Making AIDS vaccine a reality

By Margaret I. Johnston and Anthony S. Fauci

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World AIDS Day today is an opportunity to bow our heads in remembrance of the more than 25 million men, women and children who have died of HIV/AIDS. It also is a chance to renew our resolve to end this deadly scourge.

More than two decades after experts first recognized the threat posed by this disease, 40 million people worldwide - a nearly incomprehensible number - are living with HIV/AIDS, and 14,000 people are newly infected with HIV each day.

To beat back this modern plague, we must collectively recommit ourselves to global efforts to care for HIV-infected individuals and their families and to redouble our efforts in HIV prevention. The ultimate defeat of HIV/AIDS will require a multifaceted effort but will be difficult, if not impossible, without a safe and effective preventive HIV vaccine.

In the past five years, the U.S. National Institutes of Health (NIH) alone has dedicated \$2 billion toward HIV vaccine research. The Global HIV/AIDS Vaccine Enterprise, a consortium devoted to HIV/AIDS vaccine research, has been endorsed by the Group of Eight industrialized countries and provides needed focus on this issue. Progress is being made.

Cutting-edge science has led to novel vaccine approaches that have shown promise in the laboratory and in animal tests. About 25,000 people have volunteered to participate in more than 90 HIV vaccine clinical trials worldwide. Each trial brings us a step closer to ending the pandemic.

But all this effort will be for naught if the public continues to believe myths about HIV/AIDS vaccine research. The tragic truth is that if scientists discovered the ideal vaccine candidate tomorrow, many Americans would not be prepared to help prove its effectiveness - a critical step in licensing a safe vaccine.

To conduct a meaningful, large-scale trial, tens of thousands of healthy, HIV-negative volunteers will need to roll up their sleeves and receive an experimental vaccine. Finding volunteers for vaccine trials is often daunting. But it will be nearly impossible if Americans continue to believe misinformation about HIV vaccine trials.

According to a recently published study by the National Institutes of Health in Bethesda, only half of those surveyed knew that the HIV vaccines being tested could not cause HIV infection. More than half of respondents expressed skepticism about the safety measures built into vaccine trials. Equally disturbing, a majority of those surveyed reported that they would not be supportive of a friend or loved one volunteering for a preventive HIV vaccine trial.

Such attitudes cripple vaccine trials. It is critical that communities most affected by the HIV pandemic and policy-makers inside and outside the government help dispel these myths. Credible spokesmen and women must repeat - over and over again in media trusted by the public - that volunteers in preventive

vaccine trials cannot contract HIV from the vaccines being tested. The overriding importance of clinical trials, and the way in which they safeguard volunteers, must be conveyed.

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Finding a vaccine for HIV/AIDS and ending the HIV/AIDS pandemic rests in no small measure with each of us, as researchers, advocates, volunteers, family and friends. Despite the extraordinary efforts of thousands of scientists worldwide, there is still no effective HIV vaccine.

On this World AIDS Day, let us recommit ourselves to doing everything in our power to find an HIV vaccine. We must roll up our sleeves, literally and figuratively.

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