American Journal of
Preventive Medicine

Depression in the Postpartum Year and Life Course Economic Trajectories

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Introduction: Perinatal depression affects 13% of childbearing individuals in the U.S. and has been linked to an increased risk of household economic insecurity in the short term. This study aims to assess the relationship between perinatal depression and long-term economic outcomes.

Methods: This was a longitudinal analysis of a cohort of mothers from the Fragile Families and Child Wellbeing Study starting at delivery in 1998−2000 and followed until 2014−2017. Analysis was conducted in 2021. Maternal depression was assessed using the Composite International Diagnostic Interview−Short Form 1 year after childbirth, and the outcomes included measures of material hardship, household poverty, and employment. Associations between maternal depression and outcomes were analyzed using logistic regression and group-based trajectory modeling.

Results: In total, 12.2% of the sample met the criteria for a major depressive episode 1 year after delivery. Maternal depression had a strong and sustained positive association with material hardship and not working for pay in Years 3, 5, 9, and 15 after delivery. Maternal depression also had a significant positive association with household poverty across Years 3−9 and with unemployment in Year 3. Trajectory modeling established that maternal depression was associated with an increased probability of being in a persistently high-risk trajectory for material hardship, a high-risk trajectory for household poverty, and a high−declining risk trajectory for unemployment.

Conclusions: Supporting perinatal mental health is crucial for strengthening the economic well-being of childbearing individuals and reducing the impact of maternal depression on intergenerational transmission of adversity.
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INTRODUCTION

Perinatal depression affects 20% of childbearing individuals globally and 13% in the U.S. and disproportionately impacts individuals with lower levels of income or education.[1−3] Perinatal depression is characterized by depressed mood, decreased interest or pleasure in activities, feelings of worthlessness or guilt, and sometimes suicidal ideation.[4,5] If untreated, perinatal depression diminishes the ability to function effectively across emotional and social domains.[4] Most previous studies have examined the implications of this for mother−infant bonding; child neglect; and children's health, cognitive, and behavioral development.[6−12] Indeed, the reach of perinatal depression on child outcomes is long: recent longitudinal studies have found that maternal depression is associated with adverse child development and offspring depression up to age 18 years.[9,10,12−16]

However, maternal depression and the resulting harms to women's social functioning may have important

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implications for other aspects of their lives, namely, in areas of economic well-being such as employment and financial security.[17] Recent studies have documented the relationships between maternal depression and subsequent short-term risk of household food insecurity, housing instability, relationship dissolution, unemployment, and missed workdays.[18−23] Scant research has examined how maternal depression is associated with women's long-term economic outcomes.

Given the robust literature showing lasting impacts of maternal depression on children's well-being, further research on long-term economic impacts on women is needed, especially considering that financial hardship itself is a risk factor for depression. Maternal depression may therefore exacerbate cycles of disadvantage through which health disparities affect childbearing individuals and their families. Moreover, the dearth of evidence on long-run economic impacts of maternal depression may result in underestimates of both the toll maternal depression takes on the quality of life and the cost effectiveness of interventions.[24]

This analysis uses the Fragile Families and Child Wellbeing Study to examine how women who experience depression in the postpartum year fare economically over the long term. Data from interviews with mothers are combined with medical records, allowing for adjustment for a wide range of potentially confounding socioeconomic, demographic, and maternal and infant health variables. The objective is to assess the relationship between depression in the postpartum year and material hardship, poverty, and employment over a 15-year period. The primary hypothesis is that depression in the postpartum year will increase material hardship and poverty and decrease employment.

