# Foreword

# Drugs in Pregnancy: Common Use Despite Limited Information

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*Consulting Editor*

Basic science and clinical investigations continue to provide new information pertaining to drug therapy for disorders encountered during pregnancy, whether unique or preexisting. This information is now incorporated in a new *Obstetrics and Gynecology Clinics of North America* issue, "Drugs in Pregnancy," led by the Guest Editor, Catherine Stika, MD.

Guidelines for obstetric providers are provided for using common medications. Attention is balanced between safety to the fetus and maternal effectiveness and safety. For the student and practitioner of medicine, drugs of interest are generally confined to those of therapeutic value. In addition to iron, folic acid, or vitamin preparations, nearly all patients take one or more medications at some time during pregnancy. The most prescribed medications during pregnancy remain antibiotics, antiemetics, mild analgesics, and drugs for gastroesophageal reflux. The issue is well divided into subjects pertaining to medications for medical disorders (eg, diabetes, seizures, coagulation disorders, hypertension), antivirals, prevention or minimizing preeclampsia, and preparing for possible preterm delivery.

The issue begins with an overview of principles of obstetric pharmacology, including newer information about hepatic metabolism changes. Lessons learned and opportunities are then described about the inclusion of pregnant women and lactating women in clinical research. Medicines should be used during gestation only if the anticipated benefit is reasonable and considered to outweigh any known, suspected, or theoretic risk to the fetus. Conversely, drugs used to treat mothers-to-be with serious medical or mental health disorders may be intentionally discontinued before seeking advice from her obstetric provider. Special attention is devoted to opioid use, analgesia needs, and common psychiatric medications.

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Conclusions from case reports, epidemiologic studies, and animal investigations have definite limitations. Effects of a drug or its metabolites on the fetus require consideration of the dose, route of administration, duration, and fetal developmental stage of exposure. Drugs taken in high doses and near delivery may cause more immediate and sustained neonatal effects. Limited research has addressed the question of chronic exposure to therapeutic doses and subtle yet long-term consequences.

Relief of symptoms and the medical welfare of the pregnant patient must not be ignored. Drugs intended to improve maternal physical and mental health may benefit the fetus indirectly. To minimize any additional risks to the fetus or adverse side effects to the mother, a prescribed medication should be chosen properly and monitored closely, using the presumed most therapeutic dose for the shortest duration. Likewise, over-the-counter drugs for relief of symptoms should be used sparingly in the smallest dose for the shortest period. Despite this, individual variation in patient metabolism or clearance of certain drug must be appreciated, since recommended doses for nonpregnant women may be inadequate.

Careful attention was placed in this issue on the planning and writing of guidelines. Efforts were undertaken by 42 contributors specializing in general obstetrics, maternal-fetal medicine, internal medicine, and psychiatry. Their writings in the 18 articles describe not only new therapies that became available but also advances in both basic pharmacology and its application to obstetrics practice. Development of this large issue was successful due, in part, to the thoroughness and collaboration of the Elsevier publishing staff. I concur with Dr Stika's hope that this issue will provide readers with a broader understanding in caring better for our patients while inspiring investigators to pursue research in the growing field of obstetrics pharmacology.

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