

Implications of Neglect and Caregiving During Childhood for Maternal Pregnancy Spacing



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Abstract

Rapid repeat pregnancies (RRP) are associated with higher risk of adverse outcomes for maternal and child health. Previous research has identified numerous risk factors for RRP, but none have studied the link between maternal adverse childhood experiences (ACEs) and RRP. Our study examines this association, as well as the potential factors that moderate the impact of ACEs in RRP. In a clinic-based sample of 111 women with high levels of childhood adversity on average, those who experienced childhood neglect had more RRP than those who did not. However, this was not true for women who experienced neglect and acted as caregivers during childhood. Further research is needed to explore this interaction and its implications for (1) treatment of childhood neglect and (2) prevention of RRP.

Introduction

Approximately 35% of pregnancies in the US are classified as RRP, indicating conception occurring within 18 months of a previous birth (Gemmill & Lindberg, 2013). Birth spacing has important implications for maternal and child health and wellbeing. Shorter intervals between pregnancies are associated with higher risks of adverse outcomes, including maternal mortality and morbidity, stillbirth and infant death, and preterm delivery (McKinney et al., 2017; Schummers et al., 2018).

Underlying current reproductive behaviors are the factors that are responsible for shaping reproductive motivations, desires, and intentions regarding reproduction (Miller, 1994). Adverse childhood experiences (ACEs) such as abuse and neglect, have been linked to greater ambivalence about pregnancy and inconsistent contraceptive use (Deitz et al., 1999; Zapata et al., 2013). To our knowledge, no prior studies have examined the association between ACEs and RRP.

Our goal for this study is **to examine whether ACEs are associated with number of RRP in a high-risk sample of pregnant women (ages 17-38) and to examine potential moderators that may enhance or reduce the impact of childhood neglect for RRP:** mental health conditions, resilience, and caregiving during childhood. These factors may serve as strengths for women who have experienced abuse or neglect as children.

Methods

Sample

➤ Data for the current study come from a longitudinal clinic-based cohort study conducted in 2016-2017 of 177 pregnant women (aged 15-40) recruited from two perinatal clinics in Tulsa. The participating clinics serve a racially diverse, socioeconomically disadvantaged and medically-underserved patient population. The sample for the current study was restricted to the 111 participants who had been pregnant more than once.

Measures

- *Childhood neglect* was measured with two questions indicating an absence of love and caretaking: “When you were growing up, during your first 18 years of life, did you often feel that: (1) No one in your family loved you or thought you were special?; and (2) You didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you?” Responding “yes” to either question was coded as neglect = 1.
- *Number of rapid repeat pregnancies* is a count variable summing the number of times the respondent was pregnant within 18 months of a prior pregnancy.
- *Caregiver during childhood* was coded as a dichotomous variable (yes = 1) if the respondent indicated caregiving responsibilities.

Analytic Strategy

➤ We used Poisson regression analysis to examine the association between childhood neglect, caregiving responsibilities, and number of rapid repeat pregnancies. Poisson is an appropriate regression method when the dependent variable based on count data that may have a large number of zeros and a low arithmetic mean (<10) (Coxe et al., 2009).

