR=0.40, p=0.011, respectively). These relationships remained significant after controlling for mothers' baseline mental and physical health, baby's health, and demographic characteristics (AOR=0.326, p=0.015; AOR=0.267, p=0.025, respectively).

Conclusions—Maternal employment and strong social support, particularly non-partner support, were independently associated with fewer depressive symptoms. Clinicians should encourage mothers of young children who are at risk for depression to consider ways to optimize their employment circumstances and "other" social support.

Conflict of interest. The authors declare that they have no conflict of interest.

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Keywords

mothers; depression; employment; social support

Introduction

Postpartum depression (PPD), self-reported in 11.7 to 20.4% of women who give birth,¹ is a serious complication of childbirth, with significant adverse effects on both the mother and her infant. For the mother, PPD can produce mental and physical symptoms that adversely affect her quality of life² and productivity,³ and for the infant, it can disrupt mother-infant interactions, bonding, feeding, and sleep.⁴ Traditionally, PPD treatment has consisted of antidepressants and/or psychotherapy.^{5–8}

Social support may play a critical role in both the development and treatment/resolution of PPD. Social support has long been considered important to mothers, which was highlighted in an analysis revealing that women's first major postpartum concern was the need for social support.⁹ The Agency for Healthcare Research and Quality reported that a low level of social support was a consistent risk factor for PPD.¹⁰ The relationship between social support and PPD is likely bidirectional; social support may be even more important for depressed mothers, given the newborn's significant needs and the potential impact of depression on a woman's ability to functionally meet those needs.

Social support encompasses four primary dimensions: informational, material, emotional and peer/comparison (help given by someone in a similar situation).¹¹ Prior research has consistently demonstrated a relationship between postpartum mental health and overall social support,^{12–20} emotional support from a partner,^{21–22} practical support from a partner,²³ and various dimensions of social support from other (non-partner) sources.^{24–25} These aspects of social support appear to coalesce to support postpartum mental health. For example, in a recent study of 168 London women who had recovered from PPD, specific types of support that were identified as essential to recovery included: partner's emotional and practical support, communication with partner, emotional support from friends, and prompt assessment by a health visitor.²² Further, previous studies that looked at various sources of support found partner support (vs. support by other relatives, friends, etc.) to be a stronger or more pervasive predictor of postpartum mental well-being.^{26–28}

The contribution of social support to maternal mental health may be particularly important for mothers who return to formal employment after giving birth. Using U.S. Census data on first-time mothers, Laughlin reports on patterns of employment and childbirth between 2006 and 2008.²⁹ Women are more likely to work outside the home both before and during their pregnancy than they were 30 to 40 years ago, and most (55%) are employed into the last month of their pregnancy. Factors associated with maternal employment during pregnancy include: older age (22 years and older versus younger), race and ethnicity (employment rates are: White Non-Hispanic, 75%; Asian, 61%; Black, 52%; and Hispanic, 42%), and higher educational achievement (employment rates: 87% if bachelor's degree, 23% if < bachelor's degree). Additionally, more women are now returning to formal employment within a year of giving birth: 64% in 2005–2007 compared with 39% in 1976–1980, and 17% in 1961–1965. Regardless of first-time mothers' pregnancy employment status, 44% are employed 3 months postpartum, 57% by 6 months, and 64% by 12 months.²⁹

There is currently little information on the relationship between employment after childbirth and postpartum mental health. Theoretically, paid work might either enhance or detract from a woman's support systems and mental health, depending on the characteristics of her job.

For example, in a Minnesota study of 817 employed mothers of infants, worse depression scores in the first 6 months after childbirth were associated with higher total workload (paid and unpaid work), lower job flexibility, lower social support, and having an infant with sleep problems.³⁰ In addition, higher workloads and having an infant with sleep problems or fussy behavior were risk factors for poor postpartum mental health, while social support and increased perceived control over work and home activities provided a protective effect.¹² Analyzing the same data set, Grice and colleagues found that job spillover to home (e.g., bringing work home), and home spillover to job (e.g., taking telephone calls at work related to infant care) were each associated with poorer mental health, while controlling for available social support from family, friends, and the workplace.³¹

Therefore, although there is strong evidence that social support is associated with better postpartum mental health, there is limited available research that directly examines the relationship between postpartum employment and social support, and the combined interaction between mothers' mental health, employment, and social support. The purpose of this study was to characterize the relationship between maternal depressive symptoms and employment, and whether this relationship is mediated by social support.

