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Colleagues,

Welcome to the spring 2015 issue of 2x2.

In these pages, 2x2 engages with an issue of concern to all of us: publication bias in clinical trials and the steps that are being taken to rein it in. We examine the possibility of a missing ingredient in the efforts of health professionals to improve nutrition for some of our most vulnerable populations. We highlight the work of a postdoctoral research scientist considering potential links between sedentary lifestyle and cancer. And we bring you just a few of the outstanding research findings of our faculty, including a program that successfully reduces teen suicide attempts, new evidence on how prenatal exposures shape health over the lifecourse, and troubling evidence on the relationship between PTSD and type 2 diabetes risk. As always, our “in the news” section highlights the role our faculty play in the public health conversation, from measles vaccination to HIV prevention.

On a personal note, while I have been an active member of the department of epidemiology for 16 years, during these initial 3 months as interim chair, I have found myself newly impressed at the scope and rigor of the research underway in this department. I look forward to bringing you more news of our work in future issues of 2x2.

Warm regards,

[Signature]
Individuals conceived in the severe Dutch Famine, also called the Hunger Winter, may have adjusted to this horrendous period of World War II by making adaptations to how active their DNA is. Genes involved in growth and development were differentially regulated, according to researchers at the Leiden University Medical Center, Harvard University, and Columbia University’s Mailman School of Public Health. Findings are published in the journal Nature Communications.

During the winter of 1944–1945 the Western part of The Netherlands was struck by a severe 6-month famine, the result of a German blockade. During this Hunger Winter the available rations provided as low as a quarter of the daily energy requirements. Children conceived—but not born—during the famine were delivered with a normal birth weight. Extensive research on the DNA of these Hunger Winter children shows that the regulatory systems of their growth genes were altered, which may also explain why they appear to be at higher risk for metabolic disease in later life.

Decades later growth genes seemed different

“The different setting of the growth genes may have helped the Hunger Winter children to withstand the Famine conditions as compared with their unexposed siblings, but these changes may likewise be unfavorable for their metabolism as adults,” said Leiden University principal investigator Dr. Bas Heijmans. For example, the altered settings were associated with LDL cholesterol at age 60, according to the authors.

The research team in Leiden compared the DNA of the Hunger Winter children, now aged 60, at 1.2 million CpG methylation sites comparing them with same-sex siblings not exposed to famine. They were able to see how the genes were differentially regulated in the Hunger Winter children, as compared with their siblings with a similar genetic and familial background. Groups of genes involved in growth and development showed a different gene activity setting. The Hunger Winter children were all approximately 60 years of age when they gave blood for DNA research.

“The potential for a gene to become active is mainly determined in the crucial weeks after fertilization. This master regulatory system that determines which genes are on and which are off is called epigenetics and can be compared to a sound technician making adjustments during a recording to get that perfect sound. Environmental factors during development can make a lasting imprint on this system,” noted Dr. Heijmans.

The authors point out that a wealth of past epidemiological studies suggests that early development is important for later health. “Thanks to the willingness of the Hunger Winter children and their families to contribute to our studies, we can pinpoint which phases of development are especially sensitive to the environment. We are currently extending our inquiries not only to those conceived during the famine, but also to those exposed during other gestation periods,” says co-author Dr. Elmar W. Tobi.

“These findings are exciting and provide tremendous opportunities for epidemiologists,” said Dr. L.H. Lumey, associate professor of epidemiology at Columbia University’s Mailman School of Public Health and senior author who collected the analyzed blood samples. “Looking at the human genome we see systematic changes in gene regulation during early human development in response to the environment. The epigenetic revolution has given us the tools to investigate these changes and look at the impact for later life.”
Half of young drivers who died in car crashes in nine U.S. states tested positive for alcohol or marijuana, or both, according to a new study of 16- to 25-year olds published in the journal Injury Epidemiology. The study, which also looked at whether young adults might substitute marijuana for alcohol use—a possible consequence of looser marijuana laws, was led by Dr. Katherine Keyes, assistant professor of epidemiology, with senior author Dr. Guohua Li, professor of epidemiology and director of the Center for Injury Epidemiology and Prevention; and doctoral graduate Dr. Joanne Brady, who is now a senior research scientist at NORC in Bethesda, Md.

“Policies related to the use of substances in the United States remain in flux; the rapid changes in marijuana use policy are a good example of this,” said Dr. Keyes. “It’s imperative to know whether there will be unintended consequences of changes in policies, including increases or decreases in harm related to other substances that are not the focus of the policy.”

The researchers analyzed 7,191 fatal accidents in 1999 to 2011, looking at the data of drivers who died within one hour of the crash. The states—California, Connecticut, Hawaii, Illinois, New Hampshire, New Jersey, Rhode Island, Washington State and West Virginia—all routinely perform toxicological tests on the blood or urine specimens of drivers who die in car crashes. The data came from the Fatality Analysis Reporting System, a census of fatal traffic crashes maintained by the U.S. National Highway Traffic Safety Administration. Nearly 55 percent of the crashes occurred in California.

Just a little over 50 percent of young, deceased drivers tested positive for alcohol, marijuana or both. Of these, about 37 percent were under the influence of alcohol, about 6 percent used only marijuana, and about 8 percent used both substances.

Drivers who were at least the legal drinking age of 21 were 14 percent more likely to have consumed alcohol compared to younger drivers. Marijuana use was also lower for those under 21, as was using both alcohol and marijuana in combination.

The study also found that once young adults reach the legal drinking age their alcohol use increases, whereas marijuana use does not. This might suggest that young adults substitute use of marijuana for alcohol if marijuana is easier to obtain. “We would conservatively predict that increased availability of marijuana to young adults in U.S. states that have passed medical and recreational use allowance may have positive spillover effects on alcohol, reducing use to some degree among young adults,” the authors say. Of the states that were studied, only California, Hawaii, and Washington had legalized medical marijuana within the study period.

However, the substitution effects between alcohol and marijuana using the 1999–2011 data were not significant, according to Dr. Li.

Keyes KM, Brady JE, Li G. Effects of minimum legal drinking age on alcohol and marijuana use: evidence from toxicological testing data for fatally injured drivers aged 16 to 25 years. Injury Epidemiology. 2015 Jan 12; 2(1).
Children exposed during pregnancy to elevated levels of two common chemicals found in the home—di-n-butyl phthalate (DnBP) and di-isobutyl phthalate (DiBP)—had an IQ score, on average, more than six points lower than children exposed at lower levels, according to a study in PLOS One by Dr. Pam Factor-Litvak, professor of epidemiology, and colleagues at the Mailman School of Public Health. The study is the first to report a link between prenatal exposure to phthalates and IQ in school-age children.

