

# **Study on Government Intervention in AIDS Prevention and Control under the Background of Regional Change in China**

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## **Abstract**

AIDS pandemic in China has made Chinese AIDS prevention and control problems become a major public problem, from the successful experience of countries all over the world, government intervention is the fundamental guarantee of HIV/AIDS prevention and control. By the end of 2011, people living with HIV/AIDS were about 780 thousand. Sexual transmission is the main spread way of AIDS, the old crowd AIDS infection rate has increased and students infected with AIDS has also increased year by year. China's total HIV/AIDS distribute in 31 provinces (Autonomous region and centrally administered municipality), and mainly distribution in 6 provinces of Yunnan, Guangxi, Sichuan, Xinjiang and Guangdong. The problems of government intervention in China's HIV/AIDS prevention and control mainly include lack of policy and propaganda education, the weakness of the government departments' power of organization and coordination, the lack of coordination between the government and society volunteer organization and folk strength, etc.

**Keywords:** Regional Change, HIV/AIDS, Prevention and Control, Government Intervention

## **1. Introduction**

AIDS is also called Acquired Immune Deficiency Syndrome, it is a deadly infectious diseases due to the infection with the human immunodeficiency virus. In 1981, the first case of AIDS was found in the United States and the first report of AIDS cases in China was found in 1985. Statistics showed that by the end of 2010, Globally, 34.0 million [31.4 million-35.9 million] people were living with HIV at the end of 2011, and the number of new HIV infections were 2.5 million (2.2 million-2.8 million). [1] AIDS has become a crisis source which blocks the development of the society. It is not only a single medical problem but also seriously affected the economic development and social progress of a country, even make a threaten to

peace and safety. So we must consider AIDS as a comprehensive social problem.

AIDS has become a major public health problem and social problem in the world, and the government's organization and leadership is the fundamental guarantee for AIDS prevention and control work. Although the Chinese government has made positive intervention to this problem, there are still many practical problems and difficulties in the process of intervention. [2] This paper analyses the epidemic characteristics and regional distribution of AIDS and the existing problems and the reasons for government intervention in AIDS prevention and control from the theory of government regulation, government failure and public policy, then put forward the countermeasures and

suggestions for prevention and control of AIDS based on the perspective of public management.

## 2. The Epidemic Characteristics of AIDS in China

### 2.1. The Situation of AIDS Epidemic in China

By the end of 2011, the number of PLHIV in China was about 780 thousand (620-940 thousand), women accounted for 28.6%; the number of AIDS patients was 154 thousand (146-162 thousand); the infection rate of the whole population was 0.058% (0.046%-0.070%). The estimated number of 2011 year new AIDS virus (HIV) infection was 48 thousand (41-54 thousand), and 28 thousand (25-31 thousand) people died of AIDS in 2011

(Table 1). Among 780 thousand PLHIV, Through heterosexual transmission accounted for 46.5%, the homosexual transmission accounted for 17.4%, the transmission of injecting and drug using accounted for 28.4%, in which the total number of PLHIV spread by injecting and drugs in Guangxi, Guangdong, Sichuan and Guizhou accounted for 87.2% of the estimated number in China; Paid blood, blood transfusion or blood products transmission accounted for 6.6% in which the total number of PLHIV in Henan, Anhui, Hubei and Shanxi accounted for 92.7% of the estimated number in China; and Mother-To-Child Transmission accounted for 1.1%. [3]

	2005	2007	2009	2011
People Living with HIV/AIDS (1000 persons)	65 (54-76)	70 (55-85)	74 (56-92)	78 (62-94)
AIDS (1000 persons)	7.5 (6.5-8.5)	8.5 (8.0-9.0)	10.5 (9.7-11.2)	15.4 (14.6-16.2)
Death in AIDS (1000 persons)	2.5 (2.0-3.0)	2.0 (1.5-2.5)	2.6 (2.2-3.0)	2.8 (2.5-3.1)
New HIV infections (1000 persons)	7.0 (6.0-8.0)	5.0 (4.0-6.0)	4.8 (4.1-5.5)	4.8 (4.1-5.4)
Infection rate of total (%)	0.050 (0.042-0.058)	0.054 (0.042-0.065)	0.057 (0.043-0.071)	0.058 (0.046-0.070)

