TuSalud

Antibiotic Resistance Becomes Alarming

Experts express concern that antibiotic treatment options for infections are dwindling.

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Considered one of the most important advances in medicine, antibiotics help treat and prevent bacterial infections. But four years ago, the U.S. Centers for Disease Control and Prevention (CDC) warned that a time would come when common infections and minor injuries successfully treated for decades with these potent drugs would once again take lives. In fact, some believe this so-called post-antibiotic era is already upon us because antibiotic-resistant infections are increasingly common.

“We’re seeing more cases of resistant infections where there’s no option for treatment, which is really concerning,” says Lauri Hicks, DO, director of the CDC’s Office of Antibiotic Stewardship, which focuses on optimizing antibiotic use. “For some infections now, we have only one option. We are getting to a scary place where people who may get a routine infection may not have any treatment options.”

Annually, there are an estimated 2 million antibiotic-resistant infections that result in about 23,000 deaths in the United States, the CDC reports. These infections usually affect the most vulnerable populations within communities, such as young children, older adults and recently hospitalized individuals, among other high-risk groups. However, experts say even the healthiest people are now at risk for antibiotic-resistant infections.

“Every time we take an antibiotic, we expose bacteria to those antibiotics,” Hicks says. “Those bacteria are sometimes inherently resistant. What happens is you kill all the ones that aren’t resistant and the ones left over are the resistant ones, which are left behind to multiply.”

What’s more, these microorganisms adapt each time they interact with antibiotics and develop new ways to evade their effects. Some can even share their resistance with other types of germs.

In the report Antibiotic Resistance Threats in the United States, 2013, the CDC divided these resistant bacteria into three categories: urgent, serious and concerning. The inquiry also noted that antibiotic use was “the single most important factor leading to antibiotic resistance.”

“Health care providers prescribe enough antibiotics for every five out of six people to take a

course of antibiotics each year," Hicks explains. "We've done some work to assess whether all the antibiotic courses are needed. What we've learned is that 30 percent of antibiotics that are prescribed in doctors' offices and emergency departments are completely unnecessary."

There are several reasons for this. For one, Hicks notes that individuals often seek antibiotics for viral infections (colds, the flu, sore throats), which don't respond to these drugs. Plus, there's the problem of doctors overprescribing these medicines.

"When a doctor thinks that a patient or parent wants an antibiotic for themselves or their child, they're much more likely to prescribe one," Hicks says. "They're the ones making the decisions, but patient and parent expectations play a major role."

In an effort to combat antibiotic resistance, the CDC is working to help physicians learn more about how and when to prescribe antibiotics. Recently, the agency released a report that shows the current status of antibiotic use in the United States and offers information on ways the organization plans to ensure that the antibacterial meds are appropriately dispensed.

In 2016, as part of its Antibiotic Resistance Solutions Initiative, the CDC invested $160 million to combat this global threat to modern medicine and allocated funding for this purpose to state and local health departments, universities and health care partners. In addition, the CDC established the Antibiotic Resistance Laboratory Network, which includes seven regional labs, for nationwide detection of new and known threats.

Thus far this year, the CDC has invested more than $200 million to help states respond to infectious disease threats. The group dedicated $77 million dollars of that funding to combat existing and emerging antibiotic resistance.

To coincide with the 10th Annual U.S. Antibiotic Awareness Week (November 13 to 19), the health agency has rebranded its "Get Smart About Antibiotics" initiative, which has worked to educate providers, patients and the public about appropriate antibiotic use and antibiotic resistance since 2003. The latest iteration of its awareness and educational campaign is called "Be Antibiotics Aware" and features new targeted messaging and resources about antibiotics.

Although it's a doctor's responsibility to determine whether an antibiotic is required, Hicks believes patients should also address the issue. "It's always helpful to say to your provider that you don't expect an antibiotic," she says. "That does help to alleviate some pressure on them."

In addition, Hicks encourages folks to ask about the risks and benefits of antibiotics and whether the pros outweigh the cons in their particular situation. For example, Clostridium difficile colitis, a sometimes deadly diarrheal disease that can develop from taking antibiotics, is increasingly common in community and hospital settings, according to Hicks.

This nasty illness, among many other adverse potential outcomes, is just one reason why the CDC urges providers to explain to patients that an antibiotic isn't always necessary to treat some conditions. What's more, the agency wants doctors to provide alternative options for treatment

and to recommend a contingency plan if patients' conditions don't show signs of improvement.

It's key for patients to carefully consider that there may be a cost to taking antibiotics when they're not needed. Additionally, when these drugs are required, individuals should take them as directed.

"If you decide that you're feeling better and want to stop taking them, it's always a good idea to talk to your provider before stopping," Hicks stresses. "And definitely don't save leftover antibiotics for future infections. That can lead to major problems and contribute to the antibiotic resistance issue."