DnBP and DiBP are found in a wide variety of consumer products, from dryer sheets to vinyl fabrics to personal care products like lipstick, hairspray, and nail polish, even some soaps. Since 2009, several phthalates have been banned from children’s toys and other childcare articles in the United States. However, no steps have been taken to protect the developing fetus by alerting pregnant women to potential exposures. In the U.S., phthalates are rarely listed as ingredients on products in which they are used.

Researchers followed 328 New York City women and their children from low-income communities. They assessed the women’s exposure to four phthalates—DnBP, DiBP, di-2-ethylhexyl phthalate, and diethyl phthalate—in the third trimester of pregnancy by measuring levels of the chemicals’ metabolites in urine. Children were given IQ tests at age 7.

Children of mothers exposed during pregnancy to the highest 25 percent of concentrations of DnBP and DiBP had IQs 6.6 and 7.6 points lower, respectively, than children of mothers exposed to the lowest 25 percent of concentrations after controlling for factors like maternal IQ, maternal education, and quality of the home environment that are known to influence child IQ scores. The association was also seen for specific aspects of IQ, such as perceptual reasoning, working memory, and processing speed. The researchers found no associations between the other two phthalates and child IQ.

The range of phthalate metabolite exposures measured in the mothers was not unusual: it was within what the Centers for Disease Control and Prevention observed in a national sample.

“Pregnant women across the United States are exposed to phthalates almost daily, many at levels similar to those that we found were associated with substantial reductions in the IQ of children,” says Dr. Factor-Litvak.

“The magnitude of these IQ differences is troubling,” says senior author Dr. Robin Whyatt, professor of environmental health sciences and deputy director of the Columbia Center for Children’s Environmental Health at the Mailman School. “A six- or seven-point decline in IQ may have substantial consequences for academic achievement and occupational potential.”

The researchers recommend that pregnant women take steps to limit their exposure to phthalates by not microwaving food in plastics, avoiding scented products as much as possible, including air fresheners and dryer sheets, and not using recyclable plastics labeled as 3, 6, or 7.

The findings build on earlier, similar observations by the researchers of associations between prenatal exposure to DnBP and DiBP and children’s cognitive and motor development and behavior at age 3.

It’s not known how phthalates affect child health. However, numerous studies show that they disrupt the actions of hormones, including testosterone and thyroid hormone. Inflammation and oxidative stress may also play a role.

Women with post-traumatic stress disorder are nearly twice as likely to develop type 2 diabetes as women who do not have symptoms of the psychiatric condition, according to a study published in JAMA Psychiatry, senior authored by Dr. Karestan Koenen, professor of epidemiology at the Mailman School of Public Health at Columbia University and colleagues from Harvard School of Public Health.

One in nine women will have PTSD at some point over the course of her lifetime, which is twice the rate of men, and is associated with extreme traumatic events like rape and domestic abuse.

The study is one of the first longitudinal cohort examinations of the relationship between PTSD and type 2 diabetes and provides the strongest evidence to date of a causal relationship between the two.

Analyzing survey data collected between 1989 and 2011 from 49,739 women enrolled in the Nurses Health Study II, the researchers found that the greater the number and severity of PTSD symptoms, the greater a woman’s risk was for having type 2 diabetes—a dose-response relationship.

early 12 percent of women with the highest number of PTSD symptoms had developed type 2 diabetes by age 60, whereas fewer than 7 percent of women with no trauma exposure had diabetes. Four percent of the nurses reported the highest number of PTSD symptoms.

The researchers found that use of antidepresants or an elevated body mass index increased by half the risk of type 2 diabetes, or 34 and 14 percent, respectively. On the other hand, after adjusting for smoking, diet quality, alcohol intake, and physical activity, they found no change in the relationship between PTSD and diabetes.

The study builds on past findings by the researchers, including a 2013 study that reported a link between PTSD and obesity. Other research has shown a link between mental health issues like anxiety, social phobia, and agoraphobia and type 2 diabetes.

“Not only is PTSD devastating to mental health,” said Dr. Koenen, “but it affects physical health too, raising risk for cardiovascular disease, diabetes, and obesity.”

Dr. Andrea L. Roberts, research associate in the Department of Social and Behavioral Sciences at Harvard School of Public Health, said, “Our study adds urgency to the effort to improve access to mental health care to address factors that contribute to diabetes and other chronic diseases.” Fewer than half of Americans with PTSD currently receive treatment.

Further research is needed to identify the biochemical and possible additional behavioral changes, such as sleep disturbance, that mediate the relationship between PTSD and type 2 diabetes, according to the researchers.

School-based intervention linked to reductions in teen suicide attempts

A school-wide health intervention was associated with a reduction in teen suicide attempts, compared to programs that aimed to identify only at-risk students, according to a large study of teenagers in 10 European countries published in the Lancet.

“This study provides much-needed empirical evidence of the effectiveness of a universal school-based public health intervention,” write the authors, who include Dr. Christina Hoven, professor of clinical epidemiology in psychiatry, and colleagues from the New York State Psychiatric Institute, the Department of Biostatistics at the Mailman School of Public Health, and several institutions abroad.

In this study, called Saving and Empowering Young Lives in Europe or SEYLE, investigators tested the effects of three interventions—two of which were selective and one of which was universal—and compared each to a control situation. They recruited over 11,000 students from 168 schools in Austria, Estonia, France, Germany, Hungary, Ireland, Italy, Romania, Slovenia, and Spain and divided the schools into one of the four intervention groups.

The researchers measured the number of suicide attempts and instances of suicide ideation—thoughts of suicide—in all four groups after the interventions ended. After three months, none of the interventions had a significant effect on suicide attempts when compared to the control group, but after 12 months the universal intervention, called the Youth Aware of Mental Health Programme or YAM, was associated with a reduction in suicide attempts and “severe” suicide ideation. For every 167 students reached by the program, one suicide attempt could be prevented each year. The absolute risk of suicide fell by .6 percent, or 6 out of 1,000 students attempting suicide, and the relative risk fell nearly 55 percent, meaning that in the control group, 11 students out of 1,000 attempted suicide versus 5 out of 1,000 who attempted in the universal intervention group.

YAM was developed for the SEYLE study, taking place for five hours over the course of four weeks. Students heard lectures and participated in interactive workshops designed to make them aware of suicide risks such as depression and anxiety and help them deal with difficult life events and general stress. Students also received a workbook and were exposed to six educational posters.

One of the selective interventions, a U.S.-developed approach called “question, persuade, and refer,” trained teachers and other school employees to recognize at-risk students and link them to professional care. The other selective intervention, called “Screening by Professionals,” which was developed for SEYLE, gave students a survey that health professionals used to identify who might be at-risk of suicide attempts or thoughts and refer them to further help.

The control group did not receive an intervention, but for ethical reasons, they were exposed to the same posters as the universal group.

