

# The Role of Sexual Abuse and Dysfunctional Attitudes in Perceived Stress and Negative Mood in Pregnant Adolescents: An Ecological Momentary Assessment Study



Kate Walsh PhD<sup>1,\*</sup>, Archana Basu PhD<sup>2</sup>, Catherine Monk PhD<sup>2,3,4</sup>

<sup>1</sup> Department of Epidemiology, Columbia University Medical Center, New York, New York

<sup>2</sup> Department of Psychiatry, Columbia University Medical Center, New York, New York

<sup>3</sup> Department of Psychiatry, Weill Medical College of Cornell University, New York, New York

<sup>4</sup> Department of Obstetrics and Gynecology, Columbia University Medical Center, New York, New York

## ABSTRACT

**Study Objective:** Latinas have the highest rates of adolescent pregnancy in the United States. Identifying means to improve the well-being of these young women is critical. The current study examined whether a history of child sexual abuse—itsself a risk factor for adolescent pregnancy—was associated with more perceived stress and negative mood over the course of pregnancy and whether dysfunctional attitudes explained these associations.

**Design and Setting:** This mixed methods study involved laboratory-based assessments of perceived stress, sexual abuse history, and dysfunctional attitudes, as well as Ecological Momentary Assessments (EMA) of mood states every 30 minutes during a 24-hour period once during each trimester of pregnancy.

**Participants:** Pregnant adolescents (N = 204, 85% Latina).

**Main Outcome Measures:** EMA mood states and laboratory-based retrospective self-reports of perceived stress.

**Results:** One in 4 pregnant adolescents had a history of sexual abuse. Sexually abused adolescents reported greater perceived stress during the first trimester relative to those without, though the groups did not differ on EMA negative mood ratings. Dysfunctional attitudes explained associations between sexual abuse and perceived stress. Sexual abuse was indirectly associated with the intercept and slope of negative mood through dysfunctional attitudes. Findings were circumscribed to sexual abuse and not other types of child abuse.

**Conclusions:** Identifying sexually abused pregnant adolescents and providing support and cognitive therapy to target dysfunctional beliefs may decrease stress during the first trimester as well as negative affect throughout pregnancy.

**Key Words:** Adolescent pregnancy, Child sexual abuse, Dysfunctional attitudes, Perceived stress, Negative mood, Ecological momentary assessment

## Introduction

Although adolescent pregnancy in the United States has declined significantly,<sup>1</sup> the United States continues to have the highest rate of all industrialized nations.<sup>2,3</sup> Rates of adolescent pregnancy are 3 times higher among Hispanic adolescents than among white adolescents,<sup>1</sup> and, independent of race and ethnicity, adolescent pregnancy is associated with increased risk for negative birth outcomes (eg, preterm birth and lower birth weight).<sup>4–6</sup> Identifying factors that may improve the health and well-being of Hispanic adolescent mothers-to-be has significant public health relevance.

Compared with their peers, pregnant adolescents are more likely to have a history of adverse childhood events,<sup>7</sup> including childhood sexual abuse (CSA).<sup>8</sup> Although CSA may increase risk for adolescent pregnancy, few studies have

examined how CSA impacts adolescents *during* pregnancy. According to traumagenic dynamics theory,<sup>9</sup> CSA could negatively impact pregnant adolescents by engendering negative thinking patterns or attitudes that increase risk for mood or anxiety disorders. CSA victims have negative attributions of events that are more internal, stable, and global than those of nonvictims,<sup>10</sup> and victims of more-severe CSA tend to endorse more self-blame attributions relative to victims of less-severe CSA.<sup>11,12</sup> CSA victims also report more dysfunctional beliefs and attitudes compared with those without CSA.<sup>13</sup> However, with the exception of a study documenting associations between CSA and depression during pregnancy,<sup>14</sup> the effects of potentially CSA-related dysfunctional beliefs and attitudes have not been studied among pregnant adolescents.

Dysfunctional beliefs and attitudes among adolescents with CSA histories could negatively impact pregnancy by increasing their stress and negative mood. Adult women with CSA histories evidence heightened negative mood and stress during pregnancy.<sup>15</sup> Pregnancy is an outcome of sexual relations and thus may activate fear networks associated with CSA exposure and increase the experience of stress, particularly for those with posttraumatic stress disorder (PTSD).<sup>15</sup> Several studies have linked CSA to the long-term development of disorders characterized by

The authors would like to acknowledge the following funding sources: Funded by National Institute on Drug Abuse (NIDA) with Grant # T32DA031099 (Dr Walsh), Sackler Institute Fellowship in Parent-Infant Studies from the Sackler Institute for Developmental Psychobiology (Dr Basu), and Funded by National Institute of Mental Health (NIMH) with Grant # MH077144 - 01A2 (Dr Monk). The authors indicate no conflicts of interest.

