DDT Could Stop the Spread of Malaria

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GEORGETOWN, Guyana — Although for decades we have had the scientific knowledge and tools to control malaria, the disease continues to kill millions and inflict misery on families and communities, as today we mark World Malaria Day. This is also first day of the Stockholm Convention on Persistent Organic Pollutants, which regulates the use of DDT, one of the best weapons we have against malaria.

While many are pushing for an elimination of DDT, there is unequivocal evidence that this insecticide is a safe and affordable tool to prevent and control malaria. Public health professionals will one day look back and be more than dismayed that we did not do enough to make optimal use of available tools, such as DDT, to stop the horrendous scale of death and illness caused by malaria.

In my own country, Guyana, in the 1940s and 1950s, more than one-third of the patients in our hospitals and almost 20 percent of all deaths were due to malaria. The renowned malaria scientist, George Giglioli, used DDT to stop malaria on the coast of Guyana, where almost 90 percent of the population lives. Now, 60 years later, malaria has not returned to the coast. But malaria continues to rage in the hinterland of Guyana and is likely to do so for many decades. That is unless the present move to eliminate DDT is terminated.

In this regard, a particularly intriguing recent paper published in Research and Reports in Tropical Medicine, describes claims made by anti-insecticide groups
regarding a malaria control program in Mexico and seven countries of Central America. The paper confirms what I and other public health professionals have known for some time: that stopping the use of insecticides and relying on what are seen as “environmentally sound” methods to control malaria is rarely an acceptable tradeoff for such a dangerous disease.

According to the paper, impressive results were achieved by distributing large numbers of anti-malaria pills to bring malaria rates down. While these successes against malaria are a cause for celebration, the paper also questioned environmentalist’s claims that attributed the success not to medicine distribution, but to use of “environmentally sound” methods of control, such as planting certain mosquito-repelling trees around houses and using fish to eat mosquito larvae.

When Guyana used DDT, we collected meticulous data showing no public health harm from its use and great public health benefits. Yet political and financial pressures plagued, and eventually ended, Guayana’s malaria eradication program. For us, the opposition to DDT is a case of *deja-vu*, and we are well aware of the formidable power of the movement against use of DDT in malaria programs.

Some United Nations organizations, such as the U.N. Environment Program and Stockholm Convention Secretariat, are ratcheting up international pressure for global DDT elimination by 2020. They are doing this even though those U.N. agencies tasked with malaria control value DDT highly. Existing international regulations already frustrate our attempts to use DDT, as illustrated by prohibitions on DDT transport.

In contrast to the U.N.’s policy-making against DDT and other insecticides, ministers of health know that without an effective, long-lasting and affordable insecticide, the fight against malaria will continue to be a difficult and daunting challenge. Developing countries are now being encouraged to eliminate malaria. Yet, without DDT and other insecticides, success cannot be guaranteed. Furthermore, growing problems of increasing costs and parasite resistance to drugs preclude mass drug distributions as the way forward for national programs.

While Guyana has achieved impressive control of malaria through a comprehensive control and treatment program, our efforts are stagnating, and the incidence of the disease is rising once more. DDT would be a prized tool for
us, but international pressures against DDT have severely affected production. Today, India is the only producer of DDT, and the price of DDT has risen sharply.

Stop the Policies Against DDT!

Global leadership is needed to re-examine political positions and international regulations that effectively ban DDT from disease control programs. The policies that specifically target DDT for elimination must, themselves, be eliminated. A global mechanism should be established for producing and distributing DDT to prevent and control malaria, dengue and other mosquito-borne diseases.

More must be done to increase public recognition that public health insecticides, such as DDT, save lives. There are laudable global initiatives to develop new vaccines and medicines for tropical diseases, but initiatives to develop new insecticides are woefully underfunded and inadequate.

As I am responsible for the malaria program in Guyana, I can attest to the lethal consequences of anti-DDT policies and regulations. It would be shameful for us to allow needless deaths to occur and not try to protect one of our most valuable tools. Anything less than the efforts outlined above will hopelessly marginalize the global fight to eradicate malaria and other devastating diseases.

My challenge to everyone engaged in the reckless move to ban DDT is this: is it worth the millions of deaths of poor people and their children?

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