The Ailing Dragon: A study of HIV/AIDS in China from 1985 to 2004

By
Georges Zaki Fahmy

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Department of Social Sciences of the Faculty of Arts and Sciences
Lebanese American University

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Lebanese American University
Student Name: Georges Fahmy
I.D: 200301964

Thesis Title: The Ailing Dragon: A Study Of HIV/AIDS in China from 1985 to 2004

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Department: Social Sciences

School: Arts and Sciences – Beirut

Approved/Signed by:

Thesis Advisor: Paul Tabar

Member: Sami Baroudi

Member: Jennifer Skulte-Ouaiiss

Date: June 30, 2006
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Date: 13/11/06

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To my family
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Abstract of the thesis

The main objective of this thesis is to first understand HIV/AIDS, its means of transmission, and the origin of its epidemic in the People’s Republic of China (PRC) from 1985 to 2004.

Then a study of the various facilitators, namely medical, socio-economic, cultural-behavioral, politico-financial, governmental, and legal that permitted the epidemic to spread across China will be instigated.

Finally, a step-by-step analysis of the PRC’s response to the HIV/AIDS crisis in specific sectors of activity (Prevention, financing, surveillance, medical research and foreign assistance utilization) over a time span of 19 years will be carried out.
Thesis Outline:

I. Introduction:
   - Importance of the topic
   - Statement of Thesis
   - Methodology
   - Literature Review

II. An evaluation of the HIV/AIDS situation in China:

   a) HIV and AIDS: Definitions and analysis
   b) HIV Strains
   c) Transmission of HIV/AIDS
   d) Populations at Risk
   e) Detection of HIV/AIDS infections
   f) HIV/AIDS Treatment
   g) HIV/AIDS Prevention

   Part 2: The origins of HIV/AIDS in China
   h) Phase one, the Import Stage (1985 – 1988): Emergence of “Patients Zero”
   j) Phase three, the Growth Stage (1994 – Present): Outbreak
III. **The reasons behind the rapid spread of HIV/AIDS in China:**

A. *Medical facilitators:*

**Part 1:** *Sexually Transmitted Diseases/ Sexually Transmitted Infections (STIs/STDs)*

(i) STIs/STDs: An introduction
(ii) The Different Types of STI/STDs and their means of transmission
(iii) Population at risk for STI/STD
(iv) STI/STD and High-Risk Populations
(v) The Importance of STI/STD Control, Treatment, and Prevention
(vi) STI/STD in China: Detection and Surveillance
(vii) The most Common Types of STI/STD in China
(viii) STI/STD and HIV/AIDS
(ix) STI/STD and Chinese Women

**Part 2:** *Tuberculosis (TB)*

I. Definition of Tuberculosis (TB) and its symptoms
II. Tuberculosis: Risk assessment and means of transmission
III. Tuberculosis and HIV/AIDS: A daunting connection

B. *Socio-Economic Facilitators*

C. *Cultural and Behavioral Facilitators*

D. *Political Financing, Governmental Facilitators, and Legal Restrictions*
IV. The PRC’s evolutionary response to the HIV/AIDS epidemic from 1986 to 2004

- Prevention Awareness and Education (PAE)
- State HIV/AIDS Spending (SHAS)
- Sentinel Sites Enhancements (SEE)
- Medical Treatment and HIV Research (MTHR)
- NGOs and Foreign Aid Utilization in HIV/AIDS PAE campaigns

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Chapter I: Introduction

1-Importance of the topic:
In the 1990s, the UN General Security Council classified HIV/AIDS as a threat to the peace. The disease first appeared in the early 1980s and has claimed millions of lives to date. HIV/AIDS's emergence in China in the mid-1980s has had a devastating impact on many sectors, such as public health, economic growth, and has showed that even "authoritarian socialist regimes" could not deal with the epidemic more swiftly and effectively than their capitalist rivals could. I have decided to focus my thesis on the Chinese HIV/AIDS epidemic for many reasons: First, the topic was never tackled academically. Second, the majority of organizations such as UNAIDS, the WHO and others solely focus on the medical impact of the epidemic, to the detriment of other aspects such as the socio-economic, cultural/behavioral, and the politico-legal aspects. Third, although there are many excellent reports on the epidemic, made by authorities such as the UN groups and the U.S. Embassy Beijing, there has not been a single document summarizing the impact of the HIV/AIDS epidemic on the above-mentioned fields of study into a cohesive entity.

2-Statement of thesis or the claim:
This thesis has numerous objectives, set in four major segments: The first goal is to analyze the HIV/AIDS epidemic in the People's Republic of China (PRC) from a medical and evolutionary perspective as of 1985 until 2004. The next objective is to investigate the various reasons behind the Chinese HIV epidemic, specifically the medical, socio-economic, cultural/behavioral, and political/governmental/legal facilitators. Finally, the last chapter will revise China's progressive response to the HIV/AIDS crisis over the years. The thesis' conclusion will review and summarize the totality of the work while looking at China's difficulties in dealing with the crisis from an ideological point of view.
3- Structure of Thesis:

I have decided to organize the thesis as follows: First, I will briefly define HIV/AIDS and evaluate its medical impact on the population as a whole. After that, I will outline the origins of HIV/AIDS in China and its three phases. Next will be detailed explanations of the facilitators, which are factors that allowed the epidemic to gain ground in the PRC; these are medical, such as Sexually Transmitted Diseases and Tuberculosis, but also socio-economic, cultural/behavioral, as well as political/governmental/and legal. Pre-ultimately, a detailed analysis of the evolution in political response namely changes in Prevention, Awareness, and Education, State HIV/AIDS Spending, Sentinel Sites Enhancements, Medical Treatment and HIV Research, and NGOs and Foreign Aid Utilization in HIV/AIDS campaigns, from 1986 to 2004 will be undertaken. Finally, I will summarize the thesis and attempt to determine the ideological reason(s) behind China's ineffectiveness in dealing with the epidemic.

4- Thesis methodology:

Because of a lack of academic interest in the topic, I have decided to use mostly United Nations publications, U.S. Embassy in Beijing documents, along with some official Chinese Ministry of Health (MOH) joint papers, Chinese epidemiological studies, and other medical materials for writing my thesis. As a rule, I mostly used secondary sources, because all governmental and certified PRC publications on the topic were (and still are) written in Mandarin and Cantonese, languages I neither speak nor read. Fortunately, I was able to find some primary documents, mostly joint ventures between the Chinese Ministry of Health and organizations from the UN family. Additionally, I have consulted many medical publications, in majority epidemiological studies and surveys, written both by Western and Chinese authors, and have used all relevant material in my thesis, as well as three electronic encyclopedias for much the majority of the medical definitions used in the paper.
Chapter II: An evaluation of the HIV/AIDS situation in China

Part 1- HIV/AIDS in China: The medical perspective

The aim of this chapter is to provide the reader with basic but solid facts about the Human Immunodeficiency Virus (HIV) and its ensuing disease, the Acquired Immuno Deficiency Syndrome (AIDS). Having a clear picture of the disease’s potential and limitations is crucial to understanding the rest of this paper. I will first start with differentiating between HIV and AIDS, following it up with an explanation of the virus’ different strains. Then, I will explain HIV’s means of transmission (both generally and in China) and the various populations at risk for infections. After that, we will touch upon HIV and AIDS’ clinical detection through analyzing various symptoms and related illnesses. Ultimately, I will discuss HIV/AIDS treatments as well as briefly mention certain preventive strategies useful to limit future epidemics.