Results

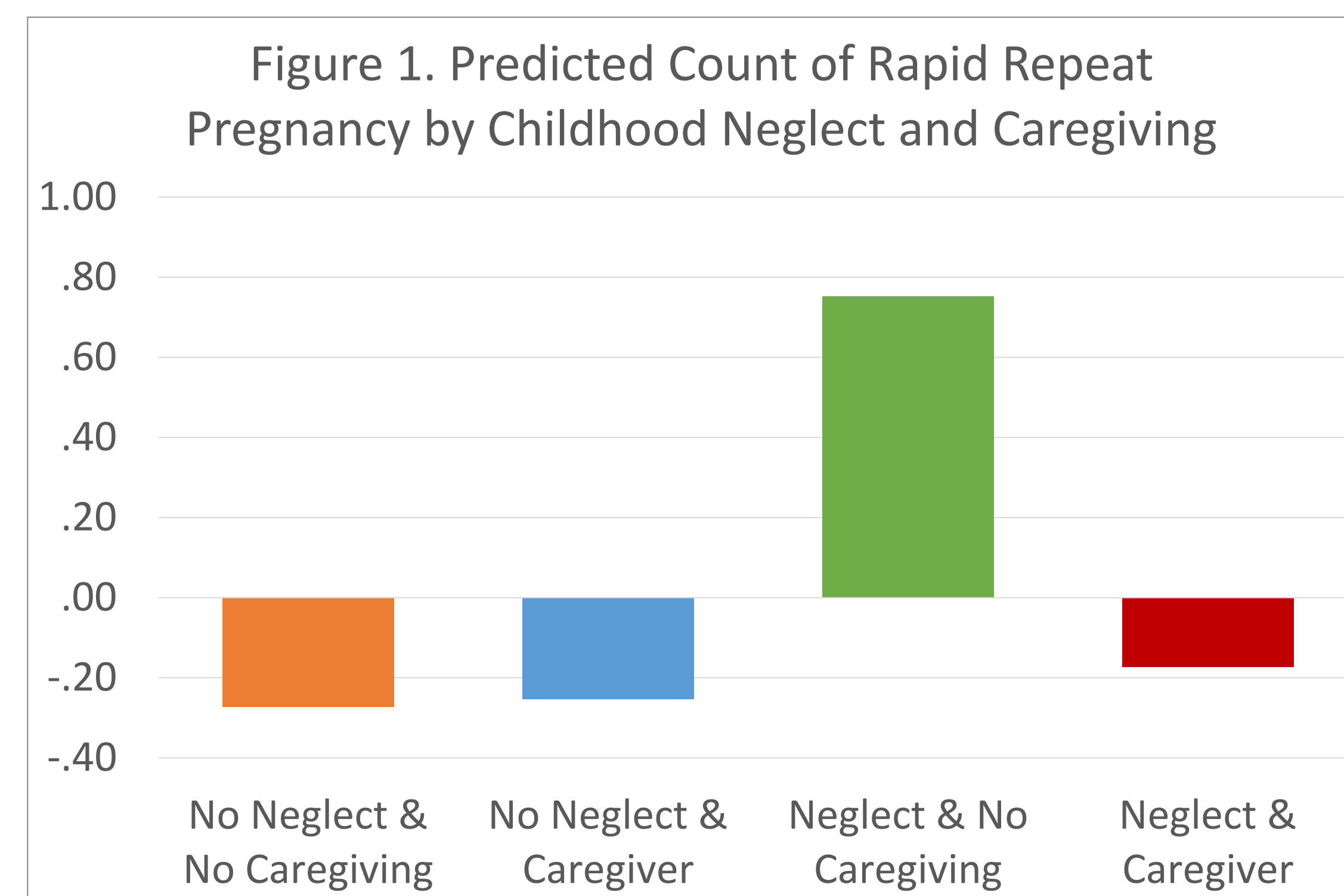
Descriptive statistics (not shown):

- ❑ Approximately 35% of the sample reported experiencing childhood neglect.
- ❑ Participants reported around one rapid repeat pregnancy.
- ❑ Proportions of mental health conditions, caregiving responsibilities, ACE score, and number of rapid repeat pregnancies are higher among those who reported childhood neglect compared to those who did not report childhood neglect.

Poisson Regression Models Estimating Total Count of Rapid Repeat Pregnancies

| | (1) | (2) |
|-------------------------------|----------------------------|----------------------------|
| Experienced childhood neglect | .53 ⁺ (.28) | .92 ^{**} (.36) |
| Caregiver during childhood | -.43 ⁺ (.24) | -.10 (.31) |
| ACEs Score Above Mean | -.39 (.30) | -.73 [*] (.36) |
| Mental Health Problems | .40 ⁺ (.23) | -.12 (.38) |
| Neglect X Caregiver | | -.91 [*] (.46) |
| ACEs Score X MH Problems | | 1.05 ⁺ (.55) |
| Age (years) | -.03 (.02) | -.02 (.02) |
| Total Number of Siblings | .09 ^{**} (.03) | .10 ^{**} (.04) |
| White | .18 (.25) | .19 (.25) |
| Parents ever married | .00 (.24) | .08 (.25) |
| Constant | .42 (.54) | .08 (.58) |
| N | 111 | 111 |

Standard errors in parentheses
⁺ p < 0.10, ^{*} p < 0.05, ^{**} p < .01, ^{***} p < .001



Summary of Results:

Poisson regression analyses.

- Model 1 includes the full model adjusted for covariates.
 - Modest (p<.10) associations between childhood neglect, caregiving responsibilities, mental health conditions, and number of rapid repeat pregnancies.
- Model 2 includes interaction terms
 - Modest (p<.10) interaction between ACEs and mental health conditions and a stronger (p<.05) statistically significant interaction between childhood neglect and caregiving responsibilities during childhood.
- Figure 1 visually depicts the interaction between childhood neglect and caregiving during childhood.

Conclusions

Findings highlight that women who experienced neglect were at risk for more rapid repeat pregnancies, except among women who were responsible for caregiving during childhood. Providing caregiving during childhood appears to serve as a protective factor for women who experienced childhood neglect.

Implications:

- ❑ Future research is needed to determine the reason for the interaction; perhaps the experience of caring for children informs caregivers about the work that parenting entails, encouraging them to be more planful in their childbearing behaviors. It is also possible that a lack of feeling loved during childhood may create a longing to feel loved, which can be filled by having more children (and more quickly). Caregiving during childhood may therefore provide an opportunity for a child who is experiencing neglect to feel loved and needed.
- ❑ Women who experienced neglect during childhood are at higher risk for a RRP; healthcare practitioners who ask women about their childhoods can provide targeted recommendations for contraception.
- ❑ Children who experience neglect may benefit from prevention efforts that provide them opportunities to be responsible for others.

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