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Influence of Pregnancy Specific Anxiety on Prenatal Supplementation Behavior

Hailey Volk, Hanna Gustafsson, Jennifer Ablow, Joel Nigg, Elinor Sullivan
volkh@ohsu.edu
OHSU Department of Psychiatry

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Abstract

Feelings of anxiety during pregnancy are common, affecting up to 40% of individuals (Leach et al., 2017). This often includes worries about the health of the developing child, giving birth, and taking care of the child postnatally, symptoms that are referred to as pregnancy-specific anxiety. While some anxiety is normative, elevated levels of anxiety during gestation can adversely impact birth outcomes and postnatal development of the child (Huizink et al., 2004). It is well known that mental health can affect eating behaviors, including during pregnancy (Lindsay et al., 2017), but the association between maternal mental health and supplementation practices has received little empirical attention. Pregnancy-specific anxiety could alter maternal nutritional behaviors due to intense fears and worries about their growing child. Due to the high level of supplement use during pregnancy, alteration in supplement behaviors could be influenced by pregnancy-specific anxiety.

In a longitudinal cohort of pregnant women (N=307), respondents completed the pregnancy related anxiety questionnaire (Rini et al., 1999) and a supplement usage questionnaire in the 2nd and 3rd trimesters. Hypotheses were tested using Pearson correlations and linear regression.

Participants who endorsed greater pregnancy-specific anxiety reported taking a greater number of different supplements ($r=.12$, $p<.05$), consuming more pills per day ($r=.14$ -. 0.15 , $ps<.05$), and spending more money on supplements ($rs=.13$ -. 0.15 , $ps<.03$). These effects appear independent of the effects of generalized anxiety. Maternal concerns about the health and development of the child were associated with greater intake of micronutrients that support healthy fetal brain development ($rs=.15$ -. 0.17 , $ps<.02$). We observed few pregnancy-specific anxiety-related differences in dietary intake, suggesting that this anxiety is manifesting specifically in supplementation practices, not in healthy eating behaviors.

Maternal mood is often underassessed in pregnancy, especially feelings of anxiety. Screening for pregnancy-specific anxiety and understanding how it influences behavior is important for improving outcomes prenatally and postnatally.

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