The New York Times

June 15, 2011

Doctors Prepare Their Professions to Explain and Treat Climate-Related Symptoms

By DINA FINE MARON of

Dr. Anthony Szema is used to seeing patients with red eyes and runny noses. But in the past couple of years, the New York-based allergist has been faced with an onslaught of patients complaining their symptoms are starting earlier and hitting harder than ever before.

Szema believes climate change is a culprit in the extended severe allergy seasons. And he is one of a small number of physicians who are beginning to talk to their patients about it.

"I don't go on a soapbox making a scientific case, but by the time patients come to my office, they pretty much understand something is going on," he said. "They want to know why they are wheezing, why they have watery eyes and why their throats are swelling up. They understand the pollen season is worse this year."

"I give multiple etiologies," he said, referring to the causes of illness, "but climate change is one of them."

As scientists solidify the links between climate change and health issues like tropical ailments that infect Americans on the backs of whipping winds and warming ocean tides, top medical associations are becoming a high-profile lobbying force for climate regulations.

Prolonged allergy seasons, re-emerging illnesses and more extreme weather events are spurred on by climate change and will systematically affect human health, they argue.

Now, health advocates say physicians like Szema need to study up on the environment and bring conversations about the fingerprints of climate change right down to the doctor-patient level.

Most individual doctors remain reluctant to speak out on climate-health links. But top medical associations leapt into the fray this past year as U.S. EPA's climate regulations became a target of

GOP-led attacks in Congress.

Medical associations join the fight for regulations

The American Medical Association and American Lung Association, for example, were part of a coalition that coordinated a defense for reining in the emissions from smokestacks and tailpipes. Their argument: Protect human health.

For that fight, they offered up a cadre of experts to speak out on the connections between greenhouse gas emissions and higher rates of asthma or other serious illnesses. Some health advocates see this as a preview of what is to come.

"The challenge for groups like the American Thoracic Society is that we are professional organizations designed to talk to ourselves. We are not well-structured to effectively communicate with the public on issues as large as this. We can certainly publish opinion pieces in our journals that make the case, but we don't have a direct line to *The Washington Post* or *The Wall Street Journal*," said Gary Ewart, director of government relations at the American Thoracic Society.

At the moment, he added, primary care physicians are also not well-positioned to squeeze talks about climate change and associated threats into 10-minute patient visits.

"In most patient encounters, you need to get the family history, and most of our physicians are seeing patients with complex problems and prescribing drugs and other lifestyle interventions ... doing that in a 10- to 15-minute discussion is a lot to cover," he said.

But Dr. Georges Benjamin, executive director of the American Public Health Association, said doctors still have a special responsibility to read up on these issues, verify the facts for themselves and help inform their communities and policymakers.

"Every physician has a role in prevention, and if we can help improve the environment, why shouldn't we?" he said. "If we saw a river was infected, we would tell our patients that they shouldn't drink the water from that river or bathe in that river, and I hope they would do work as good citizens to make sure whatever was polluting that river was taken care of."

Delivering a message that takes more than 10 minutes

Dr. Paul Epstein, associate director of the Center for Health and the Global Environment at Harvard Medical School, also sees some opportunities for doctors to wade into this issue when talking with patients and their neighbors.

Clinicians can slide into the chasm between climate science and public understanding -- connecting the dots for communities about why they should care about rising greenhouse gas emissions and acting as trusted interpreters on how these changes could affect their own families' health and what they see in their own backyards, he said.

So far, it hasn't really happened yet on any large scale. But Epstein hopes that will change.

"Physicians are getting more involved, and we are getting a clear message from health groups and from the Centers for Disease Control and Prevention that these are real issues we need to know about," he said.

Now, in the aftermath of the most recent round of international climate talks and after the demise of U.S. climate change legislation, Epstein and journalist Dan Ferber have released a new book geared toward educating the public about the human consequences to health if climate change goes unaddressed.

The book, "Changing Planet, Changing Health," caps the sweeping change in the last couple of years as more doctors and medical professionals have chimed in on the dangers of climate change -- with multiple public health groups issuing treatises on the topic in the past few years.

The foundation for more physician involvement may already be set. Several hundred health groups have banded together to boost physicians' knowledge on issues of environmental health -- including climate change.

The coalition, which calls itself Health Care Without Harm, has crafted PowerPoint presentations for clinicians and hospital administrators that offer advice about how to "green" hospitals and educate other doctors about this topic.

Allergists at the 'forefront'

So far, only a few hundred people have seen the presentations -- which were tweaked and finalized this past year, said Lucia Sayre, co-director of the San Francisco Bay Area chapter of Physicians for Social Responsibility and a coordinator of the Climate Health Literacy Consortium at Health Care Without Harm. The goal, however, is to help health professionals feel educated on these issues, she said.

