A Military Cutback We Can't Afford: Fighting Tropical Diseases

By Peter Hotez & James Kazura

As long as we have a military presence in areas known for infectious diseases, we have to keep researchers working on improved treatments.

In recent months, many politicians and presidential hopefuls have called for budget reductions, and many have specifically targeted military spending for cutbacks. Unfortunately, even programs proven to be cost effective are vulnerable to cuts. Medical research for our troops is no exception to this rule -- programs such as the Walter Reed Army Institute of Research (WRAIR) often find themselves low on the priority list despite their crucial role in saving the lives of our troops on the battlefield and here at home.
One important area of research is tropical medicine. During World War II and the Vietnam War, more than one million service members acquired tropical infections such as malaria, dengue fever, hookworm, and typhus, and many of these diseases continued to plague our veterans after they returned home. Today, American troops in Iraq and Afghanistan still face formidable tropical disease threats, especially from a disease transmitted by the bite of sand flies known as leishmaniasis, which can cause a disfiguring ulcer in one form, and a serious systemic condition that clinically resembles leukemia in another. In the coming years leishmaniasis may become the most important condition you have never heard of among veterans.

We now risk sending U.S. troops into harm’s way deprived of our nation’s most important resource for preventing tropical infections.

For over 100 years, WRAIR has been the U.S. military’s premier institution for preventing these types of tropical infections. Beginning in 1893 as the Army Medical School, WRAIR physicians developed some of the first treatments for dysentery and malaria, and developed methods to disinfect drinking water. They developed vaccines for typhoid fever, dengue, Japanese encephalitis, meningitis, and respiratory infections. Their Military HIV Research Program led to the first human clinical trial demonstrating some initial evidence of vaccine protection from the AIDS virus. And some WRAIR discoveries contributed to the recent success of the new malaria vaccine that just underwent clinical trial testing in Africa.

Despite this extraordinary track record of important global health discoveries, WRAIR faces massive budget cuts from Congress and the Department of Defense. Since WRAIR already has difficulty maintaining staff and expertise to fight the leishmaniasis outbreaks affecting our troops and veterans, these new cuts will only further jeopardize the future of WRAIR and the health of our soldiers.

WRAIR’s leishmaniasis diagnostic laboratory is the only one of its kind in the world, so each time funding is slashed our military loses considerable expertise and capabilities in the diagnosis, treatment, and prevention of this devastating disease. For example, in the years prior to the Gulf War, the WRAIR leishmaniasis program was officially decommissioned and all research was halted. Only after cases of leishmaniasis among U.S. forces exposed to sand-fly bites in the Iraqi desert were the remaining leishmaniasis experts at WRAIR quickly assembled and tasked with making up for lost time. In 2002, the WRAIR leishmaniasis program was again dissolved only to be urgently activated once more with the start of Operation Iraqi Freedom in 2003. The interruptions to the WRAIR leishmaniasis program are part of much larger budget cuts across all of WRAIR’s tropical infectious disease research programs. There is no end to the irony of such cutbacks given that they coincide with the activation in 2008 of the U.S. Africa Command (AFRICOM), charged with fighting the war on terror across the African continent. Today, sub-Saharan Africa has the largest number of cases of tropical diseases anywhere in the world. Many of these tropical infections, such as river blindness and African sleeping sickness, have been shown to destabilize communities and may actually promote conflict in the region.

We now risk sending U.S. troops into harm’s way in Africa deprived of our nation’s most important
resource for preventing tropical infections.

We need a strong and active military medical presence in global conflict hotspots such as the Middle East, Central Asia, and Africa. Strangling WRAIR with ever worsening budget cuts threatens the safety of our troops and their mission readiness, as well as the health of our returning veterans. Cutting WRAIR will deprive our troops and also the world's poorest people of one of America's greatest global health treasures. Both our national and our global security depend on a strengthened and robust WRAIR.

*Image: Skin ulcer due to leishmaniasis/Wikimedia Commons.*

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