

**MAKING
LIFE
LIVEABLE
WITH
AIDS**

(by Yang Zheng)

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There is no cure for AIDS yet. To date, a handful of Western medicines have been marketed to delay the onset of full-blown AIDS, but they are prohibitively expensive, especially for sufferers in the Third World, notably Africa, where the disease has reached plague-like proportions. Aike, a Chinese herbal preparation, is an affordable herbal hope for all HIV positives, at one-tenth of the cost of Western drugs, and without side effects.

AIDS, transmitted mainly through sexual contact, is a recently manifested scourge, which has spread around the world. It looks as if it will be one of the main killers in the next century. There is no cure at the present time for those infected with the human immunodeficiency virus (HIV), which destroys the body's ability to withstand a host of diseases.

Doctors and researchers of traditional Chinese medicine have joined the global effort to combat AIDS. After years of research and clinical work, they have come up with a herbal decoction that has been proved effective in alleviating symptoms, improving the body's immune system, and helping patients live longer and healthier lives. It is not a cure for AIDS, but tests have shown it to be a better performer than medicines developed in the West.

Commercially, the medicine is known as *Aike* Decoction (*Aike* literally means "anti-AIDS" in Chinese). It has been developed by the China Academy of Traditional Chinese Medicine (CATCM) and produced by the State Pharmaceutical Co. based in Dalian, a port 3 Km northeast China.

Researchers say the medicine is most effective for AIDS patients in the early and middle stages of HIV infection, namely for AC and ARC patients, who are largely free of symptoms.

Aike is being assessed by the Ministry of Public Health and is expected to gain approval soon. The medicine will then be marketed in China and abroad.

The medicine comes in powdered form. It is packaged in sachets *sad* taken orally after being dissolved in boiled water. Each sachet contains 10 grams of powder. Patients take the medicine twice a day, one sachet at a time.

Aike powder consists of eight varieties of herbal medicine with two herbs — *Astragalus Membraneus* and *Viola Yedoensis* — as its main ingredients. Most of the components function to annihilate the virus and fortify the immune system.

Over the years, *Aike* has gone through rigorous clinical testing, including experimentation on animals and cell cultivation. The work shows that the herbal medicine has an efficacy rate of 51.92 percent. Most noteworthy is one case where a patient's HIV blood serum antibody turned negative after a three-month course of taking *Aike*, something unheard of since the virus was identified in 1981.

The World Health Organization (WHO) estimated in 1995 that 20 million HIV carriers existed worldwide. Worse still, more than 6,000 people contract the virus each day. Although the global fight against AIDS is a joint effort by a tremendous number of top scientists, immunologists and pharmacists funded by vast sums of money, neither a vaccine to prevent HIV infection nor a cure is in sight.

'Traditional Chinese medicine should be able to offer a way to combat AIDS since we believe

AIDS largely results from the poor functions of internal organs," said CATCM Professor Wang Mianzhi, 64, who is also vice-president of the All-China Society of Traditional Chinese Medicine. 'The Chinese theory is based on a comprehensive diagnosis of the body as a whole instead of approaching each part of it separately. The Chinese way to good health focuses on reinforcing the body's resistance to a disease and enhancing the function of its immune system," Wang explained.

Dual Aims

Prof. Lu Weibo, director of the AIDS Study Department under CATCM, said traditional Chinese medicine has a central tenet: *Quxie Fuzheng*, which literally means "to remove the source of evil and enhance the natural functions of the body."

"A dose or therapy aims to achieve the two functions simultaneously," he said. "For AIDS cases, we have tried to develop a medicine that can remove the HIV virus, the source of evil, and fortify the human immune system at the same time."

"This is different from Western medicine which generally pays attention only to relieving the symptoms of a disease," he explained.

Chinese herbal medicines, coming from natural plants and animals, induce almost no side effects, and some of its ingredients are also nourishing to the body. He said.

AIDS medicine widely used in the world today — *AZT*, *ddl*, *ddC* and a promising new class of drugs called protease inhibitors — are not ideal because of their serious and sometimes fatal side effects and prohibitively high costs, says Prof. Lu.

Prof. Hao Wenxue, chairman of the board of Svate Pharmaceutical Co., which makes *the Aike* decoction, shares Prof. Lu's view. He said:

'The cost of AZT for a year's treatment is around US\$ 2,000; besides, the medicine hinders the marrow from blood reproduction. And using a protease inhibitor for the same time might cost the patient as much as US\$ 6,000."

"The *Aike* decoction, however, costs one-tenth of *AZT*, and it induces no side effects whatsoever."

Prof. Lu of CATCM's AIDS Research Department maintains that a combination therapy of *AZT* and *Aike* may constitute a good treatment for AIDS since *AZT*'s serious side effects can be eased by *Aike*, an effective immuno-regulator. A combination therapy can combat the immunity saboteur more efficiently, he said.

"In my view, this traditional Chinese medicine is superior to any Western medicine developed so far for dealing with AIDS," he said.

Tanzanian Experience

The WHO estimates that by 2000 the number of HIV carriers worldwide will reach 30-40 million, with 90 percent of them being found in developing countries. Africa is currently the most seriously affected continent. In Tanzania, for example, one million people were reportedly infected with the HIV virus by the end of 1995.

