



Preface

Drugs in Pregnancy: Optimizing Care for our Pregnant Patients



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Editor

Welcome to the most recent issue of *Obstetrics and Gynecology Clinics of North America* entitled, “Drugs in Pregnancy.” Because pregnant people become sick and people with medical problems become pregnant, much of the care we provide to our pregnant patients involves the administration of drugs. Excluding vitamins and other supplements, a remarkable number of people take both prescribed and over-the-counter medications during their pregnancy. A cross-sectional, multinational, Web-based study,¹ which surveyed 9459 pregnant people in 2011 to 2012, found that 81.2% respondents reported use of at least one prescribed or over-the-counter medication during pregnancy. The percentage was even higher for participants in Canada and the United States: 84.8% reported any medication use in pregnancy, with 75.6% taking drugs for a short-term illness and 64.2% reporting use of over-the-counter medications.

Historically, many publications about drug use in pregnancy have focused on fetal safety. While still cognizant of fetal safety, this issue places the emphasis on maternal efficacy. Only nine drugs have undergone the extensive safety and efficacy evaluation required by the Food and Drug Administration (FDA) to achieve approval for an obstetric indication.² Of these, seven are currently still marketed, and four are uterotonics. All other drugs we prescribe to our pregnant patients are used off-label, supported by evidence in the literature but without formal FDA approval for use during pregnancy. Some drugs are prescribed for the same indication in both pregnant and nonpregnant people, like oseltamivir for influenza, but we also use medications for conditions other than their approved indications, such as the antihypertensive nifedipine prescribed for tocolysis. Because pregnant people are physiologically and pharmacologically different than nonpregnant people, we cannot assume that the same dosing strategies will work in both groups. For example, evidence from research performed in pregnant

people has informed the creation of pregnancy-specific dosing guidelines for group B streptococci and cesarean antibiotic prophylaxis. But despite two decades of efforts by the FDA and National Institutes of Health as well as the 2018 recommendations of the 21st Century Cures Act Task Force on Research Specific to Pregnant Women and Lactating Women regarding gaps in knowledge and research on safe and effective therapies for pregnant and lactating women, timely research in this arena is woefully lagging, as witnessed by the recent delay in studying COVID-19 drugs and vaccinations in pregnant people. Our hope is that this issue of *Obstetrics and Gynecology Clinics of North America* will inspire investigators to pursue research in this exciting and growing field of obstetrics pharmacology.

However, the primary goal of “Drugs in Pregnancy” is to provide readers with a consolidated resource to aid in prescribing medications to treat common conditions that affect our pregnant patients. I am grateful to the many experts in their fields who have contributed to this publication. Topics they have addressed include the use of antihypertensive and antihyperglycemic medications, as well as antenatal steroids, tocolytics, and progestin therapy. You will find information about preeclampsia prophylaxis as well as guidelines for magnesium sulfate use in both high-income and low-/middle-income countries. Additional articles provide an overview of antiretroviral medications in pregnancy, COVID-19 therapies, and several other problematic viral infections. For our patients with chronic preexisting medical problems that require maintenance drugs while pregnant, we have included discussions of therapies for psychiatric conditions, opioid use disorder, epilepsy, and thromboembolic disease. Although we did not address uterotonics because that class of drugs has easily accessible FDA-approved guidance, we have included other labor-related topics, such as antibiotics for prophylaxis and treatment and analgesics prescribed during labor or postpartum. In addition, we start the issue with an overview of the changes in obstetric physiology and hepatic metabolism that impact drug use during pregnancy, a history of federal efforts to include pregnant and lactating people in drug research, and a discussion of common over-the-counter medications used by our patients.

We believe this first-of-its-kind resource will provide readers with a broader understanding of drug use in pregnancy and ultimately help us to better care for our pregnant patients.

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