“Changes in suicidal behavior are perhaps more likely to occur if pupils are personally engaged in the intervention, than with adult-driven interventions, which adolescents might be reluctant to accept,” the authors write about the YAM’s apparent success. “The YAM, through active participation might also have provided the pupils, most probably for the first time, with an opportunity to think, verbalize, and discuss among themselves a range of issues related to mental health.”

Scientists at Columbia University’s Mailman School of Public Health report that children with autism spectrum disorder (ASD) had two-and-a-half times the odds of persistent gastrointestinal (GI) symptoms as infants and toddlers than children with typical development. Results are published in JAMA Psychiatry.

The study is based on a large longitudinal survey of Norwegian mothers who were asked about their child’s GI disturbances during the first three years of life. Questionnaires were completed when the children were 18 and 36 months of age.

Mothers of children with ASD were also more likely to report one or more GI symptoms in their children in either or both age ranges compared with mothers of children with typical development. And children with ASD were more likely to have GI symptoms than children with developmental delay, suggesting that the disturbances were not simply secondary to developmental delay associated with autism.

“We not only learned that these symptoms appeared early in infancy; we also found that children with ASD were at significantly increased risk for these symptoms to persist compared with typically developing children,” says Michaeline Bresnahan, PhD, first author and assistant professor of Epidemiology at the Mailman School.

“The longitudinal nature of the study allowed us to uncover the presence of GI complaints in early life—before mothers knew their child would be diagnosed with autism,” says Ezra Susser, MD, DrPH, co-senior author and professor of both Psychiatry and Epidemiology at the Mailman School.

“The longitudinal nature of the study allowed us to uncover the presence of GI complaints in early life—before mothers knew their child would be diagnosed with autism,” says Ezra Susser, MD, DrPH, co-senior author and professor of both Psychiatry and Epidemiology at the Mailman School. “This is yet another demonstration of how longitudinal cohort research can shed light on features of autism.”

While higher rates of GI symptoms are associated with autism, Dr. Bresnahan cautions that “the vast majority of children with these symptoms won’t go on to develop autism, nor do all people with autism have GI problems as children.” Bresnahan adds, “GI symptoms alone need not be cause for alarm.”

“Although the connection of GI disturbances to autism remains unclear, the presence of GI symptoms in early life may not only help to identify a subset of children with autism who require clinical input for their GI issues, it may also open new avenues for determining the underlying nature of the disorder in that subgroup,” notes Mady Hornig, MD, co-first author of the study and associate professor of Epidemiology at the Mailman School.

“Delineating factors that disrupt signaling along the gut-brain axis while the brain is still under development may ultimately provide a key to understanding how the disorder occurs in the subset of children with autism and GI complaints,” adds W. Ian Lipkin, MD, the study’s senior author, and John Snow professor of Epidemiology and director of the Center for Infection and Immunity at the Mailman School.

Additional co-authors include Andrew F. Schultz from the Mailman School; Nina Gunnes, Kari Kveim Lie, Per Magnus, Ted Reichborn-Kjennerud, Christine Roth, Synnve Schjalberg, Camilla Stoltenberg and Pål Surén from the Norwegian Institute of Public Health; and Deborah Hirtz from the National Institute of Neurological Disorders and Stroke.

The research was supported by the Norwegian Ministry of Health and Care Service, the Norwegian Ministry of Education and Research, and grant NS47537 from the National Institute of Neurological Disorders and Stroke of the National Institutes of Health. The authors report no conflicts of interest.

Teens getting less sleep than 20 years ago

In the last 20 years, the Internet entered the lives of most Americans, social media took off, college admissions became more competitive, and obesity rates rose. These are several factors that may be linked to a significant decline in sleep reported by a new study by Dr. Katherine Keyes, assistant professor of epidemiology; epidemiology research assistant Ms. Ava Hamilton; and colleagues at University of Texas and University of Michigan, published in Pediatrics.

The study is the first to comprehensively evaluate teen sleep trends in the U.S. by age and time period. Researchers analyzed survey responses of students in 8th, 10th, and 12th grade from 1991 to 2012 to see how often they reported getting seven hours or more of sleep.

Female students, racial and ethnic minorities, and students of lower socioeconomic status were less likely to report getting seven or more hours of sleep each night compared with their male counterparts, non-Hispanic white teenagers, and students of higher socioeconomic status, respectively, the study found. It is recommended that teens get nine hours of sleep.

To learn more about the study, read the news coverage:
- wapo.st/1wpgmG7
- ti.me/1DqL3de
- abcn.ws/18mc7J
- bit.ly/1MSgcf8

And visit the Mailman School of Public Health website:
- mailman.columbia.edu/news/teens-increasingly-sleep-deprived


Ebola outbreak will take a mental health toll in West Africa

In addition to the loss of life and the damage to healthcare systems, the Ebola outbreak in West Africa poses challenges to the mental health of the people of Guinea, Sierra Leone, and Liberia, says a paper by Dr. Yuval Neria, professor of medical psychology, and colleagues published in JAMA. In Liberia and Sierra Leone, there is only one trained psychiatrist, a few dozen mental health nurses, and 100 trained paraprofessionals to assess and manage mental health disorders. The authors suggest a proactive approach that makes services available to bereaved family members, survivors, and others significantly affected by Ebola. “An effective response is essential...in West Africa to address the psychosocial needs associated with population-wide direct exposure to disease, death, and distress,” the authors write.


Study predicts decline in drug overdose deaths

Although there has been a sharp uptick in drug overdose deaths in recent years, particularly from misuse of prescription drugs, a new analysis in the journal Injury Epidemiology by Ms. Salima Darakjy, a doctoral student, and her faculty advisers, Dr. Joanne Brady, a doctoral graduate; Dr. Charles Dimaggio, associate professor of epidemiology; and Dr. Guohua Li, professor of epidemiology. Today more than 40,000 Americans die each year of an unintentional drug overdose, 10-times the number who died in 1980. The researchers used a principle called Farr’s Law, developed in the mid-1800s by British epidemiologist William Farr, to run their analysis. Studying the smallpox epidemic of that era, Farr found the rate and duration of a decline in deaths mirrored its earlier rise. The Columbia epidemiology researchers believe the rate of deaths has already increased and will peak in 2017, falling steadily after that. “If the epidemic of drug overdoses is indeed waning,” the researchers conclude, “it may imply that the intensified efforts in recent years, such as enhanced prescription drug monitoring, are working and should be continued.”

Related media coverage in Health Canal bit.ly/1uahQ5Q

Programs to improve diets may miss a cultural ingredient

Looking beyond grocery stores and nutrition guidelines

BY ELAINE MEYER
In the U.S., low-income, ethnic minorities are more likely to be obese and thus at risk for a variety of chronic illnesses compared to white Americans. While public health efforts often focus on promoting healthier diets and improving access to grocery stores, they may miss their mark if they do not address a key ingredient: culture.

