

Scientists Find No Link Between Polio Vaccine and AIDS

Michael Devitt

Eight years after it first gained widespread attention in *Rolling Stone* magazine, and a year after the publication of a book demanding further investigation, independent laboratory tests have found no evidence to support the theory that the AIDS epidemic was caused by an experimental polio vaccine used in Africa in the 1950s.

The findings of the tests, presented at a conference of the Royal Society in London this September, found no evidence that the oral polio vaccine contained any tissue from chimpanzees.

"There is nothing in the results from these tests to support the theory that HIV entered the human population during the late 1950s' polio virus clinical trials in Africa," said Claudio Basilico, chair of the microbiology department at New York University School of Medicine and lead investigator for the trials.

Scientists believe that HIV, the human immunodeficiency virus that causes AIDS in humans, originated from a type of SIV (simian immunodeficiency virus) found in chimpanzees in western Africa. Various theories have been proposed to explain how or when the virus made the jump from chimps to humans.

In the latest tests, samples of four different supplies of the vaccine, including some used in the original African vaccination program, were examined for traces of genetic material. Independent studies were conducted at the Max Planck Institute in Leipzig, Germany; the Pasteur Institute in Paris; and Roche Molecular Systems in Pleasanton, California. None of the labs were able to find any chimp DNA, nor were they able to find any evidence of either HIV or SIV viruses in the vaccines.

"In fact," said Basilico, the laboratories were able to determine that all of the Wistar samples were grown in monkey cell cultures rather than chimpanzee cell cultures."

"Does this definitively rule out the vaccine theory? No, but it makes it more unlikely," he said.

However, Basilico admitted that records kept at the time of the vaccine trials were incomplete, and that there may have been other vaccine samples used in Africa that were not included in the tests. He also stated that while the tests didn't find any traces of SIV, those results may not be important, because the virus could have died out after spending such a long time in a frozen state.

Scientists, Researchers Make Claims and Counter-Claims

More than a dozen scientists present at the Royal Society meeting who worked in central Africa stated they never used chimpanzees as a host for growing the polio vaccine. Among them were Dr. Hilary Koprowki, who developed the vaccine in the 1950s, and Dr. Stanley Plotkin, who worked at the Wistar Institute at the time of the early vaccine programs.

"I was working in the Wistar laboratory from 1957 to 1961, and I never saw or heard of chimpanzee cells being used," said Plotkin, now a professor at the University of Pennsylvania.

"We never used chimp kidneys," added Dr. Koprowski. He said that while he believed the oral polio vaccines "saved millions of lives," he is still viewed by many as "the father of AIDS, a mass murderer" for the vaccine he created.

Some researchers, including Edward Hooper, whose 1999 book *The River* helped put the AIDS-polio vaccine theory back into the public eye, remained unimpressed by the results.

"This means nothing at all for the polio vaccine theory," said Hooper. He said that other batches of the original vaccines used on African children had already been used up or destroyed. If tested, Hooper claimed, those batches might have yielded different results.

"We still not have tested all the vaccines," he said.

Meanwhile, Hooper quoted others involved in the original vaccine research in Africa who appeared to support his theory, including a lab technician who said kidneys were indeed removed from chimpanzees at Koprowski's vaccine research stations in Africa and sent to labs in Belgium and Rwanda. Others asserted that chimp kidneys were sent to the Wistar Institute for vaccine research, and that some batches of the vaccine were made in a laboratory in Stanleyville, in what was then the Belgian Congo.

While the AIDS-polio vaccine theory continues to remain completely settled, scientists at the meeting called for more serious study of the other leading theory as to how AIDS crossed from animals to humans. This theory, known as the "direct-transfer" or "cut-hunter" theory, proposes that an African hunter in the early part of this century may have become infected with the disease after being scratched or bit by a chimp when trying to capture it, or after cutting himself while butchering an animal.

Other explanations for the sudden emergence of AIDS include increased deforestation, which would bring infected monkeys into greater contact with humans; improved transportation systems, which could carry the spread of the disease from isolated areas to larger regions; and decades of political and social upheaval (contributing to substandard health care) throughout west and central Africa.

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