HIV and AIDS: Definitions and analysis

What is HIV?
The Human Immunodeficiency Virus (HIV) is a very lethal and extremely complex organism that puzzled the medical community when it first appeared in the early 1980s. (More precisely, in 1981 for the United States of America and Africa) Although its origins are unknown, it seems that the virus existed in the past but multiplied and became
fatal to humans only recently, because of changes in sexual behaviors.¹ Some speculate about HIV’s artificial origins, but there are no evidence indicating that it was “Man made”. Three medical researchers discovered HIV quasi simultaneously; they are oncologist Luc Montagnier (Pasteur Institute, France), medical researcher Robert Gallo (National Cancer Institute, Bethesda, United States of America) and virologist Jay Levy from San Francisco’s University of California.² Originally, American researchers named the virus responsible for AIDS, the Human T-Lymphotropic Virus, type III (HTLV-III). During the late 1980s, HTLV-III changed its name to HIV when more viral strains started appearing.³ From a cellular level, HIV deals a specific type of damage: Upon entering the bloodstream, the virus seeks out and destroys T-Lymphocytes, a type of white blood cells vital to the body’s immune system.⁴ Moreover, HIV hijacks other immune cells known as macrophages and uses them to replicate itself and attack other healthy cells.⁵ This weakening of the body’s defense mechanism leads to the disease known as AIDS, short for Acquired Immuno Deficiency Syndrome.

What is AIDS?
AIDS, contrary to public beliefs, is not a disease, but a syndrome defining the body’s current level of vulnerability to foreign bodies and infectious diseases. When thinking of AIDS, the Trojan Horse analogy comes to mind: A few Greeks, hiding in the wooden statue, enter the city unknowingly to its inhabitants. In the middle of the night, the hidden troops spring out, slaughter the guards, and open the city’s gates for their brethren.

¹ WHO, Regional Office for South-East Asia, HIV/AIDS. AIDS: Some Questions and Answers. Available at: http://www.searo.who.int/en/Section10/Section18/Section2011.htm

² Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996

³ Compton’s Interactive Encyclopedia, CD-ROM 1995

⁴ Ibid

⁵ Ibid
HIV, through its elimination of T-Lymphocytes, drastically lowers the body’s immune response, thus allowing any bacteria, virus, protozoa, or infection to enter the system.\textsuperscript{6} These opportunistic diseases, usually benign and easily defeated by healthy individuals, such as colds and/or influenza, crush the weakened defenses of the AIDS patient, killing him/her. Sometimes, as was observed with robust HIV-infected immune systems, the body fend off certain minor infections, only to succumb to a swarming of “small” infections, and/or more severe diseases such as Cancers, Pneumonia, Tuberculosis, or Sexually Transmitted Diseases or Infections (STDs/STIs).\textsuperscript{7} There appear to be 20 opportunistic infections (OIs), called by medical professionals AIDS Symptomatic Diseases, and whose presence in HIV patients confirms the Syndrome. These range from bacteria, fungus, viruses, and cancers, and are lethal to those with infected. The following small table lists some of the OIs often associated with AIDS. For the sake of simplicity, I have organized them by categories, such as bacteria, fungus, viral, and cancerous infections.\textsuperscript{8}

\begin{table}[h]
\centering
\caption{List of the Most Common Opportunistic Infections}
\begin{tabular}{|l|l|l|l|}
\hline
\textbf{Bacteria:} & \textbf{Virus:} & \textbf{Fungus:} & \textbf{Cancer:} \\
\hline
Pneumocystis & Herpes & Candida & Kaposi’s Sarcoma \\
Carinii Pneumonia (PCP) & Cytomegalovirus (CMV) & Albicans (Oral Thrush) & Sarcoma \\
Gastrointestinal tract bacterial infections & Herpes Simplex Virus (HSV) Type 1 & Histoplasma Capsulatum Infection & B-cell Lymphoma \\
Tuberculosis & Herpes Simplex Virus (HSV) Type 2 & Various fungal infections & \\
Mycobacterium avium & Epstein-Barr Virus & & \\
Bacterial Pneumonia & & & \\
\hline
\end{tabular}
\end{table}

\textsuperscript{6} WHO, Regional Office for the Western Pacific. HIV infections and surveillance. Available at: http://www.searo.who.int

\textsuperscript{7} Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996

\textsuperscript{8} ibid
People Living With HIV/AIDS (PLWHAs), residing in industrialized countries, have 8 to 10 years before developing AIDS (usually after three years) and succumbing from OIs, whereas those living in developing countries have less than four years to live and perish within six months of AIDS related infections.9

**HIV Strains:**

The Human Immunodeficiency Virus has many different types, called “strains”. Some strains spread faster through unprotected sexual contact, while others are more common among intravenous (IV) drug users or paid blood donors. Going through the effects and attributes of each strain would be tedious, tiring, and counterproductive to a non-virologist. However, the reader should understand the fact that certain strains are more dangerous than other types, both in potency (decreasing life expectancy) and in instigating AIDS. (There exist certain parasitic diseases that act as catalysts with certain forms of HIV and facilitate AIDS). In addition, several strains can mutate, upon interaction with other HIV types. This leads to the creation of “cross-strains” (new varieties of the virus) whose resilience to drugs, coupled with higher rate of mortality over a decreased timeline, is frightening. The “AIDS Epidemic December 2002 Update” states that this “combining” of HIV strains has already begun its spread in China, and is more frequent with the B and C types.10 According to an article written by Fubu Daobao in August 1999, there are many different strains of HIV in the PRC, thus placing China on par with other countries with high levels of infection.11

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9 WHO, Regional Office for South-East Asia, HIV/AIDS. AIDS: Some Questions and Answers. Available at: http://www.searo.who.int/en/Section10/Section18/Section2011.htm


11 Daobao, Fubu. HIV Strains in China, August 6, 1999
hereafter: The first HIV strain is subtype B, originally found among Thai Intravenous Drug Users (IDUs) and very common in the People’s Republic. According to 2002 statistics, 47.5% of all Chinese HIV patients have the B strain. The second most common HIV variety is the C Strain: It is prevalent among Indian IDUs and apparently spread from India to China. It is usually located in areas with relatively heavy drug use, mainly the Xinjiang, Guizhou, Sichuan, and Yunnan provinces. This strain has a 34.3% distribution, its spread to Eastern and Southern China facilitated by Xinjiang worker migrations. The HIV E Strain is third in spread and numbers, spreads by unprotected heterosexual intercourse, and is mostly found in China’s southwestern border regions. However, traces of the E subtype were also detected along the PRC’s southeastern coasts. (Distribution 9.6%) Apparently, a small number of Chinese expatriates became infected with the A, D, and G strains of HIV, common in Africa, while working in the Black Continent, and proceeded to spread the virus in some interior provinces exporting labor. Finally, the Guangdong Province shows traces of the South American F strain in its HIV population. (The A, D, G, and F strains have rates between 0.3 and 5.7%)

Transmission of HIV/AIDS:

HIV’s main methods of transmission:
Experience worldwide shows that HIV has limited transmissibility and that the virus can only spread via specific behaviors and actions. According to the World Health Organization (updated 2005), HIV is transmitted by sexual intercourse of any type, blood
contamination, Mother to Child Transmission (MTCT), and breast milk sharing. Recent studies show that, contrary to public belief, MTCT occurs close to or during birth, and not via placenta sharing during childbearing. HIV is not “The All-Powerful Plague of the 21st century”. The virus simply cannot infect millions instantly. Casual contact, food utensils, and insects are not vectors of infection. In truth, HIV requires intimate human contact, risky behaviors, or unhygienic medical practices to spread from an infected individual to a healthy one. Additionally, the virus is extremely vulnerable to environmental condition: Heat, cold weather, and temperature fluctuations kill the organism immediately. On top, HIV cannot penetrate the bloodstream through intact skin surfaces, by casual physical contact, food sharing, or breathing. Saliva and tears contains negligible amounts of the virus, and transmission via these mediums is extremely rare. Therefore, it is safe to state that HIV (as well as STIs/STDs) avoidance and prevention should be both medical and behavioral.