That is a takeaway from two studies of Hispanic women conducted by faculty at Columbia Mailman School of Public Health’s Department of Epidemiology and collaborators. The research—one released this January in the Journal of the Academy of Nutrition and Dietetics and another that was recently highlighted in Latino USA—suggests public health efforts to improve diets can benefit from understanding cultural preferences.

“It’s odd, if you read the entire literature on this topic, there are almost no studies where people just sat down with immigrant families and asked them what they want or what they believe is healthy food,” says Dr. Andrew Rundle, associate professor of epidemiology at Mailman and co-director of the Obesity Prevention Initiative at Columbia.

Farmers’ markets and slaughterhouses

For many years, Dr. Rundle has investigated issues of food accessibility in lower income minority neighborhoods in New York City, studying how availability of healthy food is related to obesity and other health measures. While it is a widespread belief in food policy circles that living in “food deserts” that lack grocery stores turns many ethnic minorities to a diet high in fat and processed foods, few studies have documented where lower income minority groups shop.

That was the goal of Dr. Rundle and his collaborator, Dr. Yoosun Park, an associate dean and professor at Smith College School of Social Work. (The two are also married). Dr. Park, who specializes in qualitative research that analyzes the content of interviews—spoke with 28 immigrant Hispanic women to find out how where they shop to maintain a healthy diet.

“The big finding from that work was that the women really didn’t trust supermarkets,” says Dr. Rundle. The women placed a high value on freshness and locally sourced food and “didn’t like the idea that there was food being chopped or frozen weeks ago, trucked across the country, that it sat in a freezer cabinet,” Dr. Rundle adds. “They actually think food in the supermarket doesn’t taste very good—that it’s kind of bland and empty.”

The women instead prefer farmers’ markets, slaughterhouses, CSAs (“community...
supported agriculture” programs) and other “alternative food distribution systems,” says Dr. Rundle, “in many ways because these were the systems they were used to in their home countries.”

Further analyzing survey data from 345 Hispanic women, Dr. Rundle and his team found that those who lived nearer to farmers’ markets consumed more produce than those who didn’t and that living near a grocery store was not associated with increased produce consumption. The study suggests that the hurdle for improving this population’s diet is not in getting them to like eating fresh, healthy foods but in increasing access to the local, organic food sources that in the U.S. are typically more available—because of cost and location—to wealthier Americans. As the study notes, in the U.S., the participants are “constrained by the food environments in which they now live.”

“What they are really talking about is local food, organic, locavore,” says Dr. Rundle. “They said, you know what it’s more expensive to buy food in the farmers’ market, but the food is so much better.”

**Beyond the doctor’s office and into the kitchen**

The idea that food choice is shaped by cultural preferences was also the basis of a study of Hispanic women led by Dr. Heather Greenlee, an assistant professor of epidemiology at Columbia’s Mailman School who investigates whether lifestyle behaviors can improve cancer outcomes. Although Hispanic women are at greater than average risk of cancer, with low physical activity rates, poor access to quality healthcare, and high rates of obesity, they are the subject of very few cancer studies, says Dr. Greenlee. “This is a unique population in which to conduct these kinds of trials. Most behavioral breast cancer studies are among well educated white women,” she says.

It is recommended that women with breast cancer eat a diet high in fruits and vegetables, but research has found that providing dietary recommendations alone does not lead to sustained changes in what people eat. Lower income groups are particularly less likely to follow nutrition guidelines.

Dr. Greenlee’s interest was piqued when she came across a program designed to help women adhere to the recommendations. The program, run by a New York City-based nonprofit, Cook for Your Life, helps breast cancer survivors learn how to cook healthy and tasty food during treatment, tailoring classes to reflect the cultural background of participants.

Dr. Greenlee contacted Cook for Your Life founder Ann Ogden Gaffney—a breast cancer survivor herself—to partner on a study of a program for Latina breast cancer survivors. Many were first-generation immigrants from Spanish-speaking Latin American countries who live in communities with poor access to quality grocery stores.

Conducted on Saturday mornings over a three-month period, a Cook for Your Life team made up of a chef and a nutritionist taught the women to cook Latin-inspired recipes using traditional spices and healthy ingredients, sometimes working in produce that seemed foreign to the group, like kale and Brussels sprouts. The program also familiarized the women with local markets and grocery stores that sold fresh foods and helped tailor the shopping trips to the women’s budgets.

A typical Saturday morning might be spent at Washington Heights’ Green Market choosing fresh produce, or at a teaching kitchen at the Columbia Teachers’ College campus learning how to cook healthier versions of some popular Hispanic fare—for example, baking plantains instead of frying them, or using brown rice in lieu of white rice. “Once they get into coming to the classes and they love it, they just come rain or shine,” says Ogden.

After six months the women in Cook for Your Life had increased the amount of fruits and vegetables by over 2.5 servings a day, though there was not a statistically significant decrease in the amount of fat consumed. Although the study was not specifically designed to monitor weight loss, the women in the Cook for Your Life program lost 2.5 percent of their body
weight, compared to women in the control group who gained 3.8 percent.

At a Cook for Your Life session in March 2012 at Little Apple, a Washington Heights restaurant that specializes in healthy Dominican fare, the women spoke enthusiastically about how they had started substituting olive oil for corn oil and congratulated each other on weight loss. A participant said her new eating habits had inspired her daughter to eat less frequently at Wendy’s and McDonald’s. The family now seeks out grocery stores and markets for food rather than bodegas and fast food restaurants, even if those establishments are not as close to their home. “It’s like how we eat in our home countries,” a participant said. A wheelchair-bound breast cancer survivor shared some happy news to the group: she had just found out she was cancer free. She had also lost 10 pounds in the previous 6 months. Ela Guidon, the program’s chef, teared up at these items of news.

“When you see what they are going through,” said Guidon. “We are so encouraged by their commitment to changing how they eat.”

Like Dr. Rundle’s study, Dr. Greenlee’s suggests that the impediment for her population is not necessarily living in a food desert. She points out that Washington Heights, where many of the women live, has lots of fruit and vegetables, including several green markets and outdoor produce stands. “You just have to know where to go and what you can afford. We showed our study participants that they can afford to buy healthy foods in their own neighborhoods.”

Policy implications
Results from both studies have larger implications for policy and medical research and practice. Currently, the departments of agriculture in New York and New Jersey have programs to help farmers grow foods for ethnic and immigrant populations in New York City, which could be expanded. There also could be the possibility to expand New York’s “health bucks” program, which gives people using EBT—also known as food stamps—additional dollars for shopping at participating farmers’ markets.

Meanwhile, policies New York City’s Fresh Initiative, which incentivize grocery stores to move into low-income neighborhoods, might be missing the mark. Unlike Whole Foods and other supermarkets that cater to wealthier New Yorkers, those that move into low-income and immigrant neighborhoods tend to sell food that the people in Dr. Rundle’s study perceived as of low quality.