Table 1 2005-2011 estimated the main result of the AIDS epidemic in China

Source: Ministry of Health of the People's Republic of China, UNAIDS, the World Health Organization. Estimated that of the AIDS epidemic in China in 2011

### 2.2. Sexual Transmission is the Main Route of Transmission and the Proportion Continues to Increase

Sexual transmission accounted for 63.9% in the estimated 780 thousand PLHIV of 2011, which increased 4.9% compared to the number 59% in 2009, the heterosexual transmission has risen from 44.3% in 2009 to 46.5% in 2011 and the homosexual transmission has risen from

14.7% in 2009 to 17.4% in 2011. In heterosexual transmission, sexual transmission between spouses is about 1/4 and the rest 3/4 was not between spouses. Among the estimated 48 thousand new infections, the ratio of sexual transmission rose from 75.7% in 2009 to 81.6% in 2011 in which heterosexual transmission accounted for 52.2%, increased 10 percents compared to the number 42.2% in 2009, homosexual transmission accounted for

29.4%, fell 3.1 percents compared to the number 32.5% in 2009. Reported cases over the years of homosexual and heterosexual transmission ratios increased year by year, and sexual transmission ratio rose from 33.1% of 2006 to 75.2% in 1-9 months of 2011.

### 2.3. The Old Crowd AIDS Infection Rate Increased

People infected AIDS show a trend of diversification. Case report data display that the 50 and older age group report number increased obviously in 1-9 months of 2000 and 2011, in which the proportion of 50 - 64 age group of the total reported number increased 7.5 times in 11 years, has risen from 1.6% to 13.6%;the proportion of 65 years old and above age group of the total reported number increased 20 times in 11 years, which has risen from 0.34% to 7.0%.

### 2.4. Students Infected with AIDS Increased Year by Year

Reported the number of HIV infected persons and AIDS patients whose occupation is students also showed an upward trend year by year, and the proportion of total number of reported cases has risen from 0.96% in 2006 to 1.64% in 1-9 months of 2011. Among these students of HIV

infected persons and AIDS patients, the proportion of 20-24 age group has risen from 20.3% in 2006 to 49.0% in 1-9 months of 2011. Meanwhile, in the students who infected HIV, the proportion of homosexual transmission has risen from 8% in 2006 to 55.5% in 1-9 months of 2011 and the proportion of heterosexual transmission has risen from 4% to 19.3%.

## 3. The Changes of China's AIDS Regional Distribution

### 3.1. The Estimation Distribution of China's AIDS Epidemic

From the estimation results of the epidemic, by the end of 2011, the number of China's PLHIV was 780 thousand (620-940 thousand), the infection rate of the whole population was 0.058% (0.046%-0.070%), still belongs to a low epidemic country. There were 5 provinces whose estimated number of PLHIV were over 50 thousand which account for 60% of the total estimated number in the country, and there were 12 provinces whose estimated number beyond 5 thousand th accounted for 4.8% of the total estimated number in the country (Figure 1).



Figure 1: Geographic distribution of AIDS epidemic estimated in China, 2011

### 3.2. The Geographical Distribution of China's Total HIV/AIDS

From the situation of case report, at the end of September 2011, there are 31 provinces in the country (autonomous region, centrally administered municipality) have the epidemic situation report, about 93% of the county (District) reported HIV infected persons or AIDS patients. The epidemic situation report number of different provinces has big differences, the last 7 provinces cumulative reported HIV infected persons and AIDS patients the top 6 provinces cumulative reported

HIV infected persons and AIDS patients are Yunnan, Guangxi, Henan, Sichuan, Xinjiang and Guangdong in turn, which accounted for 75.8% of the total reported number in the country; meanwhile the last 7 provinces cumulative reported HIV infected persons and AIDS patients are Xizang, Qinghai, Ningxia, Neimeng, Gansu, Hainan and Tianjin in turn, which accounted for 1.2% of the total reported number in China; the top 20 county (District, city) reported HIV infected persons and AIDS patients distribute in Yunnan, Guangxi, Xinjiang, Henan and Sichuan (Figure 2).



