

Advancing gestation does not attenuate biobehavioural coherence between psychological distress and cortisol

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ABSTRACT

Background: Despite little evidence to suggest that HPA axis responses to psychological provocation are attenuated during pregnancy, it is widely held that dampening of the HPA axis response to psychological distress serves a protective function for the mother and fetus. The current study was designed to assess changes in biobehavioral coherence between psychological distress and cortisol over the course of pregnancy.

Methods: Ambulatory assessment of ecologically relevant psychological distress and salivary cortisol were repeated in all three trimesters for 82

pregnant women. Samples were collected 5 times per day over the course of 2 days in each trimester.

Results: Psychological distress and cortisol were positively associated, $\psi = .024$, $p < .01$, indicating that increases in psychological distress were associated with increases in cortisol. Gestational age did not moderate this association, $\psi = .0009$, $p = .13$, suggesting that negative psychological experiences remain potent stimuli for the HPA axis during pregnancy. Conclusion: Biobehavioral coherence between ecologically relevant experiences of psychological distress and cortisol is not attenuated with advancing gestation. ©

Keywords: Psychological distress, Salivary cortisol, Pregnancy, Stress response, HPA axis, Biobehavioural coherence.

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