Dr. Greenlee says her study demonstrates why it is important to conduct more research into minorities and lower-income groups. “If we can demonstrate that behavior change interventions can work in vulnerable populations, I think it’s easier to extrapolate our findings to non-vulnerable populations. Whereas if we conduct our research in non-vulnerable populations, it’s very difficult to extrapolate our findings to vulnerable populations.

“We hear clinicians say, ‘nobody changes their diet, you can’t do it,'” she adds. “I think we’ve shown that assumption to be wrong. We can be successful. We can design interventions that are testable in underserved populations, and there’s a lot of work to do here.”
Examining a link between sitting and cancer

Perspective from a sedentary behavior researcher

By Christine Sardo Molmenti, PhD, MPH

It can seem like we are inundated with this headline almost every week. Some media sources have gone so far as to ask if sitting is the new smoking. But what exactly does this all mean?

Decades of research points to the complex health problems associated with prolonged sitting, in large part due to its association with central adiposity, weight gain, all cause and cardiovascular mortality, as well as type 2 diabetes and some cancers.

In my own research, I look at the relationship between sedentary behavior and colorectal adenomas, a primary point of prevention for colorectal cancer. I began this line of investigation unintentionally. I had set out to study the association between physical activity and risk in recurrence of colorectal adenomas—precursor to colorectal cancer.

However, when the data was not what I expected, I began to explore other variables in my dataset such as “leisure time” activity and found that most of these activities were considered sedentary. Upon further review, I found that sedentary behavior is distinctly different from the person who simply doesn’t get regular exercise. This includes time spent “sitting” in activities such as reading, writing, working on the computer, laying down, riding in a vehicle, and watching television.

As most of us probably know, our modern environment has made it very easy to spend the majority of our day sitting. Americans spend an estimated 50-70 percent of their waking hours in sedentary activities, which translates to about 9.5 hours per day. The remainder of time we spend in light-intensity physical activity. Even the most active among us spend less than 5 percent in moderate-rigorous activity, according to studies.

I co-led a pooled analysis of 1,730 participants in two National Cancer Institute-funded phase three clinical trials who had one or more colorectal adenomas removed during a colonoscopy in the six months prior to their trial enrollment. These participants completed an activity frequency questionnaire about their leisure, recreational, household, and other activities. I re-analyzed my data based on the metabolic equivalent of activities participants reported. All participants underwent a follow-up colonoscopy.

Men who reported spending more than nine hours a day engaged in sedentary behaviors were 47 percent more likely to experience colorectal adenoma recurrence compared with men who spent fewer than approximately seven sedentary hours a day. Interestingly, we did not find a similar result for women.

This study adds to a growing body of research that finds health risks associated with long periods of sedentary behavior. It suggests that those employed in sedentary
occupations or who are sedentary on a regular basis, especially men, should find ways to break up prolonged periods of sitting.

When I began my analysis, I was a strong advocate of engaging in regular physical activity, and I still am. However, optimal health goes beyond achieving the recommended 30 to 60 minutes of moderate-vigorous physical activity on most days of the week. We must also find ways to sit less.

Questions remain, such as, what is the threshold of sedentary behavior needed to produce a harmful effect? And over what period of time does one need to remain seated for it to qualify as a health risk? In addition, novel ways to quantify sedentary time require further investigation.

Companies such as General Electric, Cisco, Microsoft, and SAS have provided on-site gyms and sports facilities for their employees to break up prolonged periods of sitting. Other companies provide stipends or full reimbursement for gym memberships. Under the Workforce Health Improvement Program Act, the Internal Revenue Service allows businesses to deduct the costs of providing on-site gym facilities for employees, which provides an incentive to promote health and wellness in the workplace.

Compared to physical activity, which often poses obstacles and additional expense, such as finding and joining a gym, acquiring fitness equipment, and finding 30 to 60 minutes per day to dedicate toward working out, reducing sedentary behavior can be achieved with “micro-interventions.” Choose to stand instead of sit, set a timer to stand or walk every hour for five to ten minutes, stand during commercials when watching TV, stand in meetings and while talking on the phone, and limit children’s screen time to no more than two hours each day, as per the guidelines of the American Academy of Pediatrics.

Bigger commitments include the installation of a standing workstation or treadmill-desk in your office, which a growing number of companies are providing for their employees.

We also need to be sensitive to the fact that many peoples’ livelihoods revolve around sitting, such as, truck drivers and office workers. How can we help those who don’t have a choice?

The standard advice is to get up from your desk and walk around more, and other similar strategies mentioned above. But what else can we do? It’s easy for people to sit. How can we make it easy for people to stand?
Ending publication bias

How much do we actually know about our medical treatments?

BY ELAINE MEYER

the2x2project.org

2x2.ph/publication-bias
Most of us who take a medication expect our doctor has prescribed it based on evidence. But it turns out that basic assumption is often incorrect.

In fact, many clinical trials of medical treatments—particularly negative ones—never make it to publication in academic journals, which doctors consult to make medical decisions and the media publicize in their health reporting. According to a 2014 systematic review in PLoS, more than half of trial results are not published, and those that are published are three times more likely to come out with positive rather than negative results.

“I think your average consumer thinks that their treatment is based on data or research—that it’s odd that it is not,” says Dr. Kay Dickersin, the director of the Center for Clinical Trials at Johns Hopkins Bloomberg School of Public Health.

Even studies that are published may over-emphasize positive results—a kind of spin that we are conditioned to expect from politicians but not from clinical researchers. These are just some of the many misleading practices known as publication bias, and they can seriously skew the evidence doctors and patients use to make health decisions.

“We cannot know the true effects of the medicines we prescribe if we do not have access to all the information,” Dr. Ben Goldacre, a physician and science writer said in a 2012 TedMed Talk, which became an opening salvo for a science transparency group he founded called AllTrials that goes after this problem.

In recent years, a variety of governmental and nongovernmental groups are forming or stepping up efforts to bring transparency to medical research. What remains to be seen is whether these efforts can attack a problem that has persisted for decades.

Tamiflu and antidepressants

The story of Tamiflu is perhaps one of the most headline grabbing cases of publication bias. This anti-influenza drug, also known as oseltamivir—along with a similar drug called zanamivir, marketed as Relenza—came under scrutiny by the Cochrane Collaboration, an independent NGO that works to acquire data to conduct accurate systematic reviews.
After engaging in a drawn out battle for the regulatory documents that formed the basis for approval of the two drugs, Cochrane “came to the conclusion that there were substantial problems with the design, conduct, reporting and availability of information from many of the trials,” according to a statement published last year. Cochrane concluded from its analysis of the trials that the drugs did little to prevent flu symptoms beyond reducing the duration of the virus by half a day. The report called into question the billions of dollars governments including the U.S. have spent stockpiling Tamiflu to prevent a flu outbreak and the lack of easy access to important regulatory data.