HIV transmission in China:
The HIV epidemic in the PRC is not homogeneous: The epidemic affects certain provinces and regions, as well as some social groups, more than it does others. While intravenous (IV) drug use is the most frequent mean of HIV transmission in Xinjiang and Yunnan, other more prosperous provinces such as Guangdong witness a spread directly linked to heterosexual sex, whereas in the capital the majority of infections is linked to homosexuality and drug use. Some medical variables seem to favor the spread of HIV in China, such as STIs/STDs, Tuberculosis, and blood contamination due to faulty plasma transmission and/or unhygienic practices. These factors will be covered in more.

15 WHO, Regional Office for South-East Asia, HIV/AIDS. AIDS: Some Questions and Answers. Available at: http://www.searo.who.int/en/Section10/Section18/Section2011.htm

16 Acquired Immuno Deficiency Syndrome, Compton’s Interactive Encyclopedia, CD-ROM 1995

17 Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996

detail in “Part III- The reasons behind the Chinese HIV/AIDS epidemic, Medical Facilitators”.

**Populations at Risk:**

Two types of HIV vulnerable populations exist: Those directly infected by the virus, and those who indirectly contract HIV. Any individual(s) or group(s) whose lifestyle(s), behavior(s), and/or work increases their chances of being infected are said to be directly vulnerable for HIV infection (The often mentioned high-risk populations) Indirect HIV infections usually occur when members of the general population contracts the virus from a member of these high-risk groups. High-risk populations include Commercial Sex Workers (CSWs), clients of prostitutes, Intravenous Drugs Users (IDUs), Migrant Workers, Men who have Sex with Men (MSMs, also includes non homosexual men who have intercourse with other men such as military personnel), persons in prisons, STI/STD patients, TB patients, among others.  

On the other hand, those who contract HIV indirectly are often spouses or sexual partners of HIV infected individuals, IDUs, CSWs, patients at hospitals infected from unhygienic medical practices (needle reuse or contaminated blood transfusions), children who contracted HIV from their mothers (MTCT), young people, and individuals with limited knowledge of HIV’s means of transmission and prevention. Unfortunately, it seems that indirect HIV transmission is on the rise in the PRC. Although IDUs have the highest rates of infection, sexually transmitted HIV infections, as well as vertical contamination (MTCT), have doubled in

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15 HIV/AIDS in China and USAID Involvement. 2001

the last five years, as shown by the 2003 joint program between the Chinese Ministry of Health and UNAIDS.  

**Detection of HIV/AIDS infections:**

**HIV Diagnosis:**

Unfortunately, a person’s HIV status remains unknown until s/he undergoes a clinical diagnosis. During the incubation period, HIV infected individuals appear healthy and are asymptomatic, yet act as carriers of the virus. They will remain vigorous until the virus destroys enough of their immune system for AIDS to begin. Detecting HIV clinically is possible via a series of blood tests, developed in 1984: The method relies on screening the blood sample for serum antibodies against HIV; should antibodies appear to be present, the tested individual is HIV positive. Because of a growing number of HIV strains, Health professionals test blood samples multiple times for antibodies; this is “due to major differences in the protein components of HIV-1 and HIV-2.” The only problem with this method is that one must wait long enough for the immune system to create antibodies for HIV. According to Compton’s Encyclopedia (CDROM, 1995), any test done directly or soon after (any period from two weeks to three months) the suspicious act might provide false results. Microsoft Encarta (CDROM, 1996) corroborates this information and states that accurate results require a waiting period of at

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22 For those interested, a study prepared by the author of the impact of HIV/AIDS on the aforementioned populations is available.

23 WHO, Regional Office for South-East Asia, HIV/AIDS SEARO Publications on HIV/AIDS-Tuberculosis and HIV Questions and Answers page. Available at: http://www.searo.who.int

24 Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996

25 Acquired Immuno Deficiency Syndrome, Compton’s Interactive Encyclopedia, CD-ROM 1995
least two to three months before being certain of one’s infectious status. During this waiting period, those infected can transmit the virus to others. Additionally, statistical and variable error can provide negative or positive results. For that reason, in order to confirm an HIV status, two tests are needed: First, an ELISA blood test, then a Western Blot (WB) analysis. The latter is often expensive and thus rarely done in China, thus condemning people to ignorance regarding their status and allowing them to continue their (often-risky) behavior. Save for the clinical diagnostic of HIV, there exist certain “tell-tales” that warn of a HIV infection: Usually, most people experience after their becoming infected certain flu-like symptoms, skin rashes, fevers, headaches, and tender lymph nodes that last for a maximum of two weeks. Now that we discussed HIV detection, it is time to move on to AIDS and its clinical detection.

AIDS Diagnosis:
AIDS is detectable via symptoms of the AIDS Related Complex or ARC. The ARC often includes flu-like symptoms such as fatigue and fevers, as well as more drastic physical alterations such as loss of weight, skin rashes, fungal infection of the mouth, decreased immunity, and swollen lymph nodes. Occasionally, those symptoms disappear, but more often than not remain and evolve into indicators of Opportunistic Infections (OIs), such as fungi, tuberculosis (TB), bacteria, and others. In order to avoid any diagnosis errors and the resulting controversy in the clinical detection of AIDS cases, the Center for Disease Control Atlanta (CDC Atlanta) recommends the following paradigms: either

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26 Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996
28 Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996
29 Acquired Immuno Deficiency Syndrome, Compton’s Interactive Encyclopedia, CD-ROM 1995
30 WHO, Regional Office for South-East Asia, HIV/AIDS SEARO Publications on HIV/AIDS-Tuberculosis and HIV Questions and Answers page. Available at: http://www.searo.who.int
have less than 200 CD4 cells per mm3 of blood or show clear signs of AIDS related OIs such as PCP, Pulmonary Tuberculosis, Thrush, or Invasive Cervical Carcinoma.\textsuperscript{31}

(For additional technical information regarding the clinical progression of AIDS, please consult Microsoft’s Encarta Encyclopedia 1996 CDROM Edition’s AIDS article)

Generally, people with HIV are mistaken as having AIDS, when only those terminally weakened by HIV develop the immuno deficiency syndrome known as AIDS, and whose symptoms appear a year or two after the viral infection.\textsuperscript{32} Yet, certain individuals lived for 10 and even 20 years before developing any signs of acquired immuno deficiency.\textsuperscript{33}

**HIV/AIDS Treatment:**

Sadly, to date, there is no cure for HIV/AIDS. The best drugs modern science has to offer can only achieve two results: Reduce the amount of HIV in the bloodstream, and extend the lifespan of AIDS patients by a few months. So far, there are two ways of destroying HIV, and most commercialized HIV/AIDS treatments use either method. The first is by hindering the Reverse Transcription Process, while the second is by inhibiting the viral protease enzyme. By exploiting these loopholes in the viral replication process, the drugs are able to reduce the amount of virus in the blood, delaying the total destruction of the immune system and preventing AIDS.

