



# Current situation of AIDS prevention and control with traditional Chinese medicine and relevant policies in China

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## Abstract

This article analyzes the current system, the prevention and treatment team, drugs relating to AIDS prevention and control with traditional Chinese medicine, and the relevant policies in China so as to provide scientific advice on improving the policies and to promote the role of traditional Chinese medicine in treating AIDS.

**Keywords:** AIDS; traditional Chinese medicine; therapy; policy; China

## Introduction

This article is a translation from Chinese. Please refer to reference [1] to access the original source. AIDS is a chronic communicable disease which seriously threatens people's health. Between the first recognition of AIDS in 1981 and 2013 it led to nearly 70 million HIV infections and 30 million deaths worldwide [2]. The prevention and control of AIDS is a challenge for public health. Mobilizing every force with medical achievements to fight AIDS is an inevitable choice for humans.

During the long history of humans struggling with diseases, two medical theory systems – traditional medicine (represented typically by traditional Chinese medicine [TCM]) and modern medicine (Western medicine) – have gradually been developed. Both systems are making a great effort to study the causes of, therapy for, and prevention of AIDS to defeat it. Some primary successes have been achieved [3–5]. This article discusses the current situation of AIDS prevention and control with TCM, and analyzes the effect

and problems of relevant policies in China to provide specific suggestions on improving TCM treatment as well as to promote the role of TCM in fighting AIDS.

## The epidemic status of AIDS

Up to 30 September 2013 there were 434,000 surviving HIV patients in China, including nearly 10,000 new infections between January and September 2013 [6]. Since China's first AIDS case was identified in 1985, the AIDS epidemic has experienced a sporadic period (1985–1988), a local epidemic period (1989–1994), and a widespread epidemic period (began in 1995). The number of new HIV infections and AIDS patients is increasing year by year [2] (Fig. 1).

The AIDS epidemic affects a wide area of China [2] (Fig. 2). The morbidity and mortality of AIDS entered the peak period from 2001, and the trend of the spread of AIDS is from the high-risk population to the general population. Thus, there is still a long way to go in the fight against AIDS.

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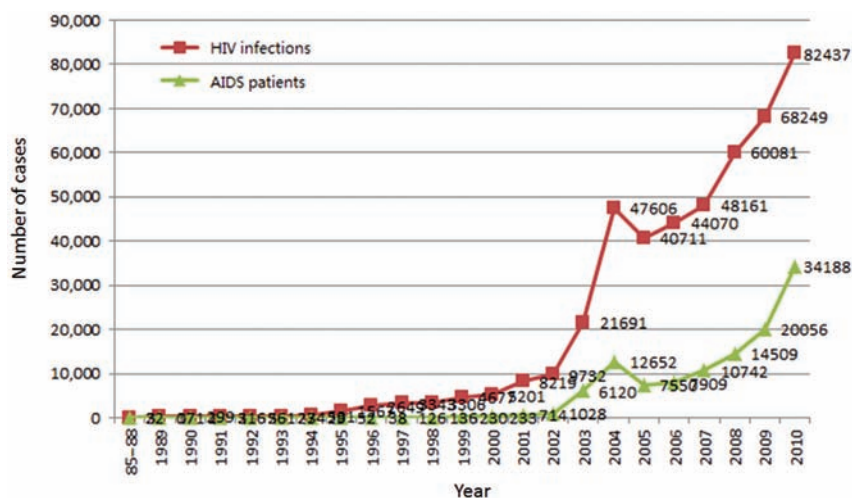


Fig. 1. The number of new HIV infections and AIDS patients from 1985 to 2010 in China.