In another widely covered story, a 2008 New England Journal of Medicine study of 74 FDA-registered studies of a dozen popular antidepressant drugs, like Prozac, Zoloft, and Paxil, found 94 percent in the medical literature were positive. But when the researchers filed freedom of information requests for FDA review documents, they found a good chunk of those trials were not published. Of 33 trials the FDA had perceived as having negative or questionable results, 22 were not published, and 11 were published but communicated positive results. (One unpublished trial was positive). The study was led by Dr. Erick Turner, a former FDA medical officer who had begun to question the veracity of the medical literature while working on the drug approval process at the agency.

In 2012, GlaxoSmithKline, the maker of Paxil, even pled guilty and paid a $3 billion fraud settlement in part for concealing negative information about the effects of the drug on children and teens.

Both the Tamiflu and the antidepressant studies have faced criticism, as studies on hot button issues often do. However, they have drawn attention to the issue of withholding crucial studies—whether intentionally or out of ignorance or an inability to publish the study. Meanwhile, new revelations continue to document cases where negative information about medical treatments was withheld from the public at various stages of the clinical trial process.

“If you start to dig down...you sort of wonder what this is like for every drug. Is this really a problem across all classes of all drugs? What can we really believe? And very quickly you’re sort of down a rabbit hole,” says Dr. Joseph Ross, an associate professor of internal medicine at Yale University.

**Trial registries**

As the problem has become more evident, the U.S. government has tried to catch up by passing regulations requiring more transparency. In 1997, Congress passed a law requiring all trials file public information at their outset. In 2000, the National Institutes of Health launched a web site called ClinicalTrials.gov where this information would be made available. “Before clinical trial registration, no editor could have known what data was being collected as part of a trial,” says Dr. Ross.

In theory, academic journals could now use the registry to double check the veracity of an article they were planning to publish—to make sure a trial reported on what it originally set out to measure.

In 2007, Congress went even farther, passing the FDA Amendments Act, which mandated reporting final study results of a drug, biological product, or device to ClinicalTrials.gov within a year after the trial concluded. The rules apply to drugs that are being studied, manufactured or seeking new drug status in the U.S.

Today, over 178,000 clinical trials are registered in ClinicalTrials.gov—the largest registry in the world—and 15,000 report...
results, according to the National Institutes of Health. To the 2007 law’s credit, trials registered increased significantly from three years before that year to three years after, according to a 2012 study in JAMA, and the number of missing data elements declined overall.

Dr. Dickersin, an early advocate for trial registries, believes ClinicalTrials.gov has provided a good picture of where the problems are. “It’s clear that there is failure to report,” she says. For instance, fewer than half of registered studies made it to a journal publication, according to a study published in 2012 by Dr. Ross and colleagues in the BMJ. Another BMJ study from 2013 found that nearly 30 percent of trials of at least 500 participants registered in ClinicalTrials.gov remained unpublished three years after they were completed.

ClinicalTrials.gov also may be providing a check on spin. A study published last year in JAMA found cardiovascular trials that had registered were less likely to report positive findings than those not registered. According to a 2013 study in PLoS, “serious adverse events,” were reported only 63 percent of the time in journal articles compared to 99 percent on the registry.

And studies published last year in Annals of Internal Medicine and JAMA found more accurate information in ClinicalTrials.gov than published papers. “This is a problem,” says Dr. Philippe Ravaud, director of the Centre of Epidemiology at the Hotel-Dieu in Paris, adjunct professor of epidemiology at Columbia University’s Mailman School of Public Health, and the senior author of the PLoS study. “It questions the narrative form of published articles.” (More on that later).

Many trials delay reporting on ClinicalTrials.gov. Nearly 80 percent of trials had not reported their results within a year of concluding, according to a 2011 study in the British Medical Journal. Only 11 percent of obstetric studies completed over two years ago had reported their results after two years, according to a 2014 study.

The lateness points to the lack of enforcement of the rules for reporting to ClinicalTrials.gov. Several sources interviewed for this article say they are not aware of the FDA ever fining an organization for failing to report trial results, even though the agency is authorized to collect civil penalties for violation of the regulations.

One deterrent to posting on ClinicalTrials.gov may be that it is a challenging website to use. A 2011 study found it takes about 38 hours to submit basic results on the site, and an additional 22 hours to collect the data and information required to register. Still, one wonders whether studies that are not being reported are more negative studies.

Even a little bit of enforcement—such as an email reminder—could improve reporting. Dr. Ravaud and his team put this to the test when they sent emails to investigators in 190 studies that had not posted results on ClinicalTrials.gov. The researchers disguised the reminders as surveys notifying recipients of their lateness and querying them about why they had not posted their results. They compared them to a control group that did not receive emails. After three months of receiving the email, there was little difference in number of studies posted by the control versus intervention group, but after six months, there had been an increase in those who posted their study results among the intervention group. The authors noted that the message might be more powerful if it came from regulators and threatened some kind of fine or sanction.

Targeting the journals

Because journals are the gateway through which medical research is publicized, some experts believe they are the best hope for cracking down on publication bias. “The best enforcement is really going to be the journals refusing to publish,” says Dr. Dickersin.

The goal of the international EQUATOR network, short for “Enhancing quality and transparency of health research,” is to improve the standards of what is published in medical journals. EQUATOR helps journals and medical researchers use what are called reporting guidelines in the writing and editorial process. The guidelines, created for many different kinds of studies, are written by experts in study design.

“We try to improve the quality of reporting after the submission of the papers. We ask editors to check if the papers follow the reporting guidelines,” says Dr. Ravaud.

While most journals endorse the guidelines, only a few require authors to submit a checklist ensuring they have met them. “If a journal is going to be really tough, they’ve actually got to pay a technical editor to do that. Some people say, can peer reviewers do that? But peer reviewers
are not paid,” says Dr. Elizabeth Wager, who consults editors, scientists, and writers on medical publishing and is a visiting professor at the University of Split School of Medicine in Croatia.

Dr. Wager suggests journals require articles to follow a very structured template, similar to trial registry requirements, but she acknowledges it would not be popular with academics. “I think [journals] know authors don’t like that. [Authors have] got a funny idea that academic writing should be like creative writing,” she says.

Targeting the investigators

Dr. Simera, who heads program development for EQUATOR based at the Centre for Statistics in Medicine at Oxford University, believes the push for accuracy and transparency should take place at research institutions. “At the end it’s researchers, scientists who are ultimately responsible for what they produce. You can say: editors, peer reviewers, they should spot the mistake. But it’s the manuscript that should be already good enough that things are not missing,” she says.

Dr. Ravaud, who directs the French EQUATOR Center says that to ensure better publications “we have to move to be able to intervene during the process of writing the first draft of the manuscript.”

There realities of the current incentive structure to publish positive results in top journals that make spending time improving manuscripts a tall order. Academics may be at work on multiple studies as well as trying to write new grants. It may not make sense for them to spend their time trying to publish a negative study when positive studies are more likely to get published in journals. Dr. Simera acknowledges as much: “Competitiveness in research is rising. People are rushing a lot more.”