In 1987, at the invitation of the Tanzanian government, China and Tanzania started to cooperate in AIDS research with traditional Chinese medicine. Teams of Chinese experts have been visiting the African country in the course of their work since 1988.

Performance of the *Aike* medicine was recorded over a one-year period between August 1992 and July 1993, when a fourth team of Chinese experts worked with their counterparts in Muhimbili Medical Center, Dar es Salaam, the capital of Tanzania.

The record shows that *Aike* had an effective rate of 51.92 percent, slightly lower than *Glyke*, a Chinese herbal tablet used by the second and third teams of Chinese experts in Tanzania, which had an effective performance rate of 59.62 percent.

Among the 340 patients treated with the two Chinese herbal medicines between April 1989 and August 1993, the blood serum antibody count in eight of them showed signs of a reversion from positive to negative.

Most strikingly, one patient's HIV serum antibody count turned negative after taking *Aike* for three months. The patient, B.M., 48, was tested HIV-positive after her sexual partner had died of AIDS. Before treatment, she lost eight kilograms and suffered from diarrhea and fever. Post-treatment tests showed that the HIV virus was no longer present in her blood serum, but genes of the virus still existed in her lymph cell nuclei. Basically, all AIDS-related symptoms were gone.

"It is the *Aike* decoction that has made her a long-term non-progressor," said Prof. Lu Weibo, who was also head of the fourth team of Chinese experts.

Aike was used to treat a total of 52 patients in Tanzania. During treatment, the gains and losses of their weights ranged within two kilograms. Symptoms such as fatigue, fever, cough, diarrhea, anorexia, lymphadenopathy and skin rash caused by HIV infection were alleviated by varying degrees. No serious side effects were recorded.

"*Aike* and *Glyke* were the two most effective among a dozen Chinese herbal prescriptions used on a trial basis in Tanzania. *Aike* is more persuasive in terms of efficacy and closer to international medical standards thanks to going through extensive testing on animals," Prof. Lu said.

Animal Experiments

The testing of *Aike* on animals, a key research project in China's Eighth Five-Year Plan period (1991-95), lasted five years. Research was divided into three parts: the external anti-viral experiment, the internal anti-viral experiment on small animals, and the SIV model experiment covering aetiological, immunological and pathological tests.

In the external anti-viral *experiment*, *Aike* was used to interact with HIV-RT, a key enzyme that the AIDS virus needs to replicate itself. Results show that *Aike* can block HIV duplication.

In the internal antiviral experiment of small animals, mice suffering from immune-deficiency were given *Aike*. Results showed an improvement in the weakened immunity functions of the mice.

The SIV model test, developed in 1989 by WHO, is the linchpin of the whole animal experiment, according to Prof. Guan Chongfen, director of the Immunology Department of CATCM. "It is sophisticated, widely used and more persuasive since the SIVmac-infected monkeys show all the symptoms that human beings have," she said.

"We selected 12 infected monkeys — six were treated with *Aike*, three with AZT and three with ordinary saline water."

"The treatment lasted four months. We are elated to find that *Aike* was more effective than *AZT* in improving the monkeys' immunity functions."

Another exciting discovery was found through microscopic examination of cross-sections of these monkeys' lymph nodes. "Activation around the infected lymph nodes after treatment with *Aike* can be clearly observed, a sign that the lymph nodes were improving their function; whereas lymph nodes treated with *AZT* were observed to wither, a sign that their destruction by the virus continued," Guan said.

The result is further confirmed by laser micrography. Pictures show that the lymphocytic nucleus, after being treated *with Aike*, are under repair from a state of near disintegration before treatment, she said.

"*Aike* is effective—clinically, immunologically and serologically," she said.

Marketability Prof. Hao Wenxue's Svate Pharmaceutical Co. purchased the prescription for *Aike* in 1993 at a cost of two million yuan (about US\$ 240,000). The company has since spent an additional 1.5 million yuan (US\$ 180,000) on animal experiments involving the herbal medicine.

"The price is really very high," Hao said. "Why did I pay so much for the prescription? Because I believe it is a good medicine for AIDS patients."

Prof. Hao, who is also an eminent researcher on snake venom and the inventor of a successful medicine based on it, has no regrets about his expensive purchase.

He said: "*Aike* decoction is competitive for being both effective and economical, and most importantly, it doesn't induce side effects. Sources of its ingredients are so abundant in China that there is no problem in meeting market demand for the medicine."

"Should China face an AIDS onslaught, Chinese herbal medicine would be the best choice for Chinese patients. And traditional Chinese medicine has a high reputation in many countries, especially in Southeast Asia."

"I'm going to have this herbal medicine collar a quarter of the world market for AIDS drugs — I believe I'll make it."

Treating AIDS with herbal medicine remains a key research project in China's current Ninth Five-Year Plan period (1996-2000), according to Prof. Lu Weibo. "There are many other prescriptions that show promise in treating AIDS," he said. "We need to continue our exploration."

Quite coincidentally, Lu, Guan and Hao, the three professors directly involved in the development and manufacture of *Aike*, used to study and practice Western medicine but have all turned to traditional Chinese medicine in an attempt to combine the two for better results.

Aike may be a purely Chinese herbal medicine, but Western medical science has been extensively used for tests and analyses. With their rich experience in both Western and Chinese schools of medicine, the professors are among the most qualified to explore for an AIDS cure, using a combination of the two medical disciplines.

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