

*Pregnant or
nursing and
taking meds?*

We've got an

THE INFANT RISK CENTER DELIVERS
RELIABLE INFORMATION ABOUT
THE SAFE USE OF MEDICATIONS BY
NURSING AND EXPECTANT MOTHERS
THROUGH ONLINE FORUMS, MOBILE
DEVICES AND, YES, THEY EVEN
TAKE PHONE CALLS.



*fast
(and)*

MARIJKE VAN HOECK, A LICENSED MIDWIFE IN BELGIUM, NEEDED INFORMATION ABOUT THE SAFETY OF NITROFURANTOIN FOR A NURSING MOTHER WHOSE BABY WAS ABOUT 3 MONTHS OLD. On a Wednesday morning in early December, she posted to the TTUHSC InfantRisk Center online forum, and Thomas Hale, R.Ph., Ph.D., had an answer: the antibiotic commonly used to treat urinary tract infections is generally safe for breastfeeding women to take if their babies are at least a month old.

For years, Hale, a pediatrics professor at the School of Medicine at Amarillo, has fielded such questions via email or by phone from health care providers and parents around the world asking about various medications ranging from antihistamines to analgesics. He is, after all, a leading expert in the field of perinatal pharmacology and the use of medications.

In July 2010, TTUHSC established the InfantRisk Center, a national call center to provide health care providers and women greater access to information regarding the use of medications during pregnancy and breastfeeding. While fielding the more than 9,000 calls received to date, Hale, the center's director, said he and the staff began to notice recurring questions about taking medications for conditions such as depression or diabetes so they added the online forums primarily as a way to streamline information to health care providers. Yet, there remained a response time that can vary depending on when the question is posted.

As of this summer, health care providers have immediate access to Hale's vast knowledge through an application for mobile devices. In July, the center launched the InfantRisk mobile application, which has a database of more than 20,000 prescription and over-the-counter medications and their safety ratings backed by Hale's years of evidence-based research.

For Kirsten Robinson, M.D., (SOM '01), assistant professor in the Department of Pediatrics at the TTUHSC School of Medicine and newborn hospitalist at UMC Health System in Lubbock, the mobile application's portability is its main benefit. Robinson has for years used Hale's book *Medications and Mother's Milk* as a resource to answer patient's nursing questions. "But I don't carry the book around with me," she said. "My phone, I do."

Each year, more than 4.3 million women give birth in the United States, and virtually all of these women will use at least one medication during pregnancy or during breastfeeding, Hale said. Knowing which medications and what amounts of them are safe during pregnancy and lactation is vital for both mom and baby's health. There are only a handful of researchers worldwide who, like Hale, study the kinetic factors of medications, including pharmaceuticals, over-the-counter and herbal remedies. He has been doing so for the past 20 years, and biennially publishes his work. *Medications and Mother's Milk*, a worldwide best-seller and one of the most trusted titles on the subject among health care providers, is now in its 14th edition and has been translated in Spanish and Japanese. Approximately 30,000 copies are bought annually, with 450,000 sold to date.

"Basically for the app, we took the information in the book and put it in an interactive format," Hale explained. "While it doesn't contain everything in the book, it's mobile and it's updated immediately as I add or change drug information online, so the provider always has the most current information that I have available."

The app, available on Apple and Android platforms, was introduced in July at the International Lactation Consultant's Conference in San Diego, Calif., and has been well-received, said Hale.