AZT, DDL, and DDC inhibit the Reverse Transcription Process and are know as “DNA-Chain Terminators”, meaning that the drug interacts with the viral replication process,

\textsuperscript{31} Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996

\textsuperscript{32} Acquired Immuno Deficiency Syndrome, Compton’s Interactive Encyclopedia, CD-ROM 1995

\textsuperscript{33} Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996
disrupting it, therefore destroying the virus. Unfortunately, these drugs have less than satisfactory results: they seem to only extent the lifespan of AIDS patients for about six months, and have extremely dangerous side effects, due to the treatment’s high-toxicity. To boot, it seems that certain forms of HIV are resilient to this type of cure. New types of drugs using the Viral Protease inhibition model are currently under development. Hydroxyurea is one of them. Although seemingly promising, the treatment is still under scrutiny, especially in the fields of toxicity and interaction with HIV drugs-resistant strains. The World Health Organization (WHO) is presently subsidizing gene therapy in an attempt to cure HIV infection. The underling mechanism of this treatment is to introduce a gene in the targeted cells, effectively protecting them from HIV infection. Alternatively, it seems that protective and therapeutic vaccines of HIV are also under development worldwide.

Regrettably, the development and the testing of new HIV/AIDS drugs takes from years to decades, precious time most HIV/AIDS patients do not have. Yet another drawback is that more than two thirds of all PLWHAs reside in under-developing regions such as Africa and South East Asia, and the majority of those infected cannot afford the prohibitive cost of the treatment, even in its generic form. The 2004 “Report on the global AIDS epidemic Executive Summary” declared that HIV/AIDS mortality rates are sometimes 20 times higher in these countries than in industrialized nations.

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34 Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996
35 ibid
36 ibid
37 ibid
38 WHO, Regional Office for South-East Asia, HIV/AIDS SEARO Publications on HIV/AIDS-Tuberculosis and HIV Questions and Answers page. Available at: http://www.searo.who.int
Unfortunately, without access to Anti Retroviral Treatment (ART), most AIDS patients have a maximum of two and a half years of life. This means that some areas (generally developing regions with HIV epidemics) are bound to witness a sharp and dramatic increase in AIDS-related deaths. Presently, it appears that the only "safe" drugs (meaning with no toxic side effects to the patient) are those used to treat some of the most common Opportunistic Infections of AIDS, such as pneumonia, Herpes, CMV, fungi ... These medicines play a vital role in reducing death and curing illnesses among AIDS victims.

**HIV/AIDS Prevention:**

Since HIV is incurable using modern science, treatment is relatively ineffective, and HIV vaccines are still at early stages of development, preventing more infections is the only remaining option. Knowing the virus' means of spread is supposed to make this "choice-less choice" simpler. Unfortunately, preventive action is extremely difficult because of certain types of behaviors favoring HIV, such as having multiple sexual partners, abusing drugs, and refusing to use proper protection during intercourse. Because of HIV's penchant to infect and eliminate the most crucial segment of society -in general, people aged from 15 to 50-, it has a direct and dramatic long-term impact on the economic and reproductive strength of a nation. For that reason, the August 2002 report entitled "The Socioeconomic Impact of AIDS in China" calls HIV/AIDS prevention "[...] a long-term task of paramount importance [that needs to involve] all government departments and NGOs (nongovernmental organizations)." In order to implement HIV

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41 Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996

42 ibid
preventive protocols and avert mounting infection rates, one must understand the virus’
two main means of transmission, sexual intercourse and blood contamination, and modify
the behaviors linked to those methods of spread. We will begin by analyzing the simplest
preventable channel of contagion, blood contamination, and then move to the prevention
of HIV via sex.

Preventing HIV transmission via blood contamination:
As we have seen before, the two most vulnerable populations to this means are IDUs and
people in contact with infected blood (Blood donors, patients in hospitals needing blood
transfusions, and medical personnel dealing with HIV infected individuals). Let us start
with HIV transmission by IDU: The simplest solution would be to remove the causes
most often linked with IV drug use: Poverty and an escape from (the often grim) reality.
However, achieving this goal is not feasible in the short or even the medium term.
Therefore, simpler alternative solutions are required. In order to prevent IDU-HIV
infections, free needle exchange programs were set up worldwide and have proven
successful in numerous countries. This action has resulted in a decrease of HIV
contamination amongst IDUs in certain Asian countries such as Thailand. Unfortunately,
there are very few such programs in China, and those in place are greatly hindered by of
the law condemning any individual with injection material to immediate detention and
transfer to a rehabilitation clinic. Another way of contracting HIV is via blood transfusion
during plasma collection, blood donations, and/or surgical procedures. This is easily
preventable by the testing, before usage and storage, of all blood products, and by
following hygienic practices for blood collection, transfusion, and surgeries. After the
blood scandals of Henan province, the PRC Ministry of Health (MOH) took action to
reduce the risks and passed new legislation.

Preventing HIV transmission via sexual intercourse:
It is much more difficult to prevent sexual transmission of the virus because of certain
“taken for granted” sexual behaviors, especially among certain communities such as

43 The Socioeconomic Impact of AIDS in China, August 2002
homosexuals. Members of these groups often have multiple partners, abuse drugs, and have unprotected intercourse. Some maintain appearances of heterosexuality by being married and/or having sexual relations with women, thus contributing to spread the disease from one high-risk community to the general population. The Frequently Asked Questions (FAQ) section of the WHO South East Asia websites advocates the following guideline for curtaining the spread of HIV among homosexual and heterosexual populations. It relies on the following points, raised during Safe-Sex campaigns: Sexual abstinence, monogamy/faithfulness to a single partner, the use of protective equipment during intercourse, and non-penetrative sex. 44 Usually, all HIV sexual precautionary strategies recommend the use of high-quality male or female condoms, for their known reliability in preventing the transmission of STIs/STDs, including HIV. 45 Condom use is a safer bet than faithfulness, sexual abstinence, and non-penetrative sex as means of protecting oneself and one’s sexual partner(s). According to U.S. health specialists in the American Embassy in Beijing (U.S Embassy Beijing, December 2000), it is also the final barrier which could prevent the shift in infections from other high-risk groups (such as blood donors or IDUs) to the general population:

"Timely intervention may still be able to slow the spread of HIV from current high-risk groups -- such as intravenous drug users and paid blood donors -- to the general population, where it will spread rapidly via sexual relations, according to Chinese experts. 44 46

Nonetheless, the most effective prevention is through educating the masses about HIV/AIDS: Only through explaining HIV’s methods of transmission and basic preventive

44 WHO, Regional Office for South-East Asia, HIV/AIDS, AIDS: Some Questions and Answers. Available at: http://www.searo.who.int/en/Section10/Section18/Section2011.htm

45 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf

measures to the public will the Chinese government succeed in curbing the epidemic.\textsuperscript{47}
Recent studies, conducted by the WHO and UNAIDS, show that Voluntary Counseling and Testing (VCT) have proved more valuable than regular informative sessions in preventing HIV infections: During VCT, the tested individual receives first hand information, advice, and learns about his/her HIV status under the guidance of a certified health professional. This resulted in decreased unprotected heterosexual intercourses with secondary partners.\textsuperscript{48}

Regretfully, there appear to be certain restrictions that limit preventive efforts in China. I have decided to discuss all of them in more details in an upcoming section entitled “Part III- The reasons behind the Chinese HIV/AIDS epidemic”.