\* Address correspondence to: Kate Walsh, PhD, 722 W 168th St, New York, NY 10032

E-mail address: [klw2153@columbia.edu](mailto:klw2153@columbia.edu) (K. Walsh).

extreme dysphoria including borderline personality disorder, PTSD, and depression.<sup>16,17</sup> Of the few studies focused on pregnant adolescents, a cross-sectional study found that adolescents with CSA histories scored higher on general measures of stress.<sup>18</sup> A study of adult women found that while external stressors remained stable throughout pregnancy, pregnancy-related stress peaked during the first and third trimesters, and anxiety peaked during the third trimester.<sup>19</sup> Furthermore, among adult women assessed at 2 time points during pregnancy, perceived stress and anxiety were not associated with increased risk for preterm birth; however, those who exhibited an increase in stress and anxiety over the course of pregnancy had shorter gestation lengths.<sup>20</sup> Factors that contributed to increased stress over the course of the pregnancy were not explored in that study; findings suggest the importance of identifying malleable individual difference variables, including CSA history or dysfunctional attitudes, that could contribute to increases in stress or negative mood over the course of pregnancy.

### *The Current Study*

Although a burgeoning body of research has documented the impact of maternal stress during pregnancy on poor birth outcomes,<sup>21–24</sup> few studies have examined individual difference factors that could contribute to variability in maternal stress during pregnancy, and far fewer studies have focused on these associations in pregnant adolescents. A history of CSA is an individual difference factor that may elevate risk for psychological distress during pregnancy, perhaps through the development and maintenance of dysfunctional beliefs and attitudes that increase perceived stress and negative mood. The current study used data from a sample of pregnant, primarily Latina adolescents to examine whether a history of CSA was associated with more perceived stress and daily negative mood during repeated ecological momentary assessments (EMA) over the course of pregnancy. We collected data on a broad range of child maltreatment experiences as child maltreatment types are known to co-occur<sup>25</sup>; thus, we also tested whether the observed associations were circumscribed to CSA or whether they extended to other forms of maltreatment. We also examined whether dysfunctional beliefs and attitudes explained associations between CSA history and changes in stress and negative mood over the course of pregnancy. Compared with nonvictims, pregnant adolescents with CSA histories were expected to report more dysfunctional attitudes as well as greater perceived stress and increased negative mood initially and over the course of the prenatal period. It also was expected that dysfunctional attitudes would account for associations between CSA and trajectories of perceived stress and negative mood over time.

## **Materials and Methods**

### *Overall Design*

Participants were drawn from a prospective longitudinal observational study of pregnant adolescents measured at three time points: early (13–16 weeks), middle

(24–27 weeks), and late (34–37 weeks) pregnancy. Participants completed the perceived stress measure during a laboratory-based assessment. Over a 24-hour period, mood ratings were collected using EMA, which permits in-the-moment collection of data.

### *Participants*

Nulliparous pregnant adolescents, ages 14–19 and between 13–27 gestational weeks, were recruited through the Departments of Obstetrics and Gynecology at Columbia University Medical Center (CUMC) and Weill Cornell Medical College, and flyers posted in the CUMC vicinity. All adolescents had a healthy pregnancy at the time of recruitment. Participants were excluded if they smoked or used recreational drugs, lacked fluency in English, or were multiparous. Per a separate aim of the study, participants were excluded on the basis of chronic use of any of the following: nitrates, steroids, systemic migraine medications, stimulants, major and minor tranquilizers; and psychiatric medications. One pregnancy ended in fetal death; this participant was excluded from analysis. Participants were 204 pregnant adolescents (mean age = 17.9 years, SD = 1.2 years, range = 14–20 years). Approximately 85% (n = 173) were Latina; 48% (n = 98) were in the 12th grade, 25% (n = 51) were in the 11th grade, 11.8% (n = 24) were in the 10th grade, 8.3% (n = 17) were in the 9th grade, and 3.4% (n = 7) were in the 8th grade. Thirty-five percent (72 participants) reported a total annual family income of \$0–\$15,000, 34.3% (70 participants) reported \$16,000–\$25,000, 16.2% (33 participants) reported \$26,000–\$50,000, 2% (4 participants) reported \$51,000–\$100,000, and 0.5% (1 participant) reported greater than \$100,000. All participants provided written-informed consent, and all procedures were approved by the Institutional Review Board of the New York State Psychiatric Institute/CUMC.

### *Measures*

#### *Child Maltreatment History*

The Childhood Trauma Questionnaire (CTQ)<sup>26</sup> is a 28-item self-report questionnaire that retrospectively assesses 5 types of childhood maltreatment: emotional, physical, and sexual abuse and emotional and physical neglect. Each abuse type is assessed with 5 items measured on a Likert-type scale from 1 (never true) to 5 (very often true). Responses to the CTQ are summed, with higher scores indicating greater levels of each type of maltreatment. Numerous investigations attest to the reliability and validity of this measure.<sup>27,28</sup> The CTQ was administered once during pregnancy, typically during the first trimester, although 14.6% (30 participants) entered the study in their second trimester and received the CTQ during that session; victimization status according to the 5-item sexual abuse subscale was used for the primary analysis, and victimization status for any other maltreatment (physical or emotional abuse or physical or emotional neglect) was used for secondary analysis. Per cutoffs in the manual,<sup>26</sup> participants were considered CSA victims if they scored a 6 or higher on the sexual abuse subscale. Participants who

Download English Version:

<https://daneshyari.com/en/article/3962529>

Download Persian Version:

<https://daneshyari.com/article/3962529>

[Daneshyari.com](https://daneshyari.com)