The one-size dose does not fit all.

By Jay S. Cohen, M.D.

Physicians and patients should look beyond the guidelines recommended by drug manufacturers

When I began prescribing Prozac 10 years ago, I found that about half my patients responded well while the other half didn't. One woman became psychotic within five days. Another developed panic attacks so severe she couldn't work. Though I'd given them the lowest recommended dose - 20mg a day - it was simply more than they could tolerate. Then, in the medical library, I found a study that shocked me. It showed that even before the Food and Drug Administration approved Prozac, testing had shown that 54 percent of depressed patients required only 5mg. No wonder so many of my patients reacted badly. They were getting four times the medication they needed.

It's clear to me that the cookbook approach to prescriptions defies both medical science and common sense. People respond very differently to medications depending on weight, age and inborn ability to process drugs, just as they differ in their capacities for coffee or alcohol. That's why some patients require 80mg of Prozac a day while others need as little as 2.5mg. But our standard methods of prescribing drugs ignore this variation. Although 45 percent of women can relieve menstrual pain with 200mg of nonprescription Motrin, doctors usually prescribe 400mg. The starting doses that doctors obtain from the Physicians' Desk Reference (PDR) for many blood-pressure drugs (Norvasc, Vasotec, Zestril, Prinivil) are equally inflated. And though a given dose of many drugs will yield higher concentrations in the blood of an elderly person than in a younger adult, seniors get the same doses of Lipitor (for high cholesterol), Allegra (for allergies), Celebrex (for arthritis) and many other drugs. Perhaps this is why more than 50 percent of people taking medication for high cholesterol and high blood pressure quit their medications within one year.

The consequences for patients can be serious. Medication reactions are now a leading cause of death in the United States, ahead of AIDS, accidents and infectious diseases. There are more than 2 million severe adverse drug reactions and 106,000 medication-related fatalities in U.S. hospitals every year. Most of the adverse reactions occur at the very doses that manufacturers recommend and doctors prescribe. But these are not unforeseeable hazards. The clinical trials that manufacturers perform to test new drugs are often too small or too brief to identify the lowest effective doses. And even when studies find low doses effective for some people, manufacturers often exclude these findings in their labeling information. They like to emphasize effectiveness - and drugs are usually more effective at higher doses, even if higher doses tend to increase the risks. Doctors, for their part, like drugs that are simple and quick to prescribe. If one drug requires thoughtful dosing to match patients' differences and another is one-size-fits-all, you can guess which one they'll prescribe.

Until we devise a better system for testing and labeling pharmaceuticals, using them as directed won't guarantee your safety. But there are steps you can take to protect yourself and still get the treatment you need. One is to monitor your own drug sensitivities and keep your doctor informed. Physicians usually ask about drug allergies (which are relatively rare), but not about side effects. Also, if you're extremely sensitive to coffee, alcohol or medications - or if drug sensitivities run in your family - a standard initial dose may be too much for you. If your illness isn't acute, ask your doctor about starting with a low dose. If it is ineffective, the physician can easily increase it. Don't change medication doses on your own. Just any low dose won't do. It must be proven effective in scientific studies, or you may waste valuable time and could even do harm.

The problem also involves the higher doses that some people require. The jumps in dosage that manufacturers recommend are too much for some people. Viagra is often dosed from 25 to 50mg and from 50 to 100mg, each a 100 percent jump - too much, I believe, for a small percentage of people. I once knew a patient for whom 40mg of Prozac wasn't enough. The higher standard dose was 60mg, but this gave him nausea, insomnia and a tremor. Naturally, he stopped taking the drug altogether. The solution was obvious. After I suggested he try 50mg, he did fine.

The point is not that lower doses are always better than higher ones. It's that individualized doses are better than standard ones. Think of it this way: no designer would expect Ally McBeal, Shaquille O'Neal, a 96-year-old grandmother and a 6-year-old child to all wear the same size, but that's how Claritin is prescribed. If we stop expecting everyone to tolerate the same drug doses, we can save thousands of lives every year.

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