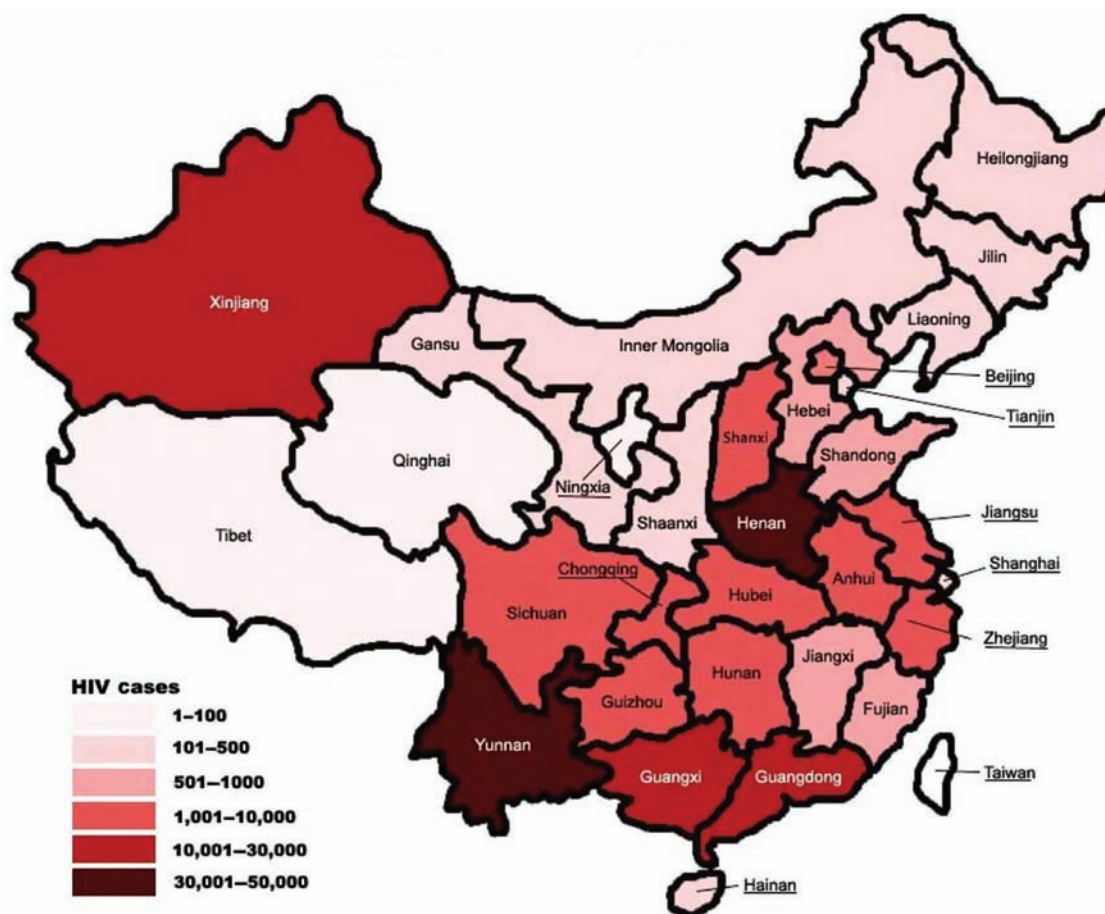


Fig. 2. Reported HIV cases by province, 1985–2005.



### The current situation of AIDS prevention and control

Significant progress has been achieved in the prevention and control of AIDS in recent years in China. The increasing prevalence, fatality rate, and social discrimination of individuals with AIDS have reduced, and the living quality of individuals with HIV has greatly improved. The overall goals of *China's Action Plan for Retaining HIV/AIDS Epidemic (2006–2010)* have been basically achieved. The following systems have been established and strengthened on the basis of the management of AIDS prevention and control in China: (1) a working mechanism led by the government, with the cooperation of related departments and the whole society; (2) a policy and regulation system for AIDS prevention and control; (3) a comprehensive prevention and control system dominated by the government; (4) a medical care and life security system for AIDS patients; and (5) a scientific research system for AIDS prevention and control.

Methadone maintenance treatment (antiretroviral treatment) is the mainstay of AIDS therapy. There were 761 methadone maintenance treatment clinics by October 2013 in China, and 407,000 heroin addicts had been treated there. Among these addicts, the proportion of new HIV infections decreased by 89.5% compared with 2006. So far, 3413 AIDS antiretroviral treatment facilities covering 2286 counties/districts in 31 provinces/municipalities have been established. Up to September 2013, 260,000 patients had been treated,

including 209,000 patients still being treated in these facilities [6].

