UNC study: new approach promises greater success for predicting drug safety

Adverse reactions to drugs are one of the leading causes of death in the United States. However, there may be a way to predict which people are most likely to suffer a toxic side effect from a drug before they have even taken it. A study published in the online journal Genome Research (May 4, 2009) describes a more effective and less costly method for testing drugs for potential toxicity. The method also could result in more people benefiting from existing drugs, says senior author David Threadgill, PhD, professor of genetics in the UNC School of Medicine and head of the genetics department at North Carolina State University. Ivan Rusyn, MD, PhD, associate professor of environmental sciences and engineering in the UNC Gillings School of Global Public Health, is a study co-author. The National Institutes of Health funded the research.

HPM students’ research contributes to Mississippi legislation

A team of UNC health policy and management graduate students helped convince the Mississippi state legislature to require communities around the state to fluoridate their water. The students include Lauren Brown, Kim Hammersmith, DDS, Ashley Kranz, Presha Patel and Bhav Shukla, as well as Nick Mosca, Mississippi State Dental Director and student in the School’s distance education DrPH program.

As part of a course on health care in the U.S., students were assigned a state and a broad topic area – in this case, “dental health.” Mosca asked the students to conduct research on water fluoridation and other states’ mandates on the process. Last fall, he shared their findings with the Mississippi State Board of Health. In April 2009, the board mandated that all Mississippi communities with populations over 2,000 add fluoride to their water supplies.

Later in April, Hammersmith and Kranz took the team’s findings to the National Oral Health Conference in Portland, Ore., where Hammersmith made a poster presentation to dentists and dental directors from around the country.

“This project was a great example of student activity being an important part of a real-world public health benefit,” says Edward “Ned” Brooks, PhD, who taught the course.

Findings were published in the May 2009 Journal of the Mississippi State Medical Association.

Getting more “health,” less “sickness” into marriage vows

Penny Gordon-Larsen, PhD, associate professor of nutrition, and Natalie The, nutrition doctoral student, found that newlyweds are more than twice as likely to become obese than are people in romantic relationships who are not living together. Women living with a romantic partner have a 63 percent increased risk of obesity. The findings were published online and in the July issue of the journal Obesity.

According to Gordon-Larsen, when people are living together – married or not – they tend to share behaviors and activity patterns. For instance, they may cook bigger meals together or eat out more often than when they were single, and may watch TV together instead of going to the gym or playing a sport.

“If this is a time of shifting behaviors and of influencing each other, then maybe it’s a good time to intervene with these young couples and get them to have a more positive effect on each other,” Gordon-Larsen says. “Maybe they can exercise together or cook healthy meals together. Couples can use that phenomenon (of shared behaviors) to their advantage if they’re aware of what’s going on.”

Minority health videoconference focused on educational inequities and health disparities

The 15th Annual Summer Public Health Research Videoconference on Minority Health was broadcast live online on June 9, 2009. The event, “Breaking the Cycle: Investigating the Intersection of Educational Inequities and Health Disparities,” featured Howard Lee, MSW, executive director of the N.C. Education Cabinet, past chair of the N.C. Board of Education and former mayor of Chapel Hill, N.C., as moderator. Panelists were Reginald Weaver, vice president of Education International and past president of the National Education Association; Dina C. Castro, PhD, scientist at UNC’s Frank Porter Graham Child Development Institute; Nicholas Freundberg, DrPH, distinguished professor and director of the doctor of public health program in the Program in Urban Public Health, Hunter College School of Health Sciences, City University of New York; and Lillian A. Sparks, JD, executive director of the National Indian Education Association.