"What we have found with our trainings is if clinicians are given more information about these topics, they tend to bring them up more in regular clinical visits," she said, pointing to anecdotal

evidence.

"You would assume clinicians know about this, but they don't unless they are personally interested. They don't receive any training on this," she said.

Dr. Mark Windt, a New Hampshire-based allergist, immunologist and pulmonologist, underscores that point. He reports that he weaves climate change into his meetings with patients on a regular basis, but as a specialist with his own private practice, he acknowledges he may be somewhat unique.

"Training as an allergist and immunologist puts me at the forefront of exposure to allergens and people with allergies, and we are seeing increases in cases," he said.

Windt has seen an uptick in workshops and seminars on these issues for specialists in his field, he said. The American Medical Association, too, has been increasing its offerings on this topic, thanks to funding from the Harvard Medical School Center for Health and the Global Environment. But ultimately, the drive to dig deeply on these topics continues to come from personal interest.

Cynthia Romero, a doctor with a family practice in Virginia Beach, Virginia, said she started peppering her patients' visits with discussions about climate change in the past couple of years -- after she started hearing more about it in the news and at conferences.

When patients bring up their allergies, they often ask about climate change, she said. But beyond treating allergy symptoms, she said, those talks often become about what they can do to mitigate change through recycling and energy efficiency.

"Even though my interactions with patients may be short and focused on a particular disease or condition when they come in, I am able to initiate conversations we can continue the next time they come in. ... It is really an ongoing conversation," she said.

Pushing treatment, not an agenda

But for some physicians, these types of conversations -- on climate change and a host of other topics -- are also fraught with concerns about espousing political views that may alienate patients, she said.

"It is a common theme that physicians really are not in favor of using their office as an opportunity to communicate a political agenda. I think physicians are really geared toward

focusing on patient care and trying not to be judgmental on political views," she said.

One stumbling block for physicians and scientists is that pinpointing a clear cause for specific diseases is complex.

"It is always tough to tease out when we are talking about the exact relationship between climate change and an illness, because it is always multifactorial," explained Kim Knowlton, senior scientist at the Health and Environment Program at the Natural Resources Defense Council.

"It is never just climate change or temperature or humidity or changing rainfall -- it is also people's level of development, socioeconomic status and access to health care," she said. Unforeseen circumstances like antibiotic resistance also play a key role in disease outbreak.

Another challenge is that science takes time to develop and even longer to evaluate.

For Epstein and like-minded medical professionals, however, climate change is like any other health issue that requires fast and preventive treatment.

To help make communities more climate-ready, the Centers for Disease Control already has taken steps in the past year to help communities prepare for climate related-health threats. That agency is providing more than $5 million for 10 states and cities to begin to adapt to extreme heat and more vector-borne diseases and respiratory illnesses.

Lyme disease soars in Maine

Outside extended allergy seasons and air pollution concerns, other health impacts linked with climate change are already readily apparent.

Scientists are already documenting how insects that infect people with malaria or dengue fever are surviving and thriving in higher altitudes than ever before -- expanding their range and moving northward in Africa and Latin America. Changing migration patterns are also enabling dengue-infected mosquitoes to circulate in Florida.

"You have to look at the whole picture -- it's not just a question of if just these particular mosquitoes are here or there," said Epstein.

In New England alone, Epstein notes, Lyme disease is on the rise, and he believes climate change is propelling it. More than 700 cases of Lyme disease were reported in 2010 in Maine. A decade earlier, fewer than 100 cases were reported within that state's borders.

Richard Ostfeld, a disease ecologist at the Cary Institute of Ecosystem Studies in New York, said that while climate change is likely a factor driving Lyme disease, the science on the climate change connection is not as robust as it is with dengue fever or malaria.

Trees coming back after they were cleared to become farmlands in the 1800s may also be a driver for the increase in Lyme disease, since the bacteria may have lain dormant in pockets of those areas the whole time, he said.

How and where climate change could help trigger epidemics remains uncertain, since illnesses rest on multi-variable factors, but scientists agree that some of the calling cards of climate change -- heavy rains, prolonged drought and unusual warmth -- are ultimately setting the stage for diseases to prosper.

And extreme weather events and their aftermath leave communities with problems that simmer below the surface such as trauma and depression. They also exacerbate other physical maladies, including high blood pressure and heart disease.

"When is this going to wake people up?" said Epstein. "We are talking about fundamental assaults on health systems."

For more news on energy and the environment, visit www.climatewire.net.
ClimateWire is published by Environment & Energy Publishing. Read More »