The financial funds for AIDS prevention and treatment at all levels are increasing year by year in China. The special financial funds from the central government increased from RMB 120 million (USD 18.71 million) to RMB 2.39 billion (USD 0.37 billion) between 2002 and 2012, with more than RMB 12 billion (USD 1.87 billion) funded totally [2]. Figure 3 shows the total funds in AIDS prevention and control from 1995 to 2007. We can see from Fig. 3 that the funds were lower before 2002, and significantly increased from 2002 to 2004, then remained constant after 2004 [7].

### The situation of AIDS prevention and control with TCM

#### Efficacy of TCM in treating AIDS

TCM is the most popular complementary medical therapy. There are studies showing that TCM can relieve the potential symptoms of HIV patients, decrease viral load, and increase CD4<sup>+</sup> T cell count, and it also possibly has a unique advantage of improving the life quality of HIV patients [8, 9].

#### Prevention and control system and prevention and treatment team for AIDS

The State Administration of Traditional Chinese Medicine (SATCM) of the People's Republic of China leads the work to fight AIDS with TCM. The coordinating group and expert

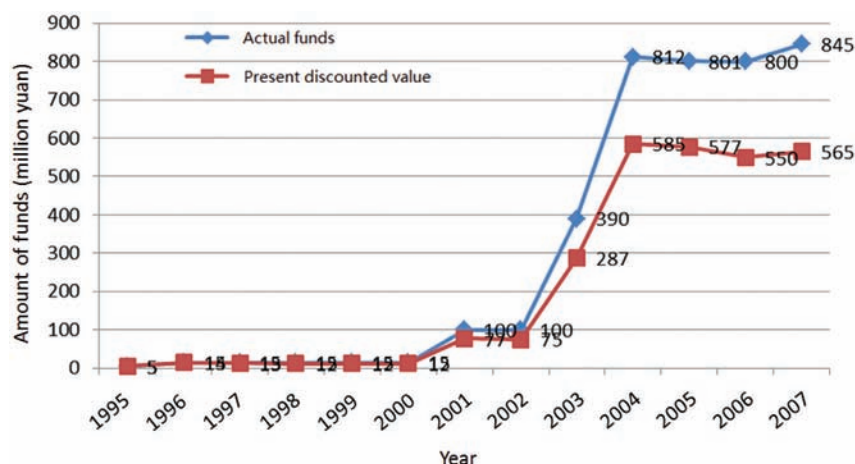


Fig. 3. Funds for prevention and control of AIDS in China, 2000–2007.



consulting group of the SATCM, and the AIDS Research Center of the China Academy of Chinese Medical Sciences constitute the organizational structure of the SATCM organizing leadership and provide technical guidance for AIDS prevention and control [10].

Clinical research bases and centers for AIDS prevention and control have been established in some provinces in China. A three-grade management system, including the AIDS Research Center of the China Academy of Chinese Medical Sciences, provincial/municipal leading groups, expert panels, and clinics for AIDS control with TCM, has been developed (Fig. 4) [10].

Since the launch of the TCM pilot project for treating AIDS in 2004, the number of provinces running TCM pilot projects has expanded to 19 from the initial five. The facilities contribute to AIDS therapy with TCM, including 132 relevant scientific research institutions, hospitals for infectious diseases, hospitals for TCM and Western medicine, and universities. There are 944 direct participants in these facilities, among them 264, 241, and 439 with senior, intermediate, and junior professional titles, respectively [10].

There are three problems with AIDS control in the organizing system and team structure: (1) the organizing and managing system is isolated – there is a lack of a framework and a mechanism for coordination between TCM and Western medicine; (2) the pilot sites for treating AIDS with TCM are mainly affiliated with the TCM facility system, general hospitals are seldom involved, and a mechanism for corporation and exchange between the principal institution – the Chinese Center for Disease Control and Prevention – and pilot sites is lacking; and (3) although the TCM pilot facilities are growing stronger and stronger, their overall strength is still weak, and the level of TCM treatment of AIDS has been just about the basic standard for more than 10 years.

Currently, the lack of a perfect cooperative mechanism among departments competent in TCM and Western medicine, the academic community, and clinical practice can lead to TCM and Western medicine fighting AIDS separately. This situation mainly occurs as the resource sharing and coordination mechanism is imperfect, scientific research collaboration and communication are inadequate, and the recognition of a medical effect is divergent between TCM and Western

medicine departments. In the clinical therapy aspect, mutual repulsion and opposition even exist between TCM and Western medicine; this may result in a waste of resources.

### *Service delivery and funds for AIDS prevention and control*

A total of RMB 220 million (USD 34.30 million) was invested in the pilot project by the central government from 2004 to 2007 [10], and the average funds were RMB 31 million (USD 4.83 million) per year. The central government special funds for AIDS prevention and treatment amounted to RMB 815 million (USD 127.06 million) between 2004 and 2008: special funds=total special funds from 2004 to 2007/4=(810+800+800+845)/4=RMB 815 million. So, the funds for the pilot project accounted for 3.8% of the special funds.

With regard to service delivery, 14,244 patients have been treated by the “pilot project”; among them 9561 patients are still being treated. From a rough calculation, patients treated by the “pilot project” account for 5.4% of patients (14,244/260,000) who have had antiretroviral treatment. We can assume that the central government is paying increasing attention to the pilot facilities for AIDS control. But the funds allocated are still at a low level.

### *Relevant laws, regulations, and policies on AIDS control*

By analyzing *Health Work Policies in New Period*, *Law of the PRC on the Prevention and Treatment of Infectious Diseases*, *Regulations on AIDS Prevention and Treatment*, *China's Medium-Long Term Plan on Prevention and Control of HIV/AIDS*, *China's Action Plan for AIDS Prevention and Control*, and so on, we can see the national government supports and encourages TCM playing an important role in AIDS control with macro policies; there are laws and regulations supporting people to prevent and treat AIDS with TCM.

*Regulations on AIDS Prevention and Treatment* clearly points out the following: “National government encourages and supports the development of scientific researches in AIDS prevention, diagnosis, and treatment, and improvement of science-technical level of AIDS prevention and control; and encourages and supports the development of traditional