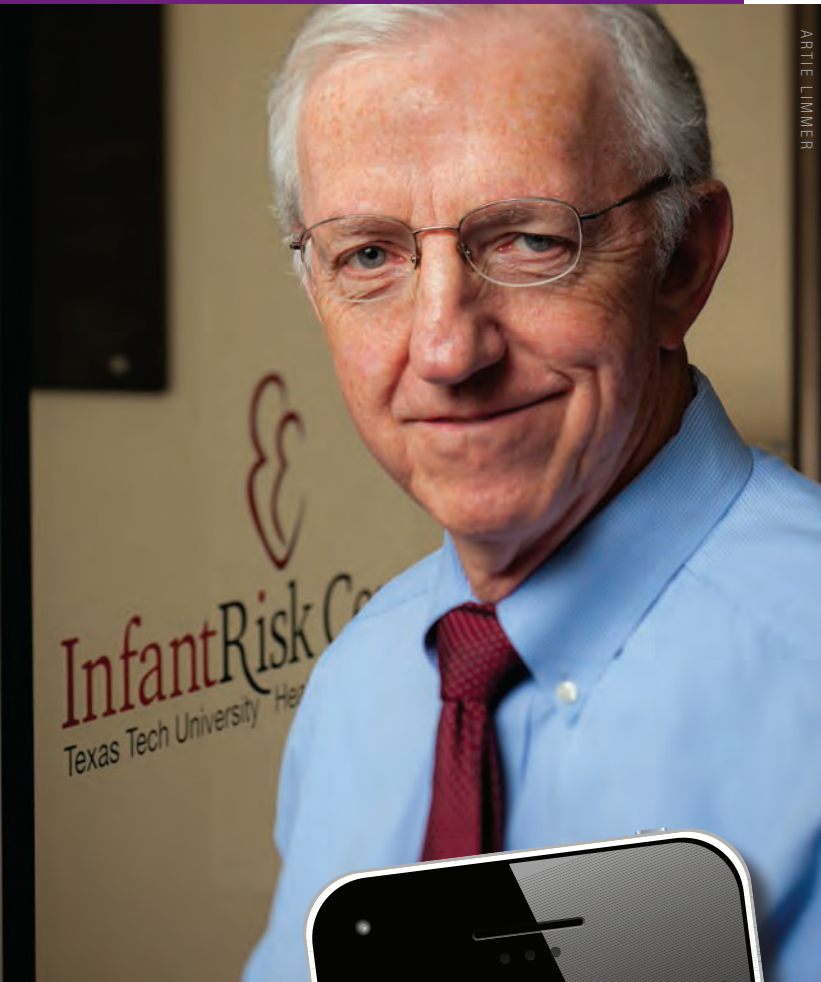
Robinson learned about the app through a TTUHSC press release. "I use the book on a daily basis, but I also take calls even when I'm not at the hospital. I like that I can look up a prescription or over-the-counter med and read it right there with the patient at the bedside."

Among the app's most useful features, she adds, is the direct dial to the call center. "I've had fantastic results getting information from their experts when I have questions about more complicated cases."

Without Hale's book and support through the InfantRisk call center and app, Robinson said the resources for lactation and medication questions are limited.

... that
... more!

BY DANETTE BAKER



ARTIE LUMMER

Perinatal pharmacologist Thomas Hale, R.Ph., Ph.D., is director of the InfantRisk Center at Amarillo.



“There are other applications, like Epocrates, but most of those are designed for medication dosing, which is really not what I need.

“This (InfantRisk resources) really is the best resource. It’s the most accurate and most comprehensive.”

Valeri Gatlin, a lactation consultant and childbirth educator at UMC Health System in Lubbock, also relies on Hale’s expertise.

“He’s one of the only ones I know of who’s continually researching the medications and how they can affect babies.” she said. “We have women who need to take medications but want to breast feed. His research gives us accurate information regarding medications and how they will affect their milk.”

Gatlin says she too trusts Hale’s conclusions, because his research is there to back it up.

Hale became interested in studying how medications affect breast milk after he was asked to give a lecture on the topic.

“The physiology of the milk was beautiful and there was almost nothing done about it,” he said.

Hale uses six factors to determine the possible transfer amount of a drug across the placenta during pregnancy or through the mother’s milk in breastfeeding. Based on these factors, he developed a classification system to identify the safety of the medication and peak feeding times after each dosage.

Gatlin too keeps a current copy of Hale’s book at her desk to answer calls she receives through a breastfeeding hotline. She has also utilized the expertise available by calling the InfantRisk Center. She recently began using a smartphone and said the app will be one of her first purchases.

“A lot of times I find myself going back to the office to get the book or look something up. I’m always making copies of the pages to give to patients so I really see the conveniences of having that resource right there on the phone for them to read.”

The book, app and forums have made a significant impact in disseminating information to health care providers, Hale said, but individuals could benefit from additional tools as well. In the works, he added, is a consumer version of the InfantRisk app, MommyMeds™, which will provide information simply by scanning the bar code of a prescription or over-the-counter medication with a smartphone.

“Of course, we always encourage women to contact the InfantRisk hotline and their physicians if they have any concerns,” Hale said. “But we believe this consumer app could provide some of the basic information and give women another layer of confidence to take charge of theirs and their babies’ health.”



Learn more about the InfantRisk Center and its mobile applications by scanning the image with your mobile phone.

*You will need to download a scanner application to your phone. Visit <http://gettag.mobi>