Sometimes, Dr. Wager points out, medical researchers are also ignorant, especially those who may not have been trained in a discipline like epidemiology that emphasizes study design. “I do a lot of training with doctors and it surprises me how unaware they are of reporting guidelines,” she says.

Universities lack a single compliance office that can guide medical academics—some of whom may not be trained in study design, says Dr. Ross. “No one has the resources to do it, but academics are worse off.”

Incentivizing data sharing

Clinical trial registries require publication of the results of studies, but a large portion of data from clinical trials is never published or made available. Concerns about publication bias, among other things, has driven a movement toward data sharing. “Almost all other professions share a lot more data under much more liberal circumstances than we do,” said Dr. Andrew Vickers, an attending research methodologist at Memorial Sloan Kettering Cancer Center, during a Columbia University Epidemiology Scientific Symposium about health research outcomes in February.

There are many barriers to sharing of clinical trial data, such as issues surrounding privacy of patient health information and the extensive technology infrastructure it may require. But as suggested by an Institute of Medicine report released in January, clinical trial data sharing is the future. The report outlines a framework for developing “a culture, infrastructure, and policies” to foster data sharing among the multiple stakeholders involved. “We think responsible sharing of clinical trial data will advance the science that underlies as the foundation of good clinical care,” said Dr. Bernard Lo, president of the Greenwall Foundation and the chair of the committee that published the report, at a press briefing.

The movement toward sharing data will be a big undertaking for many and is not going to solve the publication bias issue overnight. “Moving from a sharing-optimal to a sharing-required environment is a fundamental change that requires modifying a complex ecosystem of incentives and controls involving a network of industry, academia, regulators, journals, funders, providers, and patients. Changing any element affects all of them,” wrote Dr. Steven N. Goodman, a professor of medicine and health research at Stanford who was on the report committee, wrote in the Annals of Internal Medicine.

“Fake fixes”

Dr. Goldacre of AllTrials to refer to journal guidelines and trial registries as “fake fixes,” a term he used in his 2012 TedTalk and still stands by today.

“There’s still no routine audit of whether registration and reporting are enforced, so there’s no accountability, and no way of knowing the levels of compliance,” Dr. Goldacre wrote in an email in January. He also points out that ClinicalTrials.gov only requires registration of trials that were ongoing during or after the 2007 FDA Amendments Act was passed.

He doesn’t have much faith that stepped up enforcement of registry requirements will happen anytime soon. Thus, his organization AllTrials has tried to “take the bull by the horns” and directly audit company’s public statements and their actions. They plan to publish the results.

“That way,” he writes “doctors, patients, researchers, journalists and policymakers can all see for themselves who are the worst offenders, but also, crucially, who is showing leadership.”
How did we arrive at a measles outbreak?

The upsurge in measles cases is largely explained by an increase in the number of unvaccinated children, says Dr. Abdul El-Sayed. “The tragic irony of vaccination in America is that it has become a victim of its own success,” he writes. Read more in Project Syndicate. › bit.ly/1c4fc9J

Lower vaccination rates pave the way for permanent resurgence of measles

Measles could become permanent in the U.S. if vaccination rates fall below 90 percent says Dr. Stephen Morse in ABC News. Currently they are just over 91 percent. Dr. Morse was a guest in an “explainer” segment on WNYC’s Brian Lehrer Show to discuss the recent measles outbreaks, the safety of vaccinations, and the principle of herd immunity. › bit.ly/1zUl287

The latest measles outbreak and herd immunity

Dr. Stephen Morse was a guest in an “explainer” segment on WNYC’s Brian Lehrer Show to discuss the recent measles outbreaks, the safety of vaccinations, and the principle of herd immunity. Listen to the show. › bit.ly/1zUl287
Spotty on Measles?
Everything you need to know about the virus and its vaccine

In 2000, the Centers for Disease Control and Prevention (CDC) announced that measles was eliminated from the United States. The highly contagious infection was no longer ever-present on home soil, thanks to an effective Measles, Mumps, and Rubella (MMR) vaccine, licensed in 1971, and a vaccination program refined to emphasize two doses over one. Between 2001 and 2011, the CDC reported 63 outbreaks, with a median number of six cases per outbreak. The majority of these outbreaks were concentrated in communities with low MMR vaccination rates, primarily affecting those who were not vaccinated or had unknown vaccination status.

Measles cases were on the rise in 2014, but came to the fore of national news late last year, with an outbreak at California’s Disneyland theme park. By February 13, 2015, 141 cases had been reported across 17 states, 80 percent of which stemmed from the Disneyland outbreak.

Whither measles? What does it look like, and how does the MMR vaccine work? From basic reproductive rates to herd immunity, this infographic has got you covered.

Originally published at the2x2project.org
**Virus Profile: Measles Virus**

- **Where it lives:** Nose, throat, lungs
- **How it's spread:** Coughing, sneezing, contact, contaminated surfaces/air
- **Contagiousness:** Very contagious. Someone with measles can infect up to 18 people.

**Contagiousness Scale**

- Swine flu: 0 people
- Smallpox: 4 people
- Measles: 20 people

- **What an infection looks like:**

  **Infected**
  - Virus gains strength
  - Symptoms appear

  **Symptoms start here**

  **Symptoms appear**
  - High fever
  - Runny nose
  - Red eyes
  - Cough

  **Symptoms spread here and here**

  **Rash appears**

  **Infectious period**

  **Hospitalization**

  **Serious complications**

  **Brain swelling**
  - Hearing loss
  - Pneumonia
  - Death
  - Seizure

**A Note About Measles Elimination**

In 2000, the Centers for Disease Control and Prevention (CDC) announced that measles was "eliminated" from the U.S. Even so, outbreaks have continued to occur as people travel to locations where the virus persists and return to largely unvaccinated communities.

**Vaccine Profile: MMR (Measles, Mumps, Rubella) Vaccine**

- **Ingredients:** Weakened viruses to help the body produce a faster response to future infection
- **Administration:** Two shots
  - **1st shot:** 12-15 months old
    - With 1 MMR shot, only 5 people out of every 100 would be infected w/measles.
  - **2nd shot:** 4-6 years old
    - With 2 MMR shots, only 1 person out of every 100 would be infected w/measles.

**A Note About the 2014 Disneyland Outbreak**

Last December, 42 measles cases were linked to an initial exposure at Disneyland. Of the 42 cases, 5 had previously received 2 or more MMR shots. As the third-most visited theme park in the world, Disneyland is an ideal incubator for contagious diseases.

- **"Herd immunity":** If 94% of the population is vaccinated, those who are too young or too sick for vaccination will be protected. Even if enough people are vaccinated state-wide, low vaccination rates locally (e.g., at school) can result in outbreaks.
- **Vaccine exemption policies differ across the country:**
  - Non-medical exemptions are now under scrutiny.