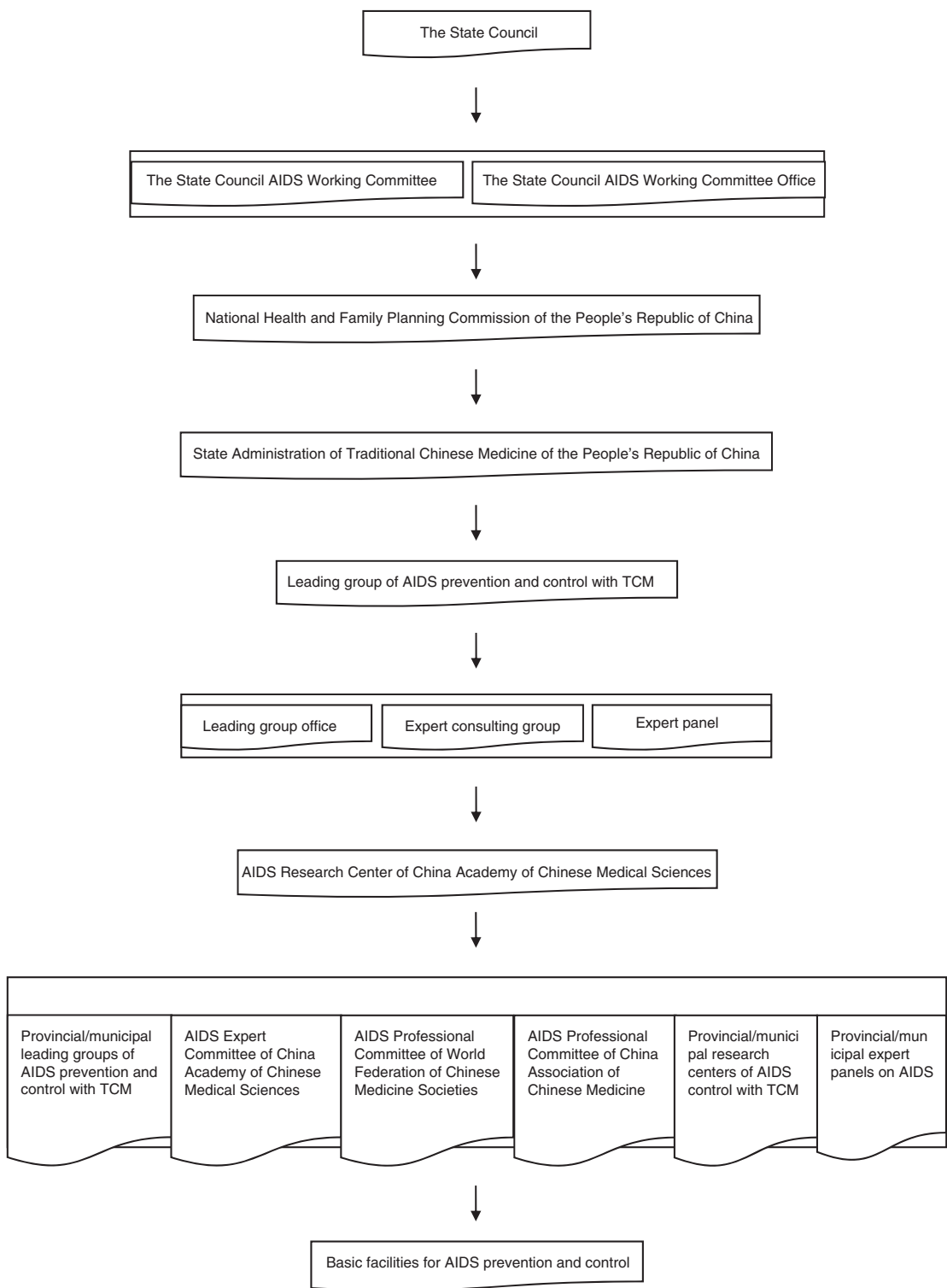


Fig. 4. Organization chart of AIDS prevention and control with traditional Chinese medicine.





medicine and tradition-modern combined medicine in AIDS clinical treatment and researches.”

*China's Medium-Long Term Plan on Prevention and Control of HIV/AIDS (1998–2010)* addressed the general and specific targets that the AIDS control work should achieve between 1998 and 2010, and the related measures. The specific related measures pointed out that scientific research should be implemented with plans, adhere to the orientation of the prevention and control services, take full advantage of traditional medicine and tradition-modern combined medicine, value the consulting and guiding function that expert committees provide in scientific research, focus on major points and key technical issues, accumulate talent from every discipline and area, and tackle problems cooperatively with technology.

*China's Action Plan for AIDS Prevention and Control (2006–2010)* (Document No. 13 Issued by the General Office of the State Council of the People's Republic of China [2006]) addressed the general and specific targets, strategies, and measures for AIDS prevention and treatment in 2007 and 2010. The measures section pointed out that the Chinese government supported the development of TCM clinical services for AIDS patients, and China should conduct research for clinical therapy, summarize the regularities of TCM diagnosis and treatment, and improve the integrated therapeutic scheme of TCM combined with Western medicine. The prevention and treatment targets stated that more than 50% and 80% of AIDS patients who meet the treatment standard should receive antiretroviral or TCM therapy in 2007 and 2010, respectively.

*China's Twelfth Five-Year Action Plan for AIDS Prevention and Control* addressed the targets, control measures, safeguard measures, supervision measures, and assessment measures for AIDS prevention and control during the 12th 5-year plan period. The targets included that the number of AIDS patients who receive TCM therapy should be increased by 70% in comparison with the number in 2010; this made the targets more specific and clearer. The control measures pointed out that the departments responsible for health and TCM should fully develop the role of TCM in treating AIDS, explore an integrated therapeutic scheme of TCM combined with Western medicine, expand the TCM therapy scale, and improve TCM treatment quality. The safeguard measures pointed out that the departments responsible for health and

TCM should strengthen construction of the AIDS prevention and treatment team, intensify the training for all types of AIDS control staffs at all levels, including knowledge of AIDS control in the medical licensing examination, and pay attention to personnel training for academic leaders and innovative talent. Team construction of AIDS prevention and control with TCM was first proposed in *China's Twelfth Five-Year Action Plan for AIDS Prevention and Control*; this is of great significance for promoting the power of AIDS prevention and control with TCM.