\textsuperscript{47} UNAIDS, HIV/AIDS: China’s Titanic Peril 2001 report. Available at: www.youandaids.org/unfiles/chinastitanicperillast.pdf

\textsuperscript{48} ibid
Part 2- Origins of HIV/AIDS in China:

The purpose of this chapter is threefold: Outlining the different phases of HIV/AIDS epidemic in China, explaining the initiation of each stage, and setting the grounds for some discussion about the facilitators of HIV/AIDS in China.

Origins of HIV/AIDS in China: The beginnings of an epidemic and its different stages:

Zheng Xiwen, of the "Chinese Academy of Preventive Medicine's AIDS Surveillance Center", was the first PRC health scientist to state that the Chinese HIV epidemic underwent three stages of growth. I have found his timing of the epidemic to be descriptive of the current situation, and used it myself for this paper. Therefore, the Chinese HIV/AIDS crisis in the PRC can be divided into three main periods: Phase one (1985 – 1988) is the Import Stage and witnessed the emergence of "Patients Zero". Phase 2 is the Dissemination Stage (1989 – 1993) and exposes the presence of a limited HIV/AIDS epidemic. The final phase or Growth Stage, begun in 1994, and predicts a probable generalized outbreak of the disease. Others scientists, mostly from the Chinese Ministry of Health and UN Theme Group on HIV/AIDS in China (Joint MOH/ UNTG, 2003), prefer to use a different terminology in the naming of the phases. They also lengthen the second phase, ending it in 1994 instead of 1993, and use 1995 as the beginning of the Outbreak era. 49 My interpretation, available on the following pages, is closer to Zheng Xiwen's dating, for I believe it reflects more accurately the reality of the

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situation. I have however slightly modified its naming to express in simpler words the reality of the outbreak.

*Phase one: 1985 – 1988: Emergence of “Patients Zero” (The Import Stage)*

“Patient Zero” is a medical term used to describe the first individual(s) to carry or develop a contagious disease. S/he is the often involuntary initiator of an epidemic. HIV/AIDS appeared in China in 1985 when “[…] a Chinese national [returned] from an extended stay abroad.” Thus, the epidemic started with a limited number of contaminated HIV patients (mostly foreigners or returning Chinese) in coastal cities. On top, there seems to have been a small number (four people in the Zhejiang Province to be exact) of individuals who have gotten HIV from imported contaminated blood products, more specifically, through the transfusion of contaminated Antihemophilic Globulin (AHG). At first, the number of HIV cases was insignificant. However, because of many facilitators, such as ignorance about HIV’s means of transmission, the government’s negligence in dealing with the disease, among others factors, the PRC witnessed a rapid growth in HIV infections. (Supplementary information about facilitators to HIV/AIDS in China are found in other chapters of this thesis, namely “Part III- The reasons behind the Chinese HIV/AIDS epidemic”) Because of very little support from Central Government and local government officials’ camouflaging the outbreak (for financial and political reasons), there were (and still are) very little reliable local statistics on the early years of HIV/AIDS infections and deaths in China.

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50 HIV/AIDS in China and USAID Involvement. 2001


AIDS grew from a small-scale costal infection and spread to the inner provinces during the late 1980s early 1990s, with most of the cases linked to drug abuse. It seemed that the HIV infection rates gradually decreased the further one moved from the Chinese-Burmese border, probably because of one-or both- reasons outlined hereafter:

The fact that the numerous IDUs are indigenous to the areas studied (IV drug abuse is fairly high among minority groups in China, especially in areas with high unemployment and poverty levels), or the fact that IDUs prefer staying close to the “Golden Triangle” region, namely Myanmar/Burma, Laos, and Thailand, where obtaining narcotics is both cheaper and easier. Meanwhile, other high-risk groups such as people with venereal diseases, CSWs, and Chinese workers coming back from abroad also started showing signs of HIV infection. Unfortunately, there was still very little information about the number of infections or deaths due to HIV/AIDS for that period, because of local government officials’ decision to downplay the problem. This is why Chinese epidemiologists had to rely on conjectures and, using the Durfee statistical method, estimated that there were 10,000 HIV-infected people in 1993.4

Phase three: 1994 onwards: Outbreak (The Growth Stage)

Starting 1994, HIV/AIDS began appearing in all provinces of China, with a substantial number of cases appearing in IDUs and professional blood sellers from diverse provinces such as Sichuan, Xinjiang, and Guangxi, in 1995, 1996, and 1997 respectively. This led to a national increase in HIV infection, which led the United Nations AIDS Watch Group in the PRC (UNAIDS 2001) to state that the country was “on the brink of an HIV/AIDS explosion.”

54 Zheng Xiwen of the AIDS Prevention and Control Center, Chinese Ministry of Health, Beijing 100050
Chapter III - Reasons behind the rapid spread of HIV in China:

Increases in high-risk behaviors such as IV drug abuse and unsafe sex are responsible for soaring HIV infections in China. In addition, prostitution among female migrant workers is on the rise: Some 120 millions migrant workers leave rural areas and travel to cities for work, and are particularly vulnerable to HIV. It seems that women are more at risk from HIV infection than males because of their inability to insist on safe sex practices. Moreover, changing social and cultural values intensifies teens and young people’s vulnerability to HIV/AIDS. For example, Chinese adolescents are more likely to have sexual intercourse than their parents did, and often at a younger age. This segment of the Chinese population seriously lacks comprehensive sex education, rarely uses condoms, and is seldom aware of STIs, Hepatitis B, and HIV. Limited access to health services and related information for a large proportion of the population only makes things worse. All of these factors, as well as others, will be studied in depth in the upcoming sections.
A- Medical Facilitators

Part 1: Sexually Transmitted Infections/Sexually Transmitted Diseases (STIs/STDs)

STIs/STDs: An introduction

According to “Microsoft Encarta 1996 Encyclopedia”, Sexually Transmitted Infections/Sexually Transmitted Diseases (STIs/STDs) “are infectious diseases that can be spread by sexual contact. [Although] Some can also be transmitted by nonsexual means […] these make up a minority of the total number of cases.” Historically, venereal diseases have existed for centuries, the most infamous being Syphilis, whom Christopher Columbus’ crew brought back from the New World in the late 1400s, and that led to mass epidemics throughout Renaissance Europe. Gonorrhea is another famous STI that ravaged the United States during the sexual revolution in the 1960s and 1970s. However, the most famous (and deadliest) STD was and still is, since its appearance in the early 1980s, the Human Immunodeficiency Virus. STI/STD cases are increasing yearly, especially in developing countries: UNAIDS, in its April 2003 pamphlets, stated that globally, in 2001, an estimated 8.5 million individuals were infected and spreading sexually transmitted diseases. According to World AIDS Day 2004, at half of all new STI infections (340 million per year) occurred in the Asia Pacific region. Those dreadful numbers “[… do not] include HIV, herpes, genital warts and hepatitis B.” This incredible high number of cases means that STI/STD is on the rise in Asia. The two most heavily populated countries in the region - India and China- are at risk. The PRC has

56 Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996
57 UNAIDS’ Pamphlets: Condoms, April 2003
58 Women, Girls, HIV AIDS World AIDS Day 2004
witnessed a revival in STI/STD infections since the 1980s: USAID, in its 2001 report, states that cases have increased 144 times over a 14 years period, from some “5,800 [infections] in 1985 to more than 836,000 in 1999.” In 2004, the updated “China Epidemiological Fact Sheet on HIV/AIDS and STIs” report confirmed the numbers and affirmed that the country was witnessing a hundredfold increase in STI cases between 1985 and 2001.60

This section’s main objective is to point out the importance STIs/STDs have on facilitating the spread of HIV in a given country. In order to reach that goal, we will briefly analyze at first the different types of STI/STD and their means of transmission. Then, a study of vulnerable populations (both the mainstream public and minorities in high-risk settings) will be undertaken. Next will be a part examining the importance of STI/STD control, treatment, and prevention, along with a quick glance at Chinese sentinel sites statistics. Subsequently, we will scrutinize the most common venereal diseases in China in an attempt to understand how and why STIs affect HIV transmission. Finally, the impact of STDs on Chinese women will constitute a conclusion to the chapter.