Materials and Methods

General Procedures and Study Sample

Data for this analysis come from two surveys in the *Listening to Mothers* series: *Listening to Mothers* II (LTM II) and its postpartum follow-up survey. The questionnaires and reports for the baseline and follow-up surveys are available at http://www.childbirthconnection.org/article.asp?ck=10413.

LTM II is a survey conducted in January and February, 2006, among a nationally representative sample of 18–45 year old women who gave birth to a single baby in a U.S. hospital in 2005. The LTM II baseline survey was completed an average (weighted mean) of 7.3 months after delivery (SE 0.15, range 0.8 to 12.2 months), and the follow-up survey 6 months later, at an average of 13.4 months postpartum (SE 0.15, range 6.8–18.5 months). Our final weighted sample included 253 employed and 447 unemployed women, for a total of 700 women. Of the 253 employed women, 173 (68.4%) worked full-time, and 80 (31.6%) worked part-time.

The LTM II baseline survey contains information on childbirth and postpartum return to work, and the follow-up survey contains details on depressive symptoms, social support, and additional employment information. While respondents completed postpartum surveys at two separate times (the LTM II baseline survey and the LTM II follow-up survey six months later), our primary exposure and outcome variables were both measured at the follow-up survey.

Strictly speaking, the term "postpartum" generally refers to a period of weeks or a few months following delivery. However, in reality, many health-related effects of childbirth, including both physical and mental disorders, may persist for several months or longer.^{32,33} Therefore, consistent with the LTM II purposes to evaluate short and longer-term childbirth related experiences and outcomes, we conceptualize the follow-up interval at 13 months post-delivery to be part of participants' postpartum experience.

Variable measurement

Employment status—Our primary comparison groups of interest were classified by postpartum employment status, which was based on self-report. Women who reported working full-time or part-time for an external employer at the time of the follow-up survey

were coded as "employed," and women who reported not working for an external employer during this time were coded as "not employed." (We do not know how many unemployed women chose not to return to work, or no longer had a job waiting for them.) The following women were excluded from the analysis, due to timing of the depressive measures with respect to work: those who returned to work prior to 8 weeks postpartum (n=129), worked after childbirth but were self-employed (n=47), and were on extended maternity leave at the time of the follow-up survey (n=25).

Social support—Social support was classified by type and by source. The postpartum follow-up survey asked women about support available from married or unmarried partners and others (specific sources of other support were not elicited). For each source of support, there were questions about how often four domains of support were available to the respondent. The four support domains were: emotional (i.e., listening to your concerns and giving good advice), practical (i.e., helping you get things done or get needed information), affectionate (i.e., showing you affection and helping you feel wanted), and enjoyment (i.e., having fun or relaxing together). Response choices for support availability were: none of the time (0), a little of the time (1), some of the time (2), most of the time (3), or all of the time (4).

For each source of support (partner or other), we created an index by summing the responses for each domain of partner support and each domain of other support. Each index ranged from 0–16. We divided the index into quartiles to indicate low, medium, high, or very high support from each potential source. We then created a dichotomous measure of "high support" or not from each source using a score of 8 as the cut-point. Finally, we created a 4-category social support variable representing mutually exclusive categories of whether the woman reported an absence of "high support" from either source, high support only from a partner, high support only from another (non-partner) source, or high support from both sources.

