

## **Prospective Evaluation of Hot Flashes during Pregnancy and Postpartum**

**In press, Fertility and Sterility**, by Rebecca C. Thurston, James F. Luther, Stephen R.

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I had been curious about hot flashes, which many postpartum women reported, but I could not find publications on hot flashes during childbearing. In the differential diagnosis was panic attacks, but hot flashes are distinct from panic attacks in several ways: Hyperthyroidism is also in the differential diagnosis, but presents as a persistent sensation of being hot, rather than as hot flash "bursts."

To read the rest of the article, please [click here](#).

I began collecting data on the prevalence, course, and risk factors for hot flashes during pregnancy and postpartum. Women (N=429) were assessed prospectively during pregnancy (weeks 20, 30, 36) and postpartum (weeks 2, 12, 26, 52). A clinical interview, physical measurements, and questionnaires were administered at each visit. Predictors of hot flashes (any/none) were evaluated in binomial mixed effects models. We found that 35% of women reported hot flashes during pregnancy and 29% reported hot flashes during postpartum. Women who were younger (per year: OR(95% CI): 0.94(0.88-0.99)), had a higher pre-pregnancy body mass index (BMI; per unit increase: OR(95% CI): 1.05(1.01-1.10)), and had less than a college education (OR(95% CI): 2.58(1.19-5.60); vs.  $\geq$ college) were more likely to report hot flashes both during pregnancy in multivariable models. Higher depressive symptoms were associated with hot flashes during pregnancy (per unit increase: OR(95% CI): 1.08(1.04-1.13)) and postpartum (OR(95% CI): 1.19(1.14-1.25)). We concluded that hot flashes, typically considered a perimenopausal symptom, were reported by over a third of women during pregnancy and/or postpartum. We were intrigued because the predictors of hot flashes during pregnancy and postpartum, such as depressive symptoms, low education, and higher BMI are similar to those for menopausal hot flashes.

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From Hanish LJ et al: *Psychological Bulletin* 2008, Vol. 134(2)247–269

**Panic attack:** A sudden, intense period of anxiety or discomfort accompanied by various physical and emotional symptoms including palpitations, dyspnea, and fear of death. Panic attacks are cued by stressful situational factors, physiological sensations, and emotional cues. About 28% of adults experience panic attacks.

**Hot flash:** A rapid thermoregulatory event characterized by heat and sweat but also accompanied by palpitations, changes in breathing, and at times emotional distress. More than 70% of women experience hot flashes. Hot flashes can be triggered by ambient heat, physical activity, and stress.

Additions by K LW: Hot flashes occur during times of hormonal fluctuation (pregnancy, postpartum, perimenopause) or treatment with aromatase inhibitors, tamoxifen or leuprolide. The majority of women with panic attacks also have generalized anxiety and/or a history of anxiety disorder. Women with hot flashes may or may not have generalized anxiety or a history of anxiety disorder.

I have heard anecdotally about hot flashes occurring with premenstrual dysphoric disorder symptoms – has anyone seen any studies?