**What Exactly Is Going On With Measles?**
Higher rates of incarceration related to neighborhood depression and anxiety

There is “significant collateral damage for the mental health of people left behind in neighborhoods where incarceration rates are unusually high,” says a New Republic article that reports on a study by Dr. Katherine Keyes, Dr. Sandro Galea, Ms. Ava Hamilton, and colleagues. Read more. > bit.ly/1KjVwdM

Mass incarceration and drug laws

An opinion article urging the U.S. to revisit its harsh drug laws cites Dr. Ernest Drucker’s contention in his book A Plague of Prisons that mass incarceration “exhibits all the characteristics of an infectious disease—spreading most rapidly by proximity to prior cases.” Read more at Philly.com. > bit.ly/1znheLJ

Increasing leadership roles for women in global health

Dr. Elaine Abrams was featured in an article about bringing more women into high-level positions in global health. She talks about her own experiences balancing HIV research in New York and in Africa with family. Read more in Devex. > bit.ly/1vuS0u5

HIV prevention funding should focus on women

“[South Africa] cannot solve the problem of HIV without making a substantial impact on reducing HIV transmission in young women,” said Dr. Salim Abdool Karim in an article about the government’s HIV funding priorities. Read more in IOL News. > bit.ly/1Fb57Rf

Microbicides makes Big Issue’s 2015 list

Calling it “one of the world’s most exciting medical breakthroughs,” Big Issue says that vaginal microbicides, which are applied before sex to prevent HIV transmission, could constitute a huge step in fighting aids, citing the research of Drs. Quarraisha and Salim Abdool Karim. Read more in the Big Issue. > bit.ly/1KRhzd6
Prevention science deserves more funding

“National health care spending is heavily skewed toward prescription drugs, medical devices, and clinical services. In fact, 97 percent of U.S. health-related spending goes to medical care while public health and prevention activities represent only 3 percent of annual spending,” says Dean Linda Fried in a commentary that discusses a new study about prevention funding. Read more in the Huffington Post ➤ huff.to/156Iamd and see Dean Fried’s article about public health lessons in Ebola from 2014. ➤ huff.to/1xbCFD3

When mental illness enters the family

Dr. Lloyd Sederer gave a TedX talk about the issue of how families can detect and deal with mental illness in a relative. Watch ➤ bit.ly/156IcKN

Diabetes drug linked to bladder cancer in trial

Dr. Al Neugut testified in a trial over the diabetes medication Actos that a review of numerous studies and analyses had convinced him that the drug caused an increased risk of malignancies. Read more on Law360 (subscription required). ➤ bit.ly/1Bdo5Ia

E-cigarette manufacturing process evidences need for strict regulation

A recent New York Times exposé on e-cigarettes supports need for strict regulation of the product says Dr. Neil Schluger in a letter to the editor: “Safety standards in the manufacturing process are dubious at best. This is only one of many concerns and unknowns about e-cigarettes,” he says. Read his letter ➤ nyti.ms/1IK2LuE, and read the original article. ➤ nyti.ms/1E8dhJG

PTSD most commonly reported mental illness in 9/11 survivors

Post-traumatic stress disorder is the most commonly reported mental illness in survivors of the World Trade Center disaster in New York City, according to a recent study by Dr. Steven Stellman; Ms. Kimberly Caramanica, an MPH graduate and research scientist at the New York City Department of Health; and colleagues. Read more on Health Canal. ➤ bit.ly/1yths0H

Should we worry about arsenic in rice?

Unlike when arsenic is found in water “the harm is a little bit more complex with food, and it may not be as dramatically bad as you expect,” says Dr. Habibul Ahsan, who has researched this subject. Read more on Take Part. ➤ bit.ly/1rUghCk
Was first Ebola victim infected by bats?

“They didn’t find smoking guns but perhaps broadened the thinking about what sparked the epidemic,” said Dr. Stephen Morse about a new paper that posited the bat theory. Read more on the Big Story. ‣ bit.ly/1wh8wYc

What’s the deal with bats?

Why are these strange creatures—the only mammals who can fly—also sources of so many diseases, from SARS to MERS to Ebola? The Scientist explores with comments from Dr. Ian Lipkin. Read more in the Scientist. ‣ bit.ly/1BEx6ch

Ebola survivors may be critical for containing the epidemic

Ebola survivors may be the most critical population to tap to help contain the epidemic, since they are immune to the strain of the virus that is going around, says Dr. Zena Stein: “This uniquely positions them to mediate between the infected and uninfected and between local people and foreign responders.” Read more on Reuters. ‣ reut.rs/1IK1lu1

WHO leadership during Ebola

Dr. Wafaa El-Sadr comments for an article for the New York Times about challenges faced by the World Health Organization during the Ebola outbreak in West Africa. Read more in the New York Times. ‣ nyt.ms/156iAsF
Are you washing your hands incorrectly?

Dr. Elaine Larson provides tips about hand washing, including how to choose antibacterial hand sanitizer. She also comments on why it’s important to clean your pillow. Read more in Health.com › bit.ly/17R3H3c and Yahoo Health. › yhoo.it/1IRQTVG

New study will look at elderly driving patterns

Researchers in injury epidemiology are now recruiting people between the ages of 65-79 to participate in an unprecedented 3,000-person study of elderly drivers, funded by AAA Foundation of Traffic Safety. They will fit cars with GPS to monitor driving patterns and accidents and do check-ups of participants’ cognition and physical health, Dr. Guohua Li, principal investigator of the study, told Reuters Health. Read more on Reuters. › reut.rs/1yNQ5fG

Epidemiology faculty receive grant to study senior road safety

The AAA Foundation for Traffic Safety has launched a five-year, $12 million project called Longitudinal Research on Aging Drivers (LongROAD) with Columbia University’s Mailman School of Public Health and six other institutions to look at the effects of aging on driving. Faculty on the project include Dr. Guohua Li and Dr. Thelma Mielenz. Read more on Phys.org. › bit.ly/1Gb2CTi

Report on integrative therapy for breast cancer makes year-end top 10 list

The Society for Integrative Oncology under the leadership of Dr. Heather Greenlee made a Huffington Post writer’s integrative health top 10 list last year. “In 2014, under the leadership of president Heather Greenlee, ND, PhD, the SIO reached new influence. Its smartly ‘graded’ practice guidelines for integrative care for patients with breast cancer were widely covered in the popular media,” the article says. Read more in the Huffington Post. › huff.to/1udBiJn

The future of drug arrests

In an article about the future of policing, Dr. Guohua Li predicts that marijuana breathalyzers will become routine within five years. Read more in the Atlantic. › theatln.tc/14KIUfK


Quandt Z, Florn TD, Tehrani-FarYP, Reim-