Depression—Our key outcome was a measure of depressive symptoms experienced by the respondent in the two weeks preceding completion of the follow-up survey. This was assessed using the Patient Health Questionnaire-2 item screener (PHQ-2). Women were asked how often over the past 2 weeks they had been bothered by little interest or pleasure in doing things, and how often they had felt down, depressed or hopeless. Response choices were: "not at all", "several days," "more than half the days" or "nearly every day;" each response was scored 0–3, and the two responses were summed. A score of 3 or higher was coded as "depressive symptoms." In a previous study of 6000 patients from 8 primary care clinics and 7 obstetrics-gynecology clinics, a PHQ-2 score of >3 had a sensitivity of 83% and specificity of 92% for identifying major depression, when compared to a structured mental health professional interview.³⁴

Other variables—Additional control variables included: race/ethnicity, age, marital status at the time of the postpartum survey, maternal education (less than high school to high school diploma; more than high school through college degree; more than college), 2005 household income (less than \$50,000, \$50–100,000, over \$100,000), health status of the child, whether this child was the respondent's first baby (parity), number of mother's major and minor physical problems in the first 8 weeks postpartum (excluding those that could be a symptom of depression), and whether the mother reported feelings of depression as a new minor or new major problem during the first 8 weeks postpartum. All of these measures were based on respondent self-reports.

Analysis

Analysis took place in two phases and made use of both descriptive statistics and multiple logistic regression modeling. In the first phase, we used means and percentages to characterize the sample by postpartum employment status. We then summarized mean level of social support availability by postpartum employment status. For each available domain (emotional, practical, affection, enjoyment) and source (partner or other) of social support, we calculated the mean level of support by employment status and used adjusted Wald tests to determine whether support levels were significantly different for women who were employed postpartum compared to those who were not. We also examined the distribution of women across categories of the support index variables and tested whether these distributions differed by employment status. In the second phase, which was a crosssectional, multivariate analysis, we estimated the odds of depressive symptoms by employment status and social support using logistic regression, and adjusting for all of the covariates described above. In the first model, we investigated the association of high partner support with depressive symptoms among partnered women. In a second model we examined the association of high "other" support with depressive symptoms among all participants. In a final set of sequentially built models, we included both partner and other support in the same model by using the four-category social support variable. First, we estimated the unadjusted odds of postpartum depressive symptoms by employment status. Next, we adjusted for social support. In the final, fully adjusted model, we estimated the odds of maternal depressive symptoms, based on employment status, adjusting for social support as well as a full array of covariates. Unpartnered women (n=33) were excluded from all analyses that used the partner support variables. We conducted a sensitivity analysis that additionally controlled for time since delivery.

We also conducted a mediation analysis to determine whether any relationship between maternal employment and depressive symptoms was mediated by social support. First, we estimated the relationship between postpartum employment (independent variable) and depressive symptoms (dependent variable), not including social support, but controlling for other potential confounders, which yielded an odds ratio (OR) of 0.36, p=.016. Secondly, we estimated the relationship between employment (independent variable) and social support (dependent variable) because a statistical relationship here would be required for social support to be a mediator of the relationship between prenatal employment and depressive symptoms. We estimated this effect using different specifications of the social support variable, including separately assessing "high partner support" and "high other support." If no significant employment-social support relationship was observed, no further mediation analyses would be required.

All analyses were conducted with Stata statistical software, version 12,³⁵ using techniques for survey data. The survey analysis techniques accounted for the unequal probability of selection using sampling weights provided with the LTMII postpartum survey data. Sampling weights adjusted the data to be nationally representative of women ages 18 to 45 who gave birth to a singleton baby in a U.S. hospital in 2005. The weighting strategy used for the LTM II resulted in nationally representative distributions,³⁶ but it does not inflate the sample to produce nationally representative weighted estimates of the population size.

Results

Descriptive statistics for the sample by employment status are presented in Table 1. Factors associated with <u>maternal</u> employment included being Black and non-Hispanic, achieving higher levels of education and being a first time mother. Factors associated with not being employed included being Hispanic and married.

Table 2 reports the results for the distribution of social support by postpartum employment status. None of the social support measures differed significantly by employment status. The means for each component of social support ranged from 2.1 to 2.7 (scale range 0–4). Among women with partners, a majority had high (35.9%) or very high (30.8%) levels of partner support. Support levels from others were slightly lower, with 35.1% having high support and only 14.1% having very high support from sources other than a partner. More than a fifth of women (22.2%) did not have a high level of support from either source. Nearly 40% had high support from both partners and others. Partner support was associated with other support (correlation coefficient = 0.270 for dichotomized support, p<0.001; and 0.318 for support index, p<0.001) among respondents in our study population.

The results for the multivariate logistic regression models including high partner or high other support are presented in Table 3. In both models, maternal employment was associated with significantly lower odds of depressive symptoms (Adjusted Odds Ratio (AOR)=0.35, p=0.011). Among women who had partners, high partner support was not associated with significantly lower odds of depressive symptoms after controlling for return to work and the other covariates (AOR=0.59; p=0.154). In the model examining support from others, high social support was associated with significantly lower odds of depression (AOR=0.40; p=0.011).

Table 4 shows the results for the final series of regression models. In the unadjusted model, employment is associated with reduced odds of depressive symptoms, but this association is only marginally statistically significant (AOR=0.51; p=0.090). After adjusting for high support from either a partner or another source, the relationship remains similar (AOR=0.51; p=0.098). In the fully-adjusted model, employment is associated with significantly lower odds of depressive symptoms (AOR=0.33; p=0.015). Additionally, in the fully-adjusted model, women with high levels of support from both a partner and another source or high support from other (non-partner) sources had lower odds of depressive symptoms compared with women who did not report high support from either source. Having high partner support only was not significantly associated with depressive symptoms compared to lacking high support from either source. The sensitivity analysis did not alter these results.

The mediation analysis yielded an odds ratio (OR) of 0.36 (p=0.016) for the association of employment with depressive symptoms. However, there was no significant relationship between employment and social support, controlling for other covariates, so we concluded that social support was not a mediator of the relationship between postpartum return to work and depressive symptoms.

Discussion and Conclusion

Our results showed that postpartum employment and social support were independently associated with fewer depressive symptoms, even after controlling for demographic and health characteristics. These findings are consistent with previous research showing a positive association between postpartum mental health and social support,¹⁰ and between postpartum depressive symptoms and unemployment.^{37–39} Our findings differ, however, from previous research^{26–28} in that "other support" (vs. partner support) appeared to be a stronger predictor of <u>mothers'</u> mental health. While reasons for this difference are not known, it could be related to sample or support measure differences between studies. Nevertheless, this finding suggests an important role for <u>social</u> support provided by other family members and friends.

One might ask whether the relationship between good mental health and employment is simply due to the "healthy worker effect," whereby individuals' poor physical health may contribute to both unemployment and depressive symptoms.⁴⁰ The results of our

multivariate regression model sequence (Table 4) suggest that the "healthy worker effect" does not completely explain the inverse relationship between employment and depressive symptoms, as this relationship remained significant even after adjusting for baseline maternal mental and physical health and demographic characteristics.

We also considered whether the social support framework found in many places of employment (i.e., maternity-related employer accommodations, interpersonal relationships with colleagues) might explain the better mental health of women who returned to work. Our fully-adjusted analyses indicated that, even when we controlled for social support from different sources (partner or other, which could include work-related supports), employment continued to be independently associated with fewer depressive symptoms.

Social psychologist Marie Jahoda, well-known for her theory of Ideal Mental Health, identified five employment by-products that are vital to one's well-being: time structure, social contacts and shared experiences, social purposes, status and identity, and regular activity. She stressed that even when one or more of these by-products is unpleasant (e.g., too rigid or demanding a time structure), unpleasant ties to reality are preferable to their absence.⁴¹ This theory argues that social support may be one important reason for the positive employment-mental health connection, but that there are likely other non-monetary benefits of employment, such as structure, purpose, shared experiences, and self-identity (all unmeasured here) that contribute to the inherent value of employment, even in the lives of busy mothers. Further research might help to clarify the importance of such work characteristics.

