Analysis: Cures for Disease Neglect

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By OLGA PIERCE

Neglected diseases -- diseases that are widespread and destructive but affect primarily the world's poor and thus attract little research investment in cures -- kill and sicken millions every year.

A number of proposals, including a new bill in the Senate, have been made to use market forces to give pharmaceutical companies an incentive to use their considerable resources to find new treatments. Though the specific incentives differ, public-health advocates agree that more effort is needed to alleviate the problem.

Some of the most common of these are leprosy, hookworm and sleeping sickness. Ancient enough to be described in the Bible and earlier texts, they take a toll in modern-day, impoverished settings.

Adding HIV, tuberculosis and malaria to the mix, the diseases kill 10 million people each year, shorten lives and reduce productivity. Parasitic diseases affecting children -- with a nearly 100-percent infection rate in many communities -- stunt physical development, and perhaps more importantly, cognitive development, during school-age years.

If the 15 most common of these lower-profile Third World diseases are combined, they comprise the fourth most deadly and far-reaching group of communicable diseases worldwide behind HIV, tuberculosis and malaria.

These diseases are equal in importance to AIDS, tuberculosis and malaria, but you never hear about them, Peter Hotez, a professor of tropical medicine at George Washington University, said at a recent news conference unveiling Senate legislation targeting neglected diseases. In the case of parasitic diseases like hookworm, children don't die, but they don't grow. This robs children of their future, he said.

With many of the diseases, science has identified promising research possibilities, Hotez said, but no one is willing to make the investment to turn those leads into cures.

It is critical to get incentives in place to move pharmaceutical companies, said Seth Berkley, president and founder of the AIDS Vaccine Initiative.

The Elimination of Neglected Diseases Act of 2006, co-sponsored by Sens. Sam Brownback, R-Kan., and Joseph Lieberman, D-Conn., would address this problem by offering drug companies a six-month to two-year patent extension on a blockbuster drug in exchange for developing a new treatment for a neglected disease.

An extended patent on a drug like Viagra would be worth tens of millions of dollars to a manufacturer and would be incentive enough to develop new treatments, Brownback said.

What we are able to do here is to use our marketplace to develop cures for neglected diseases, he said. With this market incentive we hope to have the right ingredients to reduce the number of neglected disease cases and improve the quality of life worldwide.

Qualifying diseases in the bill are HIV, malaria, tuberculosis and any other infection disease that disproportionately affects poor and marginalized populations.

To prevent the patent extension from harming the health of Americans, he said, they would be limited to so-called lifestyle drugs like erectile dysfunction and arthritis medication and exclude life-saving drugs.

The potential cost to Americans in terms of having to wait longer for a cheaper generic drug to hit the market, as well as government programs that pay for drugs for the low-income and elderly, is still being investigated, he told United Press International.

The generic pharmaceutical industry has criticized the measure, saying it sets a large reward for drug companies even if they produce lackluster results.

In its current form, it is little more than a giveaway to the brand pharmaceutical industry, Andrea Hofelich, spokeswoman for the Generic Pharmaceutical Association, told UPI.

The criteria for a treatment advance is much more broadly defined than in similar legislation like the Orphan Drug Act, she said, and so patent extensions could be granted with limited actual benefit for sick people.

Though the generic pharmaceutical industry supports research initiatives to combat neglected diseases, broad patent extensions could threaten the economic viability of the healthcare system, Hofelich said.

A patent extension is not the only conceivable prize, and researchers have made several other suggestions.

David Ridley, a business professor at Duke University, has suggested offering a priority Food and Drug Administration review voucher for a blockbuster drug in exchange for developing and finding a manufacturer for a neglected disease. Companies could either hold on to the voucher and reap the benefits of early drug sales or sell the voucher to another company eager to get a drug to market sooner.

Both prizes could help ease the tremendous suffering from neglected diseases. We prefer our proposal, however, because it also provides some benefits for U. S. consumers because it speeds access to branded and generic drugs, Ridley told UPI.

On the other hand, he said, if a company is risk-averse, it will prefer a patent extension at the end to earlier sales, which are more unpredictable.

But either proposal could play an important role in alleviating suffering caused by neglected diseases, Ridley said.

Another possibility would be to offer manufacturers the incentive of guaranteed vaccine purchase by a government or other entity, Owen Barder, senior program assistant at the Center for Global Development, told UPI.

Not only would this address the issue of research and development, but also distribution, he said, because governments and other entities have the capability of doing that.

It might also distribute the burden of paying for the program more fairly than forcing consumers to pay more for brand drugs during a patent extension, he said. Is the group of people who should bear that burden people who are currently sick? Barder asked.

But any of these proposals is better than doing nothing, he added.

The big picture is that it's good to have attention on the need to create incentives for investment in neglected diseases.