Table S1a: Overview of studies of gestational age and birthweight that analysed PTSD as a risk factor in community or prenatal samples

Reference	Design	Sample	Trauma and PTSD details	Findings	Caveats
Seng et al, 2001[9]	Cross sectional analysis of ICD-9 coding in service use data of two cohorts of Medicaid recipients	1,093 pregnant women. 455 PTSD-diagnosed, 638 with no mental health diagnoses, all receiving Medicaid, so poor or uninsured when not pregnant	455 PTSD cases based on clinician diagnostic coding, Statewide female Medicaid PTSD diagnosis prevalence rate was 0.04%.	PTSD not associated with preterm birth per ICD-9 discharge coding. No data regarding infant birthweight, but significant association with procedure code for ultrasound to rule out macrosomia.	Underdiagnosis biases to negative findings. No interval-level gestational age or birthweight data available in Medicaid data. Rape and battering exposures with ICD-9 explanation codes used to adjust for trauma.
Rogal et al., 2007[10]	Prospective cohort study using structured interview and record abstraction	1,100 women recruited via inner city clinics, 87% minority, including 39% Spanish speaking	PTSD determined with MINI Neuropsychiatric Interview. No detail on qualifying trauma rate or types. 31 cases, 3% rate.	PTSD group had non-significant trend toward earlier gestational age. Preterm delivery nearly significant despite lack of power (49%) with aOR 2.8, (0.95, 8.38).	Underpowered and potentially underdiagnosed. Model was adjusted for demographics, substance use, comorbidity, but not for trauma type.
Rosen et al., 2007[11]	Cross sectional interview data from longitudinal study of single women receiving public assistance.	148 single mothers in a welfare program,	PTSD determined with UM-CIDI and depression, substance dependence also measures and modeled. rate. Trauma history included intimate partner violence (IPV). 38 PTSD cases, 26%	Having either PTSD or Depression contributed to risk for low birth weight, with adjusted OR 8.2 (1.5, 45.5).	Small sample. PTSD and depression were comorbid and modeled together so specificity of PTSD is not certain. Model controlled for IPV, substance use, maternal deprivation.
Morland et al., 2007[12]	Prospective cohort study using self-report measures and record abstraction	101 women recruited via a prenatal clinic and physician offices on Oahu, mostly poor, 40% Native Hawaiian/Pacific Islander, 20% Asian	PTSD determined by symptom checklist (PCL) related to individual index trauma. High levels of child and adult abuse and 50% exposed to natural disaster. 16 cases, 16% rate	PTSD was not associated with birth weight or gestational age, but was associated with risk behaviors and increased maternal weight gain.	Small sample, Native Hawaiian and Pacific Islander race/ethnicity may have different pattern of associations. No modeling in relation to outcomes.

Table S1b. Overview of studies of gestational age and birthweight that analysed PTSD as a risk factor in disaster samples.

Reference	Design	Sample	Trauma and PTSD details	Findings	Caveats
Berkowitz et al., 2003[13]	Two-cohort study with self-report measures and record abstraction	187 women proximal to World Trade Center and 2,367 Manhattan resident comparison women	PTSD determined by symptom checklist (PCL), focus was on 9/11 as trauma exposure, PTSD rate not stated.	PTSD was not associated with birthweight, gestational age, or intrauterine growth retardation (IUGR), but WTC-proximal group had greater IUGR	Report is letter to editor. Number of PTSD cases is not stated, and no comparative outcome statistics are shown
Chang et al., 2004[14]	Single cohort study with self-report measures and record abstraction	115 villagers near epicenter of Taiwan earthquake	PTSD determined by symptom checklist (PCL) in relation to the earthquake trauma. PTSD rate not stated.	PTSD was not associated with gestational age or birth weight. Spouse being a casualty was significant predictor of both	Small sample. Number of PTSD cases not stated. Modeling adjusted for age, parity, and socioeconomic status found no association of PTSD with low birth weight
Engel et al., 2005[15]	Single cohort study with self-report measures and record abstraction	52 women interviewed in pregnancy shortly after proximal World Trade Center exposure	PTSD determined by symptom checklist (PCL). Focus was on 9/11 trauma exposure. 4 cases, 8% rate	PTSD symptoms were associated with longer gestation age (beta=0.04, p=0.03) and smaller head circumference (beta=-0.07, p=0.03)	Small sample with few PTSD cases, but used modeling of symptom levels and adjusted for confounds, including WTC exposure
Xiong et al., 2008[16]	Prospective cohort study with self-report measures and record abstraction	301 Hurricane Katrina exposed pregnant women, 220 from New Orleans, 81 from Baton Rouge, 120 miles distant	PTSD determined by symptom checklist (PCL). Focus was on hurricane trauma. 13 cases, 4.4% rate	PTSD association with low birth weight did not reach statistical significance. Severe hurricane exposure was significantly associated with low birth weight and preterm birth at trend level	Small number of PTSD cases. Adjusted models did not include both PTSD and exposure variables
Lipkind et al., 2010[17]	Cohort study with self-report measures and birth certificate outcomes data.	499 World Trade Center registry women with PTSD measures, exposure analysis with 49,616 controls living >5 mile away	PTSD determined by symptom checklist (PCL). Focus was on 9/11 trauma exposure. 61 cases, 12.6% rate	In the exposed cohort with PTSD data, high PTSD scores were associated with preterm birth, aOR 2.5 (1.1, 5.8), and low birth weight, aOR 2.5 (1.0, 6.1). Exposure was not associated with either outcome	Models adjusted for multiple potentially confounding factors.