

Eradicating Deadly Diseases: The Washington Global Health Alliance

Two of the world's most deadly diseases, HIV/AIDS and Malaria, claim a combined three million people a year. Both can be prevented (and in the case of Malaria, cured), but because of poor diagnosis methods, poor living standards that promote the spreading of the disease, and poor healthcare services in the places where the diseases are most deadly, they are taking their toll. To combat this, multiple organizations around the world are working hard to find cures and better diagnosis methods. Washington is home to many health-related organizations, and the WGHA, or the Washington Global Health Alliance, is an alliance of these organizations. Individually, its members are just one of the many organizations worldwide searching for cures, but through the alliance, they share, combine, and receive funding for their ideas, high- and low-tech, creating a massive force focused on eradicating devastating diseases.

In the course of one year, 708,000 to 1,003,000 people die of malaria, making it the 5th leading cause of death worldwide by an infectious disease. Multiple members of WGHA are developing cures to combat this destructive disease. PATH, a member of the WGHA, has discovered a vaccine for Malaria and is in the process of introducing it to malaria-infected children throughout the world. Obviously, spreading vaccines would curb the spread of Malaria. However, vaccines would be too costly for families in Africa, the continent with the highest malaria-related death rate, where children are forced to work to earn a living. Also, vaccines would take a long time to manufacture, to the point where the amount of people treated with the vaccine would be outnumbered by the amount of people being newly infected. To combat this, PATH also introduced low-tech solutions such as draping mosquito nets over beds in Zambia. The result of this low-tech venture was amazing: malaria-related death rates were lowered by 80%. Having low-costing methods work just as well, if not better, as high costing ones would be

an incentive to introduce more low-tech methods along with high-tech ones. Another low-tech solution being adopted throughout Africa by PATH is the spraying of insecticides in homes. Funding for both low- and high-tech methods are provided by another member of the WGHA: The Bill and Melinda Gates Foundation. By making ties that didn't exist before between individual members taking the high- and low-tech path to finding a solution and a large funding source which funds the other organizations, the WGHA creates a large force aimed at bringing down malaria. Already, malaria rates have dropped by 50% or more compared to the rates in 2000. However, as malaria parasites are becoming immune to insecticides and other drugs, the only way to stop the malaria is to eradicate it. With such a force not found anywhere else in the world, the WGHA is leading the international efforts to complete this task.

Another devastating disease, HIV/AIDS killed 2 million people last year and infected 3 million more, making it the 3rd largest cause of death worldwide by an infectious disease. Researchers from the Fred Hutchinson Cancer Research Center (FHCRC), a member of the WGHA, lead the HIV Vaccine Trials Network, the largest international collaboration of scientists and educators searching for a safe and effective vaccine against HIV/AIDS. Recently, one of FHCRC's research teams discovered important clues for designing an effective HIV vaccine. This is a major breakthrough, and it will be only a matter of time before a cure for the deadly disease is found. On the other hand, the University of Washington's International AIDS Research Training Program (IARTP) has adopted a more low-tech approach to uproot HIV/AIDS. IARTP is working with institutes in Kenya, Peru, India, Mozambique, and Uganda to educate the public about HIV/AIDS and how to prevent it from spreading via interactive lectures and street theater performances. Likewise, PATH also aimed at educating the public, but with a more creative touch. PATH brought Kenya's best hip-hop musicians together to create a

catching song that would also convey facts about the virus and how to prevent it. PATH also created a mobile contest in which people were asked questions about HIV/AIDS via their cell phones. The point of all this is to spread the word, so people in unhygienic countries would adopt healthier habits, and the transmission of the virus could be curbed. The Bill and Melinda Gates Foundation offer grants to foundations developing HIV Vaccines and testing them on humans; foundations exploring innovative ideas for HIV Vaccines; foundations facilitating efficient coordination and collaboration of vaccine discovery, development, and testing; and foundations searching for more efficient HIV diagnostics. One of the advantages organizations that are part of the WGHA such as the FHCRC and the IARTP have is that since they are connected to a large funding source, the Bill and Melinda Gates Foundation, through the alliance, they receive funding for their ventures. This type of alliance cannot be found anywhere else in the world. Because of international efforts and the efforts by the WGHA, people receiving treatment for HIV/AIDS has increased from 400,000 in 2003 to above 5 million today. However, ten million people are still in need of treatment, and, with such a force, the WGHA is at the leading edge of derailing the disease.

Members of the WGHA together are leading the international efforts to eradicate deadly diseases, and they are helped a lot by the advantages they receive for being a part of the WGHA (financial support, for one). This type of alliance is very unique. But eradicating diseases isn't all the members of the WGHA do. From curbing CO2 emissions to eliminating premature childbirth, members focus on projects concerning every aspect of global health. By sponsoring these projects, the WGHA is also creating hundreds of new job positions in the state. "We believe that Washington State can make a global difference" is their slogan, and that is why the Washington Global Health Alliance is an innovation that has left its mark around the world.

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