Figure 2 Cumulative reported HIV / AIDS distribution in China (As of the end of September 2011)

### 3.3. The Differences of the Spread of AIDS in China

Different groups have big differences about the infection rates of HIV, the drug users have highest infection rates and there are obvious regional differences. The regions of higher levels of infection are still concentrated in Yunnan, Xinjiang, Sichuan, Guangxi, Guizhou, Guangdong, etc. For example, the positive rate of HIV antibody in Honghe state of Yunnan, Wuzhou city of Gungxi and Yilei state of Xinjiang are over 50%. In most area the positive rate of HIV antibody of CSW (commercial sex workers) are at the lower level. The areas which have more than 1% infection rates of HIV are mainly in some areas of Yunnan, Xinjiang,

Sichuan, Guangxi, Guangzhou and Guizhou provinces which have seriously drug taking problems. Drug using and prostitution cross infection among CSW has a relatively higher infection rate. In some AIDS epidemic-hit areas, pregnant woman has a relatively high infection rate, some could even reach or over 1%.

## 4. Problems and reasons of China's AIDS Prevention and Control of Government Intervention

### 4.1. Policy and the Reality not Coordinative

In the early stages of HIV/AIDS prevention and control in China, introducing some limitations blood products import policy, in 1988 the

Ministry of health management of blood products production, requested to donate blood for HIV antibody test part, but only a few areas of blood donation member taken the detection of HIV antibody, and the antibodies were never detected. At the same time, because our country limits the blood products imported raw materials, increasing the demand for raw materials of blood. At that time, the government is not for blood safety management of the related laws and regulations, the promulgation of the resulted in the short term there appear a large number of illegal underground blood stations, seriously affect the quality and safety of blood products, and increased HIV/AIDS from spreading further. The government department and the party and government officials to the understanding of HIV/AIDS knowledge exists many problems, such as lack of old ideas, thus resulting in AIDS policy formulation and implementation of there is greater deviation. Apparent indifference, stubborn prejudice, cold discrimination comes from the lack of cognition of AIDS. Cognitive decision attitude, attitude, behavior only fundamentally change the cognitive to be effective in promoting HIV/AIDS prevention and control work. [4] In the prevention and treatment of AIDS, and to strengthen the policy execution, coordinate the interest related groups of vested interests, strengthen the supervision and evaluation of policy. [5]

#### **4.2. The Lack of System and Targeted Propaganda Education**

China's AIDS public education lack of depth, breadth and innovation, and in minority nationalities and remote areas it is especially lack of publicity and education. The promotions are mainly centred on the period of the world AIDS Day, and mainly concentrated in large and medium-sized cities, not only propaganda frequency is far from enough, and not to the rural areas have great influence; Publicity of content and form is more single, lacking of

pertinence, ignoring the regional ethnic differences such as age and gender; The key is not the propaganda work into the related department agenda; To reverse discrimination propaganda not enough attention; The media in AIDS propaganda lack of initiative, and planning and action plan requirements also has the very big disparity compared; On the basis of school AIDS health education and life skills training has been more successful pilot, but in the national coverage is far from enough; To school and outside the school teenagers propaganda work is basically in the blank stage; According to the floating population propaganda and health service is far from enough, and so on.