METHODS

Study Sample

The Fragile Families and Child Wellbeing Study is a longitudinal birth cohort study that sampled 4,898 children born in 1998−2000 in 75 hospitals in 20 large U.S. cities and has continued to follow them over time. This analysis uses data from all the waves, including the latest publicly available data from 2014 to 2017. Cities with >200,000 people were selected using a stratified random sample. In 18 cities, all birth hospitals were included; in the remaining cities, hospitals were randomly sampled. Within hospitals, births were randomly sampled, with a nonmarital oversample because the study was designed to provide information about the life courses of unmarried parents and their children.[25]

Baseline interviews with mothers were conducted at the hospital right after birth, with follow-ups conducted when children were aged 1, 3, 5, 9, and 15 years. Additional data were extracted from mothers' and infants' medical records from the birth hospitalization. Surveys collected information on demographic characteristics; health, economic and employment status; and parenting behavior.[25]

Measures

Depression was measured using the Composite International Diagnostic Interview (CIDI)−Short Form, Section A,[26] which is used to classify respondents according to the criteria for a major depressive episode. The CIDI is a standard tool for evaluating mental disorders for the purposes of epidemiologic research and is consistent with the DSM-IV. The CIDI-Short Form generates the probability that the respondent would be positively diagnosed if given the full CIDI interview. Scoring followed the conservative scale outlined by Fragile Families and Child Wellbeing Study,[27] resulting in a dichotomous variable indicating a major depressive episode in the past year. Although efforts were made to complete Year 1 interviews 12 months after birth, timings varied; 58% of respondents completed interviews between 9 and 15 months postpartum, and 91% completed it within 19 months.

Outcomes were evaluated in Years 1, 3, 5, 9, and 15. Surveys at each timepoint asked respondents to report experiences of material hardship in the past 12 months using 10 questions (Appendix Table 1, available online). Following previous literature, a binary measure of an affirmative response to any of the questions was created as well as binary measures in each domain: food hardship, inability to pay bills, housing insecurity, medical hardship, and utility shut-offs.[28] Poverty was measured using an indicator for household income <100% of the federal poverty level (FPL) on the basis of official poverty thresholds specified by the U.S. Census Bureau for the year preceding the interview, adjusted for household size. Employment was characterized using 2 binary measures, one for whether respondents worked for pay in the past week and another for being currently *unemployed*, defined as having looked for work but not worked in the past week.

Economic disadvantage is itself an important risk factor for maternal depression, which may confound the relationship between depression and later-life economic hardship.[29] Understanding the directionality of the association between economic disadvantage and depression is a key concern. This was addressed in 2 ways. First, in the main analysis, a rich set of potential confounders measured at the time of delivery (1 year before the measure of the exposure of interest) was included in the regression models, which included demographic, socioeconomic, and maternal and infant health factors. Appendix Table 2 (available online) lists the full set of covariates. Variables were measured at delivery to avoid adjusting for potential outcomes of exposure, apart from the lifetime history of depression of the respondent's biological parents, which was measured at Year 3 but was included given the historical framing of the question. Second, sensitivity analyses were conducted to examine the robustness of the results among women who were not economically disadvantaged, as measured by poverty level, in the year before delivery.

Statistical Analysis

Descriptive statistics for all variables were analyzed. The empirical analysis began by examining the long-run association between maternal depression and economic outcomes. Multivariable logistic regression was estimated to assess the associations between maternal major depression during the postpartum period and

economic outcomes 15 years postpartum, reporting the ORs and the 95% CIs. Marginal effects were also computed.[30] Both unadjusted and adjusted models were estimated, adding demographic, socioeconomic, and maternal and infant factors sequentially as controls.

Next, the relationship between maternal depression and economic outcomes across the life course was further examined in 2 ways. First, to assess the dynamics of this relationship over time, logistic regressions were estimated on economic outcomes separately at 3, 5, and 9 years postpartum, in addition to 15 years postpartum, using fully adjusted models. For both parsimony and clarity of presentation, one outcome from each outcome group was examined: any material hardship, income <100% FPL, and unemployment. However, results were consistent for all outcomes (Appendix Table 8, available online).

Second, to examine the extent to which maternal depression influenced the life trajectory of women's economic outcomes, analysis was conducted using group-based trajectory analysis.[31] In these models, a logit distribution was applied to identify the distinct latent subgroups of women with similar trajectories in economic indicators across the life course. All respondents with ≥2 timepoints in which the outcome was measured were included, across Years 1−15. The same 3 main outcomes as in the previous analyses were assessed. To fit the model, analysts began with a 3-group cubic-order model and iteratively increased/decreased the number of groups and decreased order terms until the final model was obtained. The posterior probability of assignment to each trajectory was calculated for respondents, who were allocated to the trajectory that yielded the highest probability of membership. The final model was selected by the process recommended in the literature: comparing Bayesian Information Criteria, minimizing adjacent trajectory CI overlap, avoiding trajectories representing <2% of the population, and limiting to average posterior probabilities of ≥0.7.[32] Because 2 trajectories for each of the 3 outcomes were identified, logistic regression was used to examine the associations between depression in the postpartum year and trajectory membership.

For respondents without linked medical records, all variables based on medical records were coded as 0, and an indicator for missing medical records was included in the regressions. All analyses were conducted in Stata, version 16, in 2021.

Several sensitivity analyses were conducted to assess robustness. First, the possibility of confounding due to reverse causality was assessed by excluding participants with household income <100% FPL at delivery (34% of the sample). The purpose of this analysis was to assess whether results were driven by economic disadvantage before delivery confounding the relationship between depression in the postpartum period and financial hardship in the long run. Next, respondents with histories of mental illness (9%) were excluded to minimize selection into maternal depression during the postpartum year among women with chronic mental disorders, which represents another source of potential confounding. Third, respondents who had their Year 1 interview later than 15 months postpartum (42%) were excluded. Finally, to explore potential bias due to attrition, differences in covariate distributions across survey years were examined using Pearson chi-square tests.

RESULTS

A total of 4,898 mothers were enrolled at delivery, and 4,364 completed follow-up at Year 1. Of those, 4,362 had completed CIDI scores and were included in the analysis. At Years 3, 5, 9, and 15, the numbers (percentages) of the original sample who were included in the analysis were 4,008 (82%), 3,875 (79%), 3,298 (67%), and 2,964 (61%), respectively.

In the analysis sample, 12.2% met the criteria for a major depressive episode in the year after delivery, which is consistent with national estimates (Table 1).[33] Women who experienced maternal depression in the postpartum year were more likely to be U.S. born, less likely to be married, more likely to have lower household income, and more likely to receive public assistance in the year before delivery (Table 1). Appendix Table 3 (available online) shows the full set of characteristics, including all explanatory variables and outcomes. Characteristics were very similar over time, indicating low sample selection bias owing to attrition based on observed factors (Appendix Table 4, available online).

Table 2 shows the unadjusted and adjusted logistic regression estimates of associations between maternal depression in the postpartum year and each outcome at Year 15. Estimates on the relative (OR) and absolute (marginal effects) scales are presented. The results of regression models that sequentially added in demographic, socioeconomic, and maternal and infant controls are shown in Appendix Table 5 (available online); these show a consistent reduction in point estimates as additional sets of controls are included, indicating that all sets of factors are confounders. In adjusted models, maternal major depression was associated with a 53% increase in the odds of any material hardship (OR=1.53, 95% CI=1.19, 1.95). For specific hardship types, maternal depression was associated with medical hardship (OR=2.59, 95% CI=1.71, 3.92), utility shut-offs (OR=1.48, 95% CI=1.12, 1.95), inability to pay bills (OR=1.32, 95% CI=1.03, 1.69), food hardship (OR=1.45, 95% CI=1.08, 1.96), and housing insecurity (OR=1.57, 95% CI=1.02, 2.41). In unadjusted models, maternal depression was associated with increased odds of household income <100% FPL, but this was not significant in adjusted models (OR=1.21, 95% CI=0.92, 1.59). Maternal depression was associated with increased odds of not working in the past week (OR=1.48, 95% CI=1.14, 1.92) and was marginally associated with unemployment (OR=1.35, 95% CI=0.96, 1.89). The authors contextualize the magnitude of these estimates with marginal effects estimates. Maternal depression was associated with between a 2- and 11-percentage-point increase in

Rokicki et al / Am J Prev Med 2021;000(000):1−9

Table 1. Characteristics of Respondents at Delivery and Outcomes at Year 15, by Maternal Depression Status (N=4,362)

Characteristics	Did not experience maternal depression (*n*=3,829)	Experienced maternal depression (*n*=533)	*p*-value
Overall, %	87.8	12.2	
Characteristics at delivery			
Age, years, *n* (%)			
15–19	690 (18)	92 (17)	0.25
20–24	1,359 (35)	214 (40)	
25–29	898 (23)	111 (21)	
30–34	524 (14)	64 (12)	
≥35	358 (9)	52 (10)	
Race/ethnicity,[a] *n* (%)			
Non-Hispanic White	836 (22)	109 (20)	0.08
Non-Hispanic Black	1,796 (47)	281 (53)	
Hispanic	1,044 (27)	124 (23)	
Other/missing	153 (4)	19 (4)	
Born in U.S. *n* (%)	3,190 (84)	473 (89)	**0.001**
Married to biological father, *n* (%)	972 (25)	99 (19)	**<0.001**
Education, *n* (%)			
Less than high school	1,284 (34)	190 (36)	0.05
High school	1,164 (30)	163 (31)	
Some college	944 (25)	138 (26)	
College degree	435 (11)	39 (7)	
Household poverty relative to FPL, *n* (%)			
0–49%	698 (18)	110 (21)	**<0.001**
50%–99%	645 (17)	102 (19)	
100%–199%	965 (25)	159 (30)	
200%–299%	606 (16)	78 (15)	
≥300%	915 (24)	84 (16)	
Lived with both parents until age 15 years, *n* (%)	1,668 (44)	191 (36)	**<0.001**
Biological father did not finish high school, *n* (%)	1,068 (30)	149 (31)	0.90
Used public assistance in year before delivery,[b] *n* (%)	1,665 (44)	278 (53)	**<0.001**
On public insurance or uninsured during pregnancy, *n* (%)	2,438 (64)	360 (68)	0.08
Outcomes at Year 15[c]			
Any material hardship, n (%)	1,092 (42)	204 (58)	**<0.001**
Income <100% FPL, n (%)	785 (30)	132 (38)	**0.004**
Did not work for pay last week, n (%)	714 (27)	135 (38)	**<0.001**
Unemployed, n (%)	312 (12)	61 (17)	**0.004**

Note: Boldface indicates statistical significance (*p*<0.05).
p-value from Pearson chi-square test.
[a]Hispanic may be of any race; respondents are only categorized in 1 racial/ethnic category in the survey.
[b]Public assistance includes a receipt of any of the following: welfare, food stamps, unemployment insurance, workmen's compensation, disability, social security benefits, or rental assistance.
[c]The sample size for outcomes at Year 15 is 2,607 for those who did not experience maternal depression and 351 for those who did experience maternal depression.
FPL, federal poverty level.

the probability of experiencing these outcomes. The largest associated increases were in the probability of not working for pay (an 8.2 percentage point increase, compared with a baseline risk of 27%) and any material

hardship (a 10.5 percentage point increase, compared with a baseline risk of 42%).

Several control variables had significant relationships with material hardship 15 years after delivery,

Table 2. Association of Maternal Depression in the Postpartum Year With Economic Outcomes at Year 15

Outcomes	Unadjusted		Adjusted		Adjusted	
	logit		logit		logit	
	OR (95% CI)	*p*-value	OR (95% CI)	*p*-value	Marginal effect (95% CI)	*p*-value
Material hardship						
Any material hardship (*n*=2,957)	1.92 (1.53, 2.41)	<0.0001	1.53 (1.19, 1.95)	0.001	0.105 (0.043, 0.166)	0.0008
Medical hardship (*n*=2,922)	3.28 (2.23, 4.81)	<0.0001	2.59 (1.71, 3.92)	<0.0001	0.045 (0.018, 0.071)	0.001
Utilities shut-offs (*n*=2,954)	1.85 (1.45, 2.37)	<0.0001	1.48 (1.12, 1.95)	0.006	0.062 (0.014, 0.111)	0.01
Inability to pay bills (*n*=2,953)	1.66 (1.32, 2.08)	<0.0001	1.32 (1.03, 1.69)	0.028	0.062 (0.005, 0.118)	0.03
Food hardship (*n*=2,949)	2.00 (1.53, 2.60)	<0.0001	1.45 (1.08, 1.96)	0.014	0.045 (0.005, 0.084)	0.03
Housing insecurity (*n*=2,922)	1.94 (1.33, 2.84)	0.001	1.57 (1.02, 2.41)	0.041	0.022 (−0.003, 0.047)	0.08
Poverty						
Income <100% FPL (*n*=2,957)	1.40 (1.11, 1.77)	0.004	1.21 (0.92, 1.59)	0.169	0.037 (−0.017, 0.092)	0.18
Employment						
Did not work for pay last week (*n*=2,950)	1.66 (1.32, 2.1)	<0.0001	1.48 (1.14, 1.92)	0.003	0.082 (0.024, 0.140)	0.01
Unemployed (*n*=2,947)	1.55 (1.15, 2.09)	0.004	1.35 (0.96, 1.89)	0.086	0.028 (−0.007, 0.062)	0.12

Note: Boldface indicates statistical significance (*p*<0.05).
The first 2 models show the OR estimates from logistic regressions with 95% CIs and *p*-values, whereas the last model shows the marginal effects (risk difference) from the logit model with 95% CIs and *p*-values. All models apply robust standard errors. Hardship outcomes asked about in the past year. Any material hardship indicates an affirmative response to any item in the material hardship index (Appendix Table 1, available online). Unemployed indicates not working for pay last week and currently looking for work. Maternal depression in the postpartum year was measured through the Composite International Diagnostic Interview−Short Form. Adjusted models adjusted for demographic factors (age, race/ethnicity, foreign-born status, marital status), socioeconomic factors (education, household poverty ratio, lived with both parents until age 15 years, biological father of the infant completed high school, received public assistance in year before the birth, insurance status during pregnancy), and maternal and infant health factors (prepregnancy BMI; drug use, cigarette use, and alcohol use during pregnancy; pre-existing chronic condition during pregnancy [cardiac condition, diabetes, or hypertension]; self-reported health status; history of mental illness; history of adversity [any self-reported history of family instability, suspected parenting inadequacy, unwanted pregnancy, domestic violence, or sexual abuse]; whether respondent's biological father or mother had a history of depression or anxiety; trimester began prenatal care; birth interval; complications at delivery; if infant was low birth weight; if infant was in a newborn intensive care unit; infant's sex; and multiple birth).
FPL, federal poverty level.

including non-Hispanic Black race (1.60, 95% CI=1.26, 2.03), married status (0.74, 95% CI=0.59, 0.94), college education (0.59, 95% CI=0.40, 0.89), living with both parents at age 15 years (0.78, 95% CI=0.65, 0.93), receipt of public assistance (1.32, 95% CI=1.10, 1.58), and respondent's mother having a history of depression (1.30, 95% CI=1.08, 1.57) (Appendix Table 6, available online). Associations were generally consistent across other economic outcomes. Results were insensitive to alternatively restricting the sample to women with income >100% FPL at delivery, women with no history of mental illness, and women who completed the CIDI 15 months before delivery (Appendix Table 7, available online).

Figure 1 shows the associations of maternal depression with economic outcomes at each of Years 3, 5, 9, and 15. Panel A shows that maternal depression had a strong and sustained association with material hardship across all years, with ORs ranging from 1.45 to 2.03. Panel B shows that maternal depression had a significant association with income <100% FPL for Years 3−9, whereas Panel C indicates that maternal depression had a significant association with unemployment only in Year 3, the earliest observed timepoint after the Year 1 interview. The results showing the ORs and CIs are shown in Appendix Table 8 (available online).

Analysis using group-based trajectory analysis revealed 2 trajectories of any material hardship (low risk [51% of the sample] and persistently high risk [49%]), 2 trajectories of poverty (low risk [53%] and high risk [47%]), and 2 trajectories of unemployment (low risk [76%] and high-declining risk [24%]) (Table 3). Maternal depression was associated with twice the odds of membership to the persistently high trajectory for material hardship, a 28% increase in odds of membership in the high-risk trajectory for poverty, and a 42% increase in odds of membership in the high-declining trajectory for unemployment. The model fit parameters for all models are shown in Appendix Tables 9−10 (available online), and plotted trajectories are shown in Appendix Figure 1
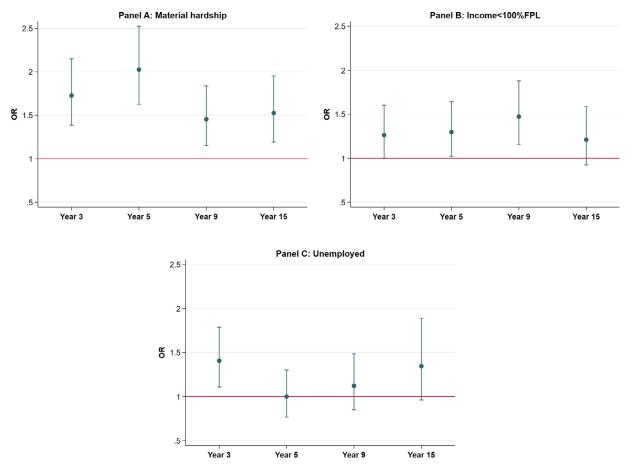
Figure 1. Association of maternal depression in the postpartum year with economic outcomes in Years 3, 5, 9, and 15 after delivery.
FPL, federal poverty level.

(available online). Results were robust to sensitivity analysis including only participants with data at all survey waves (Appendix Table 11, available online).

DISCUSSION

Fifteen years after delivery, maternal major depression in the postpartum year was associated with higher odds of material hardship and unemployment, even after controlling for a wide range of socioeconomic, demographic, and maternal and infant health variables. It was also associated with specific domains of material hardship, including medical hardship, utility shut-offs, inability to pay bills, food hardship, and housing insecurity, with particularly high odds of medical hardship. Analyses examining the relationship between maternal depression and economic outcomes across the life course indicated a strong, sustained relationship between maternal depression in the postpartum year and increased risk of material hardship and poverty, whereas the relationship

with unemployment was strongest in the first 3 years after delivery. Marginal effect estimates indicate that maternal depression is a substantively meaningful predictor of these outcomes in absolute terms, for example, raising the risk of material hardship at Year 15 from 42% to 53%.

Findings are consistent with a growing literature showing associations between maternal depression and increased risk of household food insecurity[18,22,34] and children's inadequate housing in the 5 years after birth.[19,20,22] This study examined the extent to which maternal depression affects individuals' economic welfare and financial stability over a much longer period—15 years after delivery—and found large and persistent impacts of maternal depression on material hardship and unemployment, suggesting further pathways through which maternal depression may affect childbearing individuals and their children's outcomes.

These findings highlight the importance of expanding access to mental health support services for low-income

Table 3. Associations of Maternal Depression in the Postpartum Year With Life Course Economic Trajectories

Outcomes	*n* (%)	OR (95% CI)	*p*-value
Any material hardship			
Low risk trajectory	2,327 (51)	1.00 (ref)	
Persistently high risk trajectory	2,194 (49)	2.19 (1.76, 2.73)	**<0.0001**
Income <100% FPL			
Low risk trajectory	2,392 (53)	1.00 (ref)	
High risk trajectory	2,127 (47)	1.28 (1.00, 1.64)	**0.047**
Unemployed			
Low risk trajectory	3,433 (76)	1.00 (ref)	
High-declining risk trajectory	1,085 (24)	1.42 (1.13, 1.78)	**0.003**

Note: Boldface indicates statistical significance (*p*<0.05).
The OR from logistic regression with 95% CIs is shown in parentheses.
FPL, federal poverty level.

pregnant and postpartum individuals. Access to perinatal mental health treatment in the U.S. is limited owing to a myriad of patient-, provider-, and system-level barriers.[35] Despite experiencing elevated rates of maternal depression, racial and ethnic minorities have the lowest rates of accessing care.[36] Comprehensive interventions are needed to address the barriers to depression screening and treatment[35,37] and to promote economic well-being and reduce health disparities.[38,39] Collaborative care models integrating primary and behavioral health care have been found to be effective at decreasing depression severity.[40] Recent research indicates that home visitor and lay health worker interventions may also provide effective ways of screening for and treating maternal depression while addressing clients' social and economic challenges.[41,42]

This research also has implications for cost-effectiveness studies. Recently, the U.S. Prevention Task Force recommended that clinicians provide or refer pregnant and postpartum individuals at increased risk of depression to counseling interventions.[43] Presented estimates imply that programs designed to lower the prevalence of maternal depression should be viewed not only as interventions that promote population health but also as interventions that increase economic well-being. A recent review of the lifetime costs of perinatal depression in the United Kingdom concluded that "three-quarters of the cost impact [of perinatal depression] relates to adverse impacts on the child, rather than the mother."[24] Yet, that report incorporated little empirical evidence on long-term impacts on mothers. This study's findings indicate that analyses of the cost effectiveness of interventions that aim to prevent or treat maternal depression should incorporate the long-term economic benefits.

Limitations

This analysis has limitations. First, the data are observational, and the presented results are associational. Although analyses controlled for history of mental illness and results were not sensitive to its omission, it is possible that prepregnancy undiagnosed mental illness confounds the relationship between major depression in the postpartum year and economic outcomes. Research assessing causal impacts of maternal depression on economic outcomes is an important direction for future analysis. That said, this study has established maternal major depression as a clear risk factor for adverse economic trajectories, which is useful information for tailoring both mental health and anti-poverty interventions to address the needs of affected populations. Second, there is some attrition in the data. Although there were few significant differences in sample characteristics over time, there may have been unmeasured factors that led to differential attrition. Moreover, group-based trajectory analysis estimates can also be biased by attrition. Third, data reflect the social and economic context of the U.S. How maternal depression affects childbearing individuals' economic well-being should be examined in other contexts. Finally, the analysis did not examine the outcomes associated with long-term chronic depression or specific underlying diagnoses and did not distinguish between the economic outcomes associated with one-time episodes of depression and those associated with repeated episodes of depression. Given the findings from this study as well as those from recent work indicating that postpartum depression can last for years,[44] investigating the trajectories of maternal depressive symptoms and their relationship with economic outcomes is an important area for future research. Identifying data that allow researchers to establish the contribution of the

timing of the depressive episode (postpartum or other) and type of diagnosis (e.g., unipolar or bipolar) to later-life outcomes should be a particular focus. Furthermore, future research should investigate other maternal psychological risk factors such as anxiety and post-traumatic stress disorder and their associations with future economic well-being.

CONCLUSIONS

This study finds a sustained relationship between maternal depression and long-term economic adversity. Supporting perinatal mental health is crucial for strengthening childbearing individuals' economic well-being and for reducing the impact of perinatal depression on intergenerational transmission of adversity.

CREDIT AUTHOR STATEMENT

Slawa Rokicki: Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Software; Supervision; Validation; Visualization; Writing - original draft; Writing - review & editing. Mark McGovern: Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Software; Supervision; Visualization; Writing - original draft; Writing - review & editing. Annette Von Jaglinsky: Formal analysis; Investigation; Software; Visualization; Writing - original draft. Nancy E. Reichman: Conceptualization; Funding acquisition; Methodology; Project administration; Resources; Supervision; Writing - review & editing.

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