Our analysis has implications for pregnant and childbearing women, as well as their clinicians. These results provide evidence that social support may help to prevent or ameliorate depressive symptoms in mothers of young children. Support from a source other than a partner seems to play a particularly important role; such support could originate in the workplace or elsewhere. Women should identify the specific types of support they may need and seek to secure this support. Clinicians should discuss employment circumstances as well as social support with pregnant women both during and after pregnancy; such discussions may be particularly beneficial for women at risk for depression.

Strengths and Limitations

Strengths of this study included the use of a nationally representative sample of U.S. childbearing women, with rich data to allow for examination of the issues of employment, social support, and depressive symptoms, while also controlling for key social, demographic, and health variables. Since survey questions addressed postpartum problems during two time periods, we were able to use information on depressive symptoms in the early postpartum period (first 8 weeks) in order to isolate new onset of depressive symptoms contemporaneously with employment status, at the time of the follow-up survey (at 13 months, on average).

In spite of these strengths, there are limitations that affect interpretation of our results. The *Listening to Mothers* surveys did not collect information on occupational characteristics or employment-related stress, which may have aided interpretation, but would have unlikely altered our main findings. Measurement of depressive symptoms was limited to a two-question screen (PHQ-2), which has been used with success in prior research. Regarding social support, domains assessed in these data are not fully consistent with prior research, and data on non-partner sources of social support were not explicitly ascertained. These additional details would have enhanced our interpretation but would not likely appreciably impact results. Due to contemporaneous occurrence of several key variables, we were not able to determine the directionality of the relationships we observed between postpartum

employment, social support, and depressive symptoms. Although the Listening to Mothers study was designed as a longitudinal study, most of the variables included in the follow-up survey were not present in the baseline survey; consequently, the analyses presented here focused on follow-up survey variables, making this primarily a cross-sectional study. Furthermore, the retrospective nature of the follow-up survey may have resulted in recall bias. Finally, the exclusion of women who were self-employed or returned to work prior to 8 weeks postpartum may have produced selection bias, and sample size limited our ability to explore subgroups of interest.

Conclusion

Employment was consistently associated with lower odds of depressive symptoms at 13 months post-delivery, a relationship that may be explained by a combination of factors, including the "healthy worker" effect and non-monetary employment benefits. Importantly, this positive work-mental health relationship persisted after controlling for social support, physical problems, and other demographic variables. Consistent with prior literature, social support, particularly support from a source other than the woman's partner, was also associated with lower odds of maternal depressive symptoms, regardless of employment status. New mothers may benefit from identifying needed support and sources of support in order to ameliorate depressive symptoms during a time of heightened vulnerability.

Acknowledgments

This study was supported by a Grant-in-Aid from the University of Minnesota Office of the Vice President and Vice Provost for Research, and also by the Building Interdisciplinary Research Careers in Women's Health Grant (K12HD055887), sponsored by the National Institutes of Health. This research was also supported by a grant from *the Eunice Kennedy Shriver* National Institute for Child Health and Human Development (R03HD070868).

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Sample characteristics by postpartum employment status.

| | Not employed n=447 (63.9%) % or mean | Employed n=253 (36.1%) % or mean | Total N=700 % or mean | P-value |
|--|---|-------------------------------------|--------------------------|---------|
| Race/ethnicity * | | | | |
| White, non-Hispanic | 68.4% | 67.1% | 67.9% | |
| Black, non-Hispanic | 7.5% | 18.0% | 11.3% | |
| Hispanic | 20.3% | 10.0% | 16.5% | |
| Other race | 3.9% | 4.9% | 4.2% | 0.007 |
| Maternal age [*] | | | | |
| 18–24 | 27.7% | 31.8% | 29.2% | |
| 25–29 | 29.0% | 23.9% | 27.1% | |
| 30–34 | 25.3% | 30.0% | 27.0% | |
| 35 or older | 18.0% | 14.4% | 16.7% | 0.475 |
| Educational attainment * | | | | |
| High school or less | 48.9% | 30.7% | 42.3% | |
| College | 44.3% | 55.9% | 48.5% | |
| More than college | 6.8% | 13.5% | 9.2% | 0.004 |
| Marital status † | | | | |
| Unmarried | 20.1% | 33.6% | 25.0% | |
| Married | 79.9% | 66.4% | 75.0% | 0.013 |
| Partnership status † | | | | |
| Does not have partner | 5.9% | 9.1% | 7.0% | |
| Has partner | 94.1% | 90.9% | 93.0% | 0.369 |
| Family income * | | | | |
| Low income (less than \$50,000) | 54.7% | 43.5% | 50.6% | |
| Medium income (\$50,000 to 99,999) | 32.3% | 36.0% | 33.6% | |
| High income (\$100,000 or more) | 13.1% | 20.5% | 15.8% | 0.098 |
| Baby's health status † | | | | |
| Baby in good health | 96.9% | 96.0% | 96.6% | |
| Baby in poor health | 3.1% | 4.0% | 3.4% | 0.558 |
| Parity * | | | | |
| Parity = 1 | 33.8% | 47.8% | 38.9% | |
| Parity >1 | 66.2% | 52.2% | 61.2% | 0.016 |
| Recent maternal depression \dot{t} | | | | |
| No depression in 1st 8 weeks | 63.5% | 61.5% | 62.8% | |
| Minor depression 1st 8 weeks | 24.4% | 23.4% | 24.0% | |
| Major depression 1st 8 weeks | 12.1% | 15.1% | 13.2% | 0.756 |
| Maternal post-partum problems \ddagger | | | | |
| Count of minor physical problems | 2.8 | 2.7 | 2.8 | 0.761 |
| r Jan Participa | | | | |

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| | Not employed n=447 (63.9%) % or mean | Employed n=253 (36.1%) % or mean | Total N=700 % or mean | P-value |
|---|---|-------------------------------------|--------------------------|---------|
| Count of major physical problems | 1.3 | 1.7 | 1.5 | 0.123 |
| Depressive symptoms (PHQ-2 = 3+) \dagger | | | | |
| No | 79.2% | 87.3% | 82.1% | |
| Yes | 20.9% | 12.7% | 17.9% | 0.093 |

Note: Estimates are self-weighted in accordance with the survey design for national representativeness. Reported p-values are from χ^2 tests for categorical variables, adjusted Wald tests for continuous variables.

*Measure was created from item(s) on the Listening to Mothers II survey (baseline).

 † Measure was created from item(s) on the Listening to Mothers II – Postpartum survey (follow-up).

 \ddagger Measure was created from Listening to Mothers II baseline and postpartum surveys combined.

Table 2

Social support: component measures and social support scales by postpartum employment status (N=700).

| | Not employed | Employed | Total | |
|--|--------------|-----------|-----------|-------|
| | % or mean | % or mean | % or mean | Р |
| PARTNER SUPPORT (Among women with partners) | | | | ~ |
| Components of social support from partner/husband | | | | |
| Mean emotional support | 2.6 | 2.6 | 2.6 | 0.652 |
| Mean practical support | 2.3 | 2.5 | 2.4 | 0.434 |
| Mean affectionate support | 2.7 | 2.8 | 2.7 | 0.782 |
| Mean enjoyment support | 2.4 | 2.5 | 2.4 | 0.652 |
| Partner support index | | | | |
| Low (0 – 4) | 15.9% | 10.6% | 14.0% | |
| Medium (5 – 8) | 19.1% | 19.9% | 19.4% | |
| High (9 – 12) | 33.8% | 39.7% | 35.9% | |
| Veryhigh (13 – 16) | 31.3% | 29.9% | 30.8% | 0.565 |
| OTHER SUPPORT (Among all women) | | | | |
| Components of social support from others | | | | |
| Mean emotional support | 2.5 | 2.4 | 2.5 | 0.242 |
| Mean practical support | 2.0 | 2.2 | 2.1 | 0.199 |
| Mean affectionate support | 2.1 | 2.0 | 2.1 | 0.347 |
| Mean enjoyment support | 2.0 | 2.2 | 2.1 | 0.336 |
| Other support index | | | | |
| Low (0 – 4) | 15.1% | 18.6% | 16.4% | |
| Medium (5 – 8) | 35.0% | 33.4% | 34.4% | |
| High (9 – 12) | 35.8% | 34.0% | 35.1% | |
| Veryhigh(13 16) | 14.1% | 14.1% | 14.1% | 0.873 |
| COMBINED SUPPORT (Among women who answered both support questions) | | | | |
| No high support | 23.0% | 20.7% | 22.2% | |
| High partner support only | 27.1% | 29.0% | 27.8% | |
| High other support only | 11.9% | 9.8% | 11.2% | |
| High partner and other support | 38.0% | 40.6% | 38.9% | 0.886 |

