Is Global Eradication of Hepatitis C Feasible?

May 15, 2014

With the rapid introduction of increasingly potent direct-acting antivirals (DAA) for hepatitis C virus, the global public health community faces the possibility of eradicating a virus without a vaccine for the first time. However, numerous roadblocks stand in the way of such an awesome feat. A detailed commentary published in Gastroenterology outlines the challenges ahead and proposes key points to address in the fight against global hep C.

According to the World Health Organization, more than 185 million people are estimated to have been infected with hep C worldwide, with between 130 million and 170 million of them living with the virus chronically. The worldwide prevalence is 2.8 percent, ranging between 1.2 percent and 3.8 percent in different global regions. Egypt has the world’s highest prevalence at 15 percent, almost all of which consists of genotype 4 of the virus.

The Gastroenterology paper expresses “reasonable optimism” that within five years the globe will see numerous interferon-free DAA regimens that can cure more than 95 percent of hep C cases in eight to 12 weeks of treatment. However, the article points out that various patient groups have typically been passed over in research that favors the markets of wealthy nations; such overlooked populations include those with genotypes 5, 6 and 7, decompensated cirrhosis, kidney failure and organ transplants. And despite the 5 million or more infants each year who contract the virus from their mothers, pediatric treatment for hep C has not been studied.

“Although HCV eradication is potentially feasible,” the authors write, “that time is not imminent; there remain many barriers that need to be overcome.”

These barriers include:

• Developing highly effective therapies—the easiest step, according to the authors.

• Identifying those who are infected. This is a major problem considering that less than 15 percent of those living with the virus are aware of it.

• Linking those who have hep C to care.
• Training clinicians to properly treat the virus.

• Lowering cost, which is a major problem considering the astronomical price of DAAs. Egypt has witnessed some progress, having negotiated a steep discount for Gilead Sciences’ Sovaldi (sofosbuvir). The commentary authors propose that some countries, while waiting for lower prices on the new DAAs, may want to consider treating those who are more likely to be cured with less expensive interferon-based treatment. Also, treatments that benefit genotype 1b over 1a might wind up costing less, considering that 1a is more common in the United States, for example. This may benefit the rest of the globe, considering 1b is the most common genotype worldwide.

To read the commentary, click here.