

Revisiting ADHD Treatment During Pregnancy:

The Case for Updated Guidelines

A groundbreaking systematic review and meta-analysis published in *JAMA Network Open* has reinforced the safety of methylphenidate and atomoxetine during pregnancy, showing no increased risk of miscarriage or congenital anomalies. This finding marks a significant advancement in our understanding of ADHD medication safety in pregnancy and underscores the urgent need to reassess current clinical guidelines. However, despite these reassuring results, a considerable gap remains in clinical guidance for pregnant women with ADHD, necessitating a comprehensive review of the broader implications of untreated ADHD during pregnancy.

Expanding Our Understanding: The Need for Updated Guidelines

Historically, ADHD medications such as methylphenidate and atomoxetine have been classified as "pregnancy category C" by the FDA, indicating a lack of controlled studies on their safety. This precautionary classification has left both clinicians and patients uncertain about the best course of action during pregnancy. However, recent studies challenge these outdated assumptions:

- A 2020 qualitative review found "no convincing evidence" of adverse foetal effects from ADHD medications.
- A 2023 large-scale population study concluded that stimulant use during pregnancy does not impact foetal neurodevelopment or growth.

Despite these findings, clinical hesitancy persists, leading many pregnant women to discontinue their medications. A 2022 study published in *Frontiers in Reproductive Health* found that unmedicated pregnant women with ADHD had significantly higher risks of depressive episodes, postpartum depression, gestational hypertension, and cardiac disease. This raises a critical question: **Are we doing more harm by withholding treatment than by continuing it?**

The Impact of Untreated ADHD on Pregnancy and Early Development

Untreated ADHD poses significant risks to both maternal and foetal health. Symptoms such as executive dysfunction, emotional dysregulation, and impulsivity can contribute to inadequate prenatal care, increased substance use, higher risks of accidental injury, and elevated stress levels during pregnancy. Chronic maternal stress, in turn, has been linked to adverse foetal outcomes, including impaired cognitive development and a heightened susceptibility to neurodevelopmental disorders.

Moreover, unmanaged maternal ADHD symptoms can negatively impact infant well-being, increasing stress levels, attachment difficulties, and suboptimal early parenting behaviours. This reinforces the argument that maintaining ADHD treatment during pregnancy is not solely a matter of maternal well-being but also one of foetal and newborn health.

Why We Must Revisit Pregnancy Guidelines for ADHD Treatment

Despite the growing body of evidence supporting the safety of ADHD medications, current guidelines remain outdated and overly cautious, often to the detriment of pregnant women with ADHD. Many women are left to navigate pregnancy without adequate symptom management, increasing their risk of complications and negative maternal-child health outcomes.

The new *JAMA Network Open* study adds weight to the argument that clinical guidelines must be revised. While much research has focused on methylphenidate and atomoxetine, there remains limited evidence regarding Lisdexamfetamine (Elvanse) in pregnancy. Given its distinct pharmacokinetic profile—being a prodrug that converts to dextroamphetamine in a controlled manner—Lisdexamfetamine may present an even safer alternative to other stimulants.

The UK Teratology Information Service (UKTIS) has evaluated the use of therapeutic amphetamines, including Lisdexamfetamine, during pregnancy. Their findings suggest that early pregnancy use does not increase the risk of major congenital malformations or cardiac defects. However, a theoretical risk remains that late-stage use could impair foetal growth due to vasoconstrictive effects, potentially affecting placental blood flow. Some studies also suggest a small increased risk of preterm delivery when amphetamines are used in early pregnancy, with an absolute risk of approximately 10% compared to a background risk of 7.5%.

Additionally, the "Best Use of Medicines in Pregnancy" (BUMPS) service highlights that while therapeutic amphetamines are not known to cause birth defects, their use in later pregnancy may slow foetal growth and result in neonatal withdrawal symptoms. Infants exposed to Lisdexamfetamine in the final weeks of pregnancy may require monitoring for symptoms such as jitteriness, difficulty sleeping, and feeding issues.

Given these considerations, pregnant individuals or those planning to conceive should consult their healthcare providers to carefully weigh the benefits and risks of continuing Lisdexamfetamine during pregnancy.

The Future: Research and Policy Change

To bridge the knowledge gap and ensure that guidelines align with current evidence, future research should focus on:

- Expanding large-scale longitudinal studies to assess long-term child outcomes following prenatal ADHD medication exposure.
- Investigating Lisdexamfetamine's role in pregnancy to establish a clearer safety profile.
- Exploring the benefits of continued ADHD treatment for maternal mental health, pregnancy outcomes, and early child development.
- Reevaluating current pregnancy guidelines to provide pregnant women with ADHD informed balanced medical advice.

The decision to continue ADHD medication during pregnancy should be based on an individualized risk-benefit analysis rather than outdated assumptions or a one-size-fits-all approach. It is imperative that clinicians and patients have access to accurate, up-to-date information to make informed choices.

With the latest research reinforcing the safety of ADHD treatment in pregnancy, we must move toward a more nuanced and evidence-based approach—one that prioritizes the health of both mother and child.

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