NOTE: Women who do not have partners are excluded from calculations related to partner support variables, resulting in a weighted n of 651 for those variables. Reported p-values are from χ^2 tests for categorical variables, adjusted Wald tests for continuous variables.

Table 3

Odds of depressive symptoms by postpartum employment status and social support.

| | Wome | n with p | partners | s n=651 | A | ll wom | en n=7(|)0 |
|-------------------------|------|----------|----------|---------|------|--------|---------|-------|
| | AOR | 95% | 6 CI | Р | AOR | 95% | 6 CI | Р |
| Postpartum employment | | | | | | | | |
| Not employed | 1.00 | | | | 1.00 | | | |
| Employed | 0.35 | 0.14 | 0.87 | 0.023 | 0.35 | 0.16 | 0.79 | 0.011 |
| Social support | | | | | | | | |
| No high partner support | 1.00 | | | | | | | |
| High partner support | 0.59 | 0.29 | 1.22 | 0.154 | | | | |
| No high other support | | | | | 1.00 | | | |
| High other support | | | | | 0.40 | 0.20 | 0.81 | 0.011 |

Note: Models control for race/ethnicity, age, education, marital status, family income, baby's health status, parity, maternal depression in the first 8 weeks postpartum, and a count of postpartum physical symptoms. Models are weighted to be nationally representative.

AOR, Adjusted Odds Ratio; 95% CI, 95% Confidence Interval.

Table 4

Odds of depressive symptoms by postpartum employment status and combined forms of social support (N=651).

| | | Unad | Unadjusted | | Adju | sted for | <u>Adjusted for social support</u> | upport | | Fully ² | Fully adjusted | |
|------------------------------|------|------------|------------|--------------------------------|------|------------|------------------------------------|-------------------------------------|------|--------------------|----------------|-------|
| | OR | OR LCI UCI | UCI | Р | OR | OR LCI UCI | UCI | Ρ | OR | OR LCI UCI | UCI | Ρ |
| Postpartum employment | | | | | | | | | | | | |
| Not employed | 1.00 | | | | 1.00 | | | | 1.00 | | | |
| Employed | 0.51 | 0.24 | 1.11 | 0.51 0.24 1.11 0.090 0.51 0.23 | 0.51 | 0.23 | 1.13 | 1.13 0.098 0.33 | 0.33 | 0.13 | 0.81 | 0.015 |
| Social support | | | | | | | | | | | | |
| No high support | | | | | 1.00 | | | | 1.00 | | | |
| High partner support only | | | | | 0.40 | 0.18 | 0.92 | 0.031 | 0.51 | 0.21 | 1.26 | 0.145 |
| High other support only | | | | | 0.21 | 0.07 | 0.67 | 0.009 | 0.27 | 0.08 | 0.85 | 0.025 |
| High partner & other support | t | | | | 0.31 | 0.14 | 0.72 | 0.31 0.14 0.72 0.006 0.37 0.15 0.91 | 0.37 | 0.15 | 0.91 | 0.031 |

ression in the first 8 weeks postpartum, and a count of postpartum physical symptoms. Models are weighted to be nationally representative.

Women without partners are excluded.

OR, Odds Ratio; LCI, Lower Confidence Interval; UCI, Upper Confidence Interval.