#### **4.3. The Departments of the Government Organization and Coordination Power are Weak**

Although the state council working committee on the prevention and control of AIDS the establishment of the department to strengthen the coordination of leadership strength, but some areas and the department of leadership to HIV/AIDS prevention and control work lack of full understanding, let the AIDS as a simple health problems, not from the height of the social and economic development to meet the dangers of the HIV/AIDS epidemic prevention and control and complexity, the hardship and long-term. In the part of the city county was especially prominent, in recent years, the cause of AIDS care assistance dispute law and a series of problems are falling in the department of health's head. Due to the AIDS prevention supervision assessment system is not sound and measures does not reach the designated position, basic HIV/AIDS prevention and control department cooperation more in some places still stay in form. [6] The theory of lack of cognition thinks that AIDS cognitive deficiency is a local officials HIV/AIDS prevention and control power shortage is the main reason. Jin wei believes that the leading cadre to HIV/AIDS related knowledge is not much, to the

development trend of HIV/AIDS prevention and control of HIV/AIDS in misunderstanding is a major obstacle. [7]

#### **4.4. The Government and Social Volunteer**

##### **Organization folk Strength Coordination is not enough**

Throughout the world's relatively successful curb AIDS epidemic popular countries, government and society is the result of joint efforts, which needs the government macro guidance, also need social forces and wide participation. Many national non-government organizations and non-governmental organizations are in the prevention and control of HIV/AIDS has played a key role. China's non-governmental organizations also more and more involved in AIDS prevention and control activities, become an important force in the prevention and treatment of HIV/AIDS. But at present our country includes large social organizations, for example, The National Women's Federation, Communist Youth League Central Committee, the National Youth Federation, the All-China Federation of trade unions, the Red Cross Society of China, China Family Planning Association, and so on. Some small, especially private voluntary organizations because the government leading political system, and the influence of organizational development is not mature, the prevention and control of AIDS in the government and non-governmental organizations and the interaction of the status quo of the cooperation is not ideal[38]. Wu yilong from the perspective of public economics, public goods analysis as the breakthrough point to demonstrate our country prevention and control of HIV/AIDS policy in market mechanism operation level and the failure of the national government macroscopic intervention of necessity. And to discuss the prevention and treatment of effective supply of public goods mode and the constitutional level to control policy that legitimacy. [8]

## **5. Conclusions**

Large-scale epidemic of AIDS has made China AIDS prevention and control problems become serious public problems. From the successful experiences in the prevention and control of AIDS around the world, government intervention is the fundamental guarantee for AIDS prevention and control. The Chinese government has made a lot of effort on AIDS prevention and control and achieved certain results, but in the intervention process there are still many realistic problems. This paper based on the analysis of the existence of the government intervention in China's AIDS prevention and control of the question and the reason puts forward some improvement measures, which propose to further improve and establish feasible prevention and control policy, to strengthen publicity and education, a change of attitude, improve the incentive mechanism of local officials, strengthen the supervision of public policy implementation mechanism, improve the ability of comprehensive prevention and behavior intervention, to strengthen the cooperation between departments, prominent Department advantage

AIDS prevention and control of market failure requires government intervention. Externalities, asymmetric information supply and demand of AIDS prevention and public health environment hitchhike phenomenon of market operation of AIDS prevention and control of some controlling high-risk behavior, it is the existence of these phenomena, the government intervention in AIDS prevention and control issues become necessary. Secondly, although the Chinese government in AIDS prevention and control made a lot of effort and obtained a certain result, but in the intervention process there are still many realistic problems. China's current government intervention in AIDS prevention and control situation is mainly the public policy of "delay" dilemma, public policy formulation and implementation

difficulties and behavior intervention moral dilemma.

### **Acknowledgments:**

Fund: This article sported by Foundation of Yunnan University of Economics and Finance (No.YC2012C06, No.Yc10d007). Yunnan Province Philosophy Social Science Planning Projects (NO.Yb201124). Ministry of Education of Humanities and Social Sciences Youth Fund (No.12yjc840007). Ministry of Education of Humanities and Social Sciences Western and Border Areas Fund (No.11xja840002).

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