Supplementary Material

Article Title: Adverse Childhood Experiences and Risk for First-Episode Major Depression During the Menopause Transition

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List of Supplementary Material for the article

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SUPPLEMENTAL METHODS:

Menopausal Status:

At every assessment period, each participant was assigned to one of the following categories based on bleeding patterns: Stage 1) pre-menopausal: regular menstrual cycles in the 22- to 35-day range; Stage 2) late pre-menopause: change in cycle length of 7 days or longer in either direction from the participant's own baseline for at least 1 cycle; Stage 3) early transition: change in cycle length of 7 days or longer in either direction from the participant's own baseline for at least 2 cycles up to 60 days of amenorrhea; Stage 4) late transition: 3–11 months of amenorrhea; and Stage 5) post-menopausal: 12 months or more of amenorrhea without hysterectomy.

Statistical Methods:

Students t test or chi square methods were utilized to determine whether women remaining in the POAS cohort and available for inclusion in this analysis were similar with respect to demographics, body mass index, baseline depression symptom severity and history of depression to the participants that comprised the original cohort (Supplemental Table 1).

For the purposes of this study, we defined the high ACE group as those women with 2+ ACEs. A binomial test of proportions was used to compare lifetime prevalence of MDD in individuals with 1 ACE to 2 ACEs directly, considering total, prepubertal and postpubertal ACEs separately (Supplemental Figure 1).

SUPPLEMENTAL RESULTS

Supplemental Table 1. Baseline Characteristics for Current Study Cohort Versus Those Who Dropped Out of the Penn Ovarian Aging Study

VARIABLE	CURRENT STUDY COHORT (N=243)		DROP OUTS FROM POAS (N=195)		P VALUE
	Mean	SD	Mean	SD	
Age	41.6	3.5	41.3	3.4	0.422
Body Mass Index	29.3	8.3	29.1	7.3	0.776
	N	%	N	%	
Race					
Caucasian	128	52.7	89	46.1	0.174
African American	115	47.3	104	53.9	
Education					
High School or Less	98	40.3	94	48.7	0.080
College	145	59.7	99	51.3	
Employed	200	82.3	155	80.3	0.595
Marital Status (Married)	138	56.8	112	58.0	0.795
CES-D >=16	97	40.3	85	44.0	0.426
MDD Diagnosis (Yes)	23	9.5	24	12.4	0.321

LEGEND: Comparison between the entire POAS cohort and those for whom ACE-Q data was collected revealed no significant baseline differences with respect to race, age, BMI, employment, CES-D scores, smoking, or marital status (all p>0.05). Likewise, the proportion with lifetime or incident menopause MDD diagnoses at baseline and across the study did not differ (p>0.05).
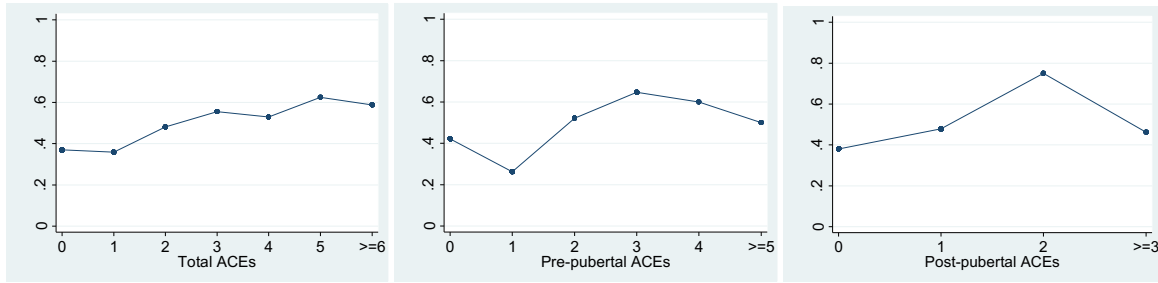
Supplemental Figure 1: Proportion of Women With Lifetime MDD Based on Number of ACEs

LEGEND: Comparing lifetime incidence of major depressive disorder (MDD) between women with 1 ACE and women with 2 ACEs for each definition of ACE (total, prepubertal and postpubertal), there was a significant increase in MDD risk when considering pre-pubertal ACE [Pearson Chi-square (df=1) =4.95, p-value=0.026], but not for post-pubertal ACE [Pearson Chi-square (df=1) = 3.55, p-value= 0.060] or total ACE [Pearson Chi-square (df=1) = 1.27, p-value=0.261].