“Notice of recommendation on “Guideline of diagnosis and treatment for AIDS” and “Clinical technique scheme for AIDS treatment with traditional Chinese medicine (on trial)” (document No. 19 issued by Ministry of Health P.R. China [2005])” was released by the former Ministry of Health of the People's Republic of China and the SATCM on January 21, 2005. This notice introduced two schemes for AIDS treatment with TCM and Western medicine, respectively, and proposed concrete and feasible measures for AIDS treatment with TCM.

However, there are also some existing problems in China's laws, regulations, or policies, as follows:

1. There are few direct high-level policies, and the specific targets of AIDS control with TCM are not clear. Few relevant policies have been issued by the State Council, although TCM-related matters were mentioned in some documents – for example, *China's Medium-Long Term Plan on Prevention and Control of HIV/AIDS*, *China's Action Plan for AIDS Prevention and Control*, and *Regulations on AIDS Prevention and Treatment* – but specific targets were not defined, high-level practical implementation strategies were lacking, and the main policies for AIDS control – “Four Frees and One Care” (free antiretroviral drugs, free prevention of mother-to-child transmission, free voluntary counseling and testing, free schooling for children orphaned because of AIDS, and care for people living with HIV/AIDS) – do not elaborate the use of TCM for AIDS patients.
2. From the AIDS diagnosis and treatment point of view, the methods of TCM and Western medicine are separate, not an integrated subject. “Clinical technique scheme for AIDS treatment with traditional Chinese medicine (on



trial)”) was not a guideline with a literal meaning; in fact, the therapies elaborated in “*Guideline of diagnosis and treatment for AIDS*” and “*Clinical technique scheme for AIDS treatment with traditional Chinese medicine (on trial)*” are isolated, not integrated.

3. Supporting policies – for example, an AIDS control with TCM relating examination and approval policy, a health insurance policy, and a long-term training mechanism for promoting AIDS control with TCM – are lacking. Antiretroviral therapy for AIDS has been studied and is improving all over the world, whereas TCM treatment is mainly researched in China, so more policy support is needed to make the development of TCM treatment keep pace with antiretroviral therapy.

### Proposal

The SATCM launched the pilot project for AIDS treatment with TCM in 19 provinces and municipalities in 2004; 14,244 patients have been treated, are 9561 are still being treated. Some success and experience has been achieved in system construction, organizational management, and talent building.

Although the pilot project was launched in 19 provinces and municipalities, there is not an integrated and independent work system, there is lack of a mechanism for communication, coordination, and corporation between TCM and antiretroviral therapies, most of the TCM treatments are limited to the basic level, and the study and clinical practice outcomes in the 19 provinces and municipalities have not been promoted nationwide.

From an AIDS prevention and control aspect, a perfect cooperative mechanism has not been established between TCM and Western medicine. Theoretically, TCM and Western medicine should fight AIDS collaboratively, but a perfect cooperative mechanism between competent departments, the academic community, and clinical practice has not been established because of policy deficiencies and framework imperfection, and in many cases, TCM and Western medicine fight AIDS separately, because the resource sharing and coordination mechanisms are imperfect, scientific research collaboration and communication are insufficient, recognition of effects is different, and there is mutual repulsion and opposition even in clinical treatment.

The authors of this article think that the following work should be done to fully develop the effect and contribution of TCM in controlling AIDS from a policy perspective:

1. Improve the organizational system and structure for AIDS treatment with TCM, establish a collaboration and communication mechanism between TCM and Western medicine, facilitate cooperation between TCM and Western medicine in the fight against AIDS, promote TCM therapy away from the basic level, and increase funding.
2. A policy document which is directly related to AIDS control with TCM issued by the State Council is needed to clearly define the treatment targets. Of particular importance, mention of TCM for treatment of AIDS should be added to the “Four Frees and One Care” policy.
3. Accelerate relevant academic research, and discuss and promote the “*Guideline of diagnosis and treatment for AIDS*” integrates TCM with Western medicine under the State Council AIDS Working Committee leading.
4. Perfect supporting policies – for example, an AIDS treatment with TCM examination and approval policy, a health insurance policy, and a long-term training mechanism which could promote AIDS control with TCM.

### Conflict of interest

The authors declare no conflict of interest.

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