The Different Types of STI/STDs and its means of transmission:

The many faces of STI/STDs:
Sexually transmitted infections are diverse and a comprehensive list would be of no use to non-medical personnel. However, I have decided to write about the most widespread infections in this part, in order for the reader to have some understanding of them.

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59 HIV/AIDS in China and USAID Involvement. 2001

60 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf
The vector of transmission differs from one disease to another, so I have found it easier to list the most common: The bacterium Chlamydia Trachomatis is responsible for Chlamydia, while viruses transmit Herpes and HIV. Protozoan, mites, and yeast cause Trichomonas, Scabies, and Monilia respectively.\footnote{Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996} (For additional information, kindly consult Microsoft Encarta 1996 CDROM Edition's STI/STD article)

\textbf{STI/STD's means of spread:}

Most of the time, unprotected sexual intercourse is the major cause of STI/STD transmission throughout the general population. Genital, anal, and oral sex transmits the disease from an infected individual to a healthy partner.\footnote{ibid} However, others infections like Chancroid and Scabies can be transmitted by the infected person from one area of skin to another by the hands, making its spread far more potent. Additionally, Genital Herpes, vaginalis caused by Trichomanas, and monilia also spread by non-sexual means.\footnote{ibid} Sadly, as in HIV, Mother to Child infection is a possibility; there are numerous cases of Syphilis, Chlamydia, and Gonorrhea detected prior to or at birth in babies.\footnote{ibid} Finally, STI/STD is transmissible by iatrogenic means. (Either by sharing needles or via contaminated blood)

The viruses, bacteria, protozoa, and other vectors responsible for STI/STD, cannot survive for long outside the human body. That is why unlike tuberculosis - which is resistant to the harshest environmental conditions - venereal diseases are frail.

\footnote{ibid}
Population at risk for STI/STD:

Surveys in the United States have showed that STI/STD affect people from all socio-economic levels, ethnicity, and gender. Yet, the segments of Chinese population most vulnerable to sexually transmitted illnesses are marginal groups (Prostitutes, IDUs, and MSMs), Migrant Workers, as well as young people, and the underprivileged. It is common to find individuals belonging to more than one segment listed here: For example, it is not rare to find young female migrant workers, selling sex for money to buy drugs or support a family. The PRC MOH, along with the UNTG on HIV/AIDS in China, stated that many are ignorant of basic STI/STD (including HIV) preventive tactics. Additionally, the majority of those infected seek treatment in private clinics or self medicate, as a direct result of public hospitals and clinics’ duty to report STI/STD infected patients to the MOH:

“Currently in China, the migrant population is estimated to be around 120 million, mostly of a sexually active age. This population has left their original place of residence, customs and norms and faces enormous changes and pressures in morality, life style, scope of contact and sexual behavior. The physical pressures, increased liberty and opportunity, combined with ignorance, present them with greater chances to engage in unsafe sex. Due to their fear of discrimination and the high cost of medical care, most are unwilling to seek treatment for STDs in hospitals or clinics, thus increasing chances of STD and HIV transmission.”

According to the U.S embassy Beijing’s 2001 statistics, there seems to be a significant increase in reported STDs, “[…] including the ulcerative STIs that are known to facilitate HIV transmission […]” with the number of infections doubling in four years (1996 to 2000). Apparently, this grow is a long-term trend, rising at some 30% annually, as

65 Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996


revealed by statistics from the Chinese National Center for STD and Leprosy Control. In 1999 alone, national STD rates have increased by 32%, while congenital syphilis cases doubled. The following graph, from the UNAIDS 2001 report, substantiates this information: According to that chart, Year 2001 witnessed some 795,000 STI cases in China, a slight decrease from the previous year’s record of 859,000 infections. (Notice that we are still analyzing the vulnerability of the general population, not focusing on risk prone groups such as prostitutes or drug users)

Chart 3: Total Reported STI Cases in China (1985-2001)

Source: Data are provided by the National Center for STI and Leprosy Control.

US Embassy Beijing December 2000 Report states that STI/STD infection rates vary depending on the provinces: Beijing, Guangdong, Shanghai, Zhejiang, Jiangsu, Zhejiang, and Hainan seem to be the hardest hit, “[...] although Shanghai, Guangdong and Hainan

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reported increases of 10% or less." The following two pages will focus on two
important groups within society: The young and the destitute. These two clusters often
include high-risk populations, such as prostitutes and IDUs.

Young People:
It is often hard to reach newly sexually active members of society to instruct them in safe
sex practices due to the generational gap, lack of resources, and other "limiting" factors.
The first casualties of this unseen war are usually young females. According to the UN
report entitled "Women, Girls, HIV AIDS World AIDS Day 2004", "Hundreds of
millions of young women are infected with an STI every day." This is because of the
low status of women within society, female biological vulnerability, and a lack of
STI/STD related information. To boot, many marry early on in their lives (mid teens to
early adulthood), often to mature men, and become exposed to infections that threaten
their reproductive capabilities. Unfortunately, studies made by "Women, Girls, HIV
AIDS World AIDS Day 2004" show that only 17% of young people use protective gear
while having intercourse.

In addition, there is a lack in youth-friendly reproductive health information and services
in most developing countries; this deficiency allows for a greater spread in STI/STD:
Misconceptions about STI/STD abound, such as beliefs that good personal hygiene
protects from STIs. One survey, conducted in the Sichuan province, shows that more than
40% of those interviewed view STD infection as a personal hygiene issue and advocate
cleanliness as protection. In addition, 63% did not know the differences between STIs

70 U.S Embassy Beijing, AIDS in China: From Drugs to Blood to Sex, December 2000 Report. Available at:
http://www.usembassy-china.org.cn/sant/hivsextrans.htm

71 Women, Girls, HIV AIDS World AIDS Day 2004

72 ibid

73 ibid
and HIV. Another mistaken belief is that fidelity and having only monogamous relationships—"one partner"—is a better precaution than using condoms: "In a survey among 3,047 women and 3,033 men in three counties, most people identified "one sexual partner" as a preventive method rather than using condoms. In one of the counties, Shanxi-Linxian, less than 10% gave correct answers to RTI/STI names, symptoms, preventive measures and condom function." Unfortunately, this overlooks the fact that many males—often married or with a stable sexual partner—indulge in sexual tourism or other risky behaviors such as drug use, especially those working long distance jobs such as truck drivers or migrant workers. Those same individuals often refuse to use protective measures during intercourse with prostitutes, thus greatly increasing their risk and that of their faithful partner at home.

Underprivileged People:

Another easy target for STI/STD is underprivileged people. This category is a high-risk segment for venereal diseases because of many factors: Lack of education, lack of funds to purchase preventive gear (condoms), IV drug use, unhygienic practices, and sex work. Each factor significantly increases the risk of contracting an STI, but above all needle sharing, and prostitution: Carrying a needle is a criminal offense in China, and doing so marks the carrier as a drug user, illegal behavior that leads to imprisonment. That is why intravenous drug users (IDUs) share needles provided by drug dealers, instead of using those given at exchange programs, therefore increasing their risk of STI/STD, Hepatitis, and HIV infection. Regarding sex work, women are at a disadvantage, being unable to impose the use of condoms on their partners and sometimes lacking the funds necessary to purchase them. Additionally, women carrying condoms can be arrested on grounds of prostitution, and detained; that is why condom use by street prostitutes is very low. Besides, infected members often cannot afford STD treatment and end up having more

75 ibid
than one infection, which significantly decreases their quality of life and dramatically increase the possibility of transmitting the diseases to others and contracting HIV.76

**STI/STD and High-Risk Populations:**

It seems logical to accuse populations indulging in high-risk behaviors (such as CSWs, IDUs, and homosexual males) as to being vectors of STI/STD spread rather than blaming the general population's ignorance, more so when studies show high prevalence among the high-risk groups.77 The following statistics were obtained from the “HIV/AIDS In Asia Pacific Region 2003” and “Women, Girls, HIV/AIDS World AIDS Day 2004” reports respectively, and substantiates the increase of STI/STD rates among those working in high-risk jobs such as Sex Work (prostitutes) and Migrant Workers (truck drivers). According to both reports, more than 80% of Kunming prostitutes and almost 20% of Togling truck drivers were infected with at least one STI. (The exact numbers were 86% for sex workers and 17% for truck drivers)78 There seem to be a parallel between these two populations, truck drivers most likely being customers of sex workers.79 Highly marginalized Chinese homosexuals also appear to be at a higher risk of spreading STIs and HIV because of their unsafe behaviors. A relatively recent (2000) KAP study on homosexual males in the PRC clearly illustrates that tendency: Out of 857 participants, studies shows that 21% of those surveyed had contracted at least one STI at one point during their life.80 These results (that sex workers, truck drivers, and

76 Women, Girls, HIV AIDS World AIDS Day 2004


78 HIV/AIDS In Asia Pacific Region 2003

79 Women, Girls, HIV AIDS World AIDS Day 2004

homosexuals have high rates of STIs/STDs) make those groups the ideal targets for “scapegoating” by unscrupulous government officials looking for a “way out”. However, other KAP Studies, this time among Shenzhen prostitutes, clearly contradicts the hypothesis that Sex Workers contribute to the spread of STI/HIV. The information, as documented in the “Journal for China AIDS/STD Prevention and Control, February 2000”, indicates that prostitutes are often more knowledgeable about STI prevention than their clients: “Prostitutes are stigmatized and often blamed for spreading STIs and HIV. Worldwide, prostitutes know more about STI/HIV than their clients.”

This theory was validated by statistics, which demonstrated that 71% of surveyed Sex Workers in Shenzhen used condoms during intercourse with customers, as opposed to only 47% of their clients. Those who refrained from using protective equipment did so to please some customers who did not like their use. Regrettably, financial incentives short-circuit those preventive tactics: it is not rare for some customers to pay up to 60% more for intercourse without protection.

According to both “Women, Girls, HIV/AIDS 2004” report and the 2003 “HIV/AIDS In Asia Pacific Region” publication, the real culprit is the lack of education and changing sexual behaviors (especially among the youth), that helps contribute to a shift of STI infections (and the underlying HIV/STI hybrid threat) from high-risk groups to the general population.

Both reports found increasing STI prevalence among high and low risk population and fear that those high rates would translate into rising HIV infections. Furthermore, the issue of HIV’s link with STI/STD is becoming very real in China: Even though HIV’s main transmission channels are IV drug use and contaminated blood, there

82 Ibid
84 Women, Girls, HIV/AIDS World AIDS Day 2004
85 HIV/AIDS In Asia Pacific Region 2003
are concerns regarding heightened diffusion rates by sexual intercourse, because of pre-infection by STI/STDs. This means that HIV is in danger of spreading from high-risk groups to the general population much faster solely because of STI/STD contamination.  

The Importance of STI/STD Control, Treatment, and Prevention:

STI/STDs are a major cause in decreasing the quality of life and favoring HIV infections worldwide. Therefore, it is an important priority to governments and international organizations to curb these diseases' advance. Treatment of STI/STD is necessary because infected individuals are more likely to suffer from skin problems, derma irritation, a decreased quality of life, and an increased vulnerability to HIV/AIDS, especially in the case of ulcerative STDs such as Herpes. Although the majority of those infections and illnesses are not life threatening, they can have serious health consequences if left untreated. According to Encarta, “Although venereal infections start at the external genitalia, they can spread to the prostate, uterus, testes, and nearby organs.”, therefore putting certain internal organs (especially those related to reproduction) in peril: Three STIs (Chlamydia Urethritis, Gonorrhea, and Syphilis) are major vectors of infertility in women.

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87 For additional information about STI/STD infections within high-risk populations in the PRC, kindly consult the case study entitled “Prevalence Survey of STI among Female Sex Workers and Truck Drivers in China” in the Appendix section of the thesis

88 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf

89 Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996

90 Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996
The China Business Review recommends treating STIs as an "[…] an effective means of preventing HIV, and diagnosing a curable STD can serve as a wake-up call for [Chinese] employees who do not consider themselves at risk of contracting HIV."[91] Early treatment of STDs, as well as Hepatitis, would also make employees more productive, increasing their profitability to the firm while making their lives more enjoyable.[92] The WHO Office in South East Asia always advised early treatment of venereal diseases for it "[would reduce] the risk of spread to other sexual partners and also [lower] the risk of contracting HIV from infected partners. Besides, early treatment of STD also prevents infertility and ectopic pregnancies."[93]

Unfortunately, that is no easy task, for the epidemic nature of the infections makes it extremely difficult in controlling the diseases; the increase of STI is directly proportional to the sexual behavior of the youth within their community. Regrettably, there seem to be a trend in replacing condoms (the sole mean of prevention, along with abstinence) with birth control pills and diaphragms, consequently increasing rather than lowering the chance of infection.[94] Add to that the changing patterns in venereal infections over the years, as well as governments’ inadequate involvement, and we end up with a serious health issue on our hands.[95]


[92] ibid


[94] ibid

[95] Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996
STD patients are cured with a combination of antibiotics (such as Penicillin, Ceftriaxone, Spectinomycin, and Tetracycline) or antiviral drugs (Acyclovir seems to be effective against Herpes).\(^{96}\) HIV and STI/STD's preventive tactics are similar, and so are the targeted audiences. STI clinics or treatment centers usually offer life saving information about venereal diseases/HIV, supply condoms, recommend sexual abstinence, in addition to counseling services and treatment for those infected.\(^{97}\) Most importantly, these institutions provide researchers and policy-makers with information on STI evolution, while also acting as forward warning stations in HIV/AIDS trends. \(^{98}\)

Controlling the spread of STDs is not as easy as it seems, for it would require the search, examining, and testing of all individuals who were/still are in sexual contact with the patients. This is extremely difficult at best and unfeasible at worst: "Usually this is done through public health clinics, where the majority of sexually transmitted diseases are reported. Locating all sexual contacts, however, can be difficult. In addition, many people with sexually transmitted diseases go to a private physician for treatment, and not all cases are reported."\(^{99}\)

Nevertheless, the first step in STI control is to manage effectively those with symptomatic STIs, thus including "[…] diagnosis, treatment and individual health education and counseling on disease prevention and partner notification."\(^{100}\)

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\(^{96}\) Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996

\(^{97}\) UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf

\(^{98}\) ibid

\(^{99}\) Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996

\(^{100}\) Epidemiological Fact Sheet on HIV/AIDS and STI China 2000
Many health experts claim that intercepting and reducing STI/STD rates would directly translate in fewer HIV infections. Therefore, STI/STD prevention is “[…] recognized as a major strategy in the prevention of HIV infection and ultimately AIDS.”

Consequently, preventing a full STI outbreak seems a good and easy way to curve a generalized HIV epidemic. In addition, proper scrutiny of STD trends by Sentinel Sites teaches us a lot about the spread of HIV in a country, as explained by Chinese Epidemiological experts: “In summary, if the incidence/prevalence of STIs is high in a country, then there is the possibility of high rates of sexual transmission of HIV.” STI monitoring stations can also help in understanding HIV dynamics and mount an effective counter attack with protective measures such as information and preventive apparatus. Hence, by treating STI/STDs, we are in fact limiting the HIV epidemic by controlling one of its “facilitators”.

**STI/STD in China: Detection and Surveillance:**

The U.S Embassy Beijing summer 2001 report declared that even though venereal diseases were eradicated successfully in China soon after the creation of the People’s Republic and Chairman Mao’s rise to power, mostly through a “[…] variety of aggressive social measures, ranging from a strategy promoting the notion that STI treatment was a patriotic duty to the mass arrest and subsequent re-education of

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101 Epidemiological Fact Sheet on HIV/AIDS and STI China 2000

102 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf

103 Epidemiological Fact Sheet on HIV/AIDS and STI China 2000

104 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf
prostitutes." The infections seem to have made a reappearance since the 1980s: To the Ministry of Health, the main culprit is China's evolution from a planned system so dear to Communist countries to a market oriented economy, which in turn, led to changes in purchasing behavior, social norms, sexual freedom, decreasing levels of risk awareness, and a rise of promiscuous behaviors among the general population.

The detection of STI/STD in Chinese patients is performed either through laboratory tests or via clinical diagnosis. Usually, Syphilis is identified by either a TRUST or an RPR test, while Gonorrhea is detected by either culture or gram stain. The gram stain method is also used to diagnosis Non-Gonococcal Urethritis (NGU), and Herpes Simplex Virus (HSV) is recognized by clinical inspection. According to UNAIDS and American Embassy Beijing Health Specialists, there are many oversights in Chinese STI/STD clinics. The upcoming subpart describes the more blatant omissions.

Facilitating factors for STI/STD recrudescence in China:

Primarily, the clinics lack "disease specific (descriptive) as well as demographic and qualitative (risk factor) trends, although some limited data were shared at the provincial and township levels on STI classification." In addition, there is a massive underreporting of STI/STD in China because official STI clinics and most hospitals are legally obliged to communicate the name of infected patients to the Ministry of Health.

Besides, the various health agencies within the PRC are, to this day, been unable to work

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108 Ibid

109 Ibid

110 Ibid
in tandem to find a solution to the problem or even limit the rise of STDs. More so, there are no ties between the Ministry of Health’s (MOH) STI sentinel sites and HIV monitoring stations. This oversight weakens the MOH’s ability to use STI trends to detect HIV spread.\footnote{U.S Embassy Beijing. Report of an HIV/AIDS Assessment in China July and August 2001. Available at: http://www.usembassy-china.org.cn/sandt/ptr/CDCAssessment-prt.html}

Moreover, as in other countries, there seem to be a deep sense of shame, heightened by a lack of confidentiality (from the medical staff responsible for the treatment) which disenchants the infected individuals and forces them to seek alternatives such as private clinics or consider self-treatment rather than trusting government-funded STI clinics.\footnote{ibid} Likewise, the Chinese Sex Industry is thriving, thus creating more opportunities for the spread of STIs, STDs, and HIV.\footnote{ibid} The fact that some prostitutes are also IDUs highly increases the odds of infection by an STI especially if the sex worker’s educational level is below primary school. A recent report from the National Center for STI and Leprosy Control stated that, out of 505 prostitutes tested for STDs, 293 had a history of drug use, and 37.8% of those had gonorrhea.\footnote{ibid} The clients of Sex Workers, an often-neglected portion of the targeted population, should be included in those high-risk populations. The “Epidemiological Fact Sheet on HIV/AIDS and STI China 2000” said that some 1% of Sex Worker Customers are infected with STI/STD.\footnote{Epidemiological Fact Sheet on HIV AIDS and STI China 2000} These individuals are often vectors of transmission of STIs/HIV from high-risk populations the general population and must be targeted as part of a general preventive campaign for STI/STD prevention.\footnote{Journal for China AIDS/STD Prevention and Control; Vol.6, No.1. February 2000. Available at: www.youandaids.org/unfiles/chinastratacticideperillast.pdf} The “United Nations AIDS 2001 report on China” has successfully identified the various factors allowing the spread of STI/STD in the PRC. They are primarily, the lack of
coordination between health care agencies, as well as deficiencies in primary prevention programs. Moreover, poor diagnosis and treatment, in addition to over treatment by greedy doctors, and dubious quality of private clinics contribute in making things worse. Other important reasons are the high cost of public clinics as opposed to private clinics/ self-medication and the lack of client confidentiality/anonymity coupled with judgmental attitudes among the treating bodies.

The Most Common Types of STI/STD in China:

It is evident, based on factual proof from the "Epidemiological Fact Sheet on HIV/AIDS and STI China 2000" that the two most common STDs in the PRC are Trichomoniasis and Chlamydia. To boot, there is evidence of other commonly reportable STI including Chancroid, LGV, Gonorrhea, Herpes Simplex Virus, as well as Non-Gonococcal Urethritis (NGU) and Syphilis, in many Chinese provinces. For example, some regions such as Jiangxi province witness rising rates of Gonorrhea, NGU (e.g. Chlamydia), and genital warts (Condyloma), along with Syphilis. "In China, Chlamydia is of the highest prevalence [...]" among Sex Workers in the Yunnan province, followed closely by Trichomonas, Gonorrhea, HIV, and Syphilis, as shown on following graph, from taken from the 2002 STI-HIV/AIDS Surveillance Report:

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118 Epidemiological Fact Sheet on HIV/AIDS and STI China 2000


Additional information from the "Prevalence Survey of Sexually Transmitted Infections among Sex Workers and Truck Drivers in China 1999-2000" report substantiates the previously stated information with the following numbers: Chlamydia ranks first, with a 56.6% rate of infection among sex workers for 2000-2001 (previously 32.2 for 1997 and 1999). Trichomoniasis and Gonorrhea comes next, with rates increasing from 12.5% and 8.8% in 1997-1999 to 43.2% and 37.8% for 2000-2001 respectively. Syphilis comes last with 10% infection rate among prostitutes for years 2000 and 2001, as opposed to 5.6 in 1997 and 1999.\textsuperscript{122} \textsuperscript{123} In addition to those listed above, there are other STI/STDs in the PRC; according to "The China Business Review" (July-August 2003), Hepatitis B and C have (and are still) widely spread nationwide and infects more than 200 million Chinese. That, along with HIV/AIDS, with which Hepatitis shares many analogies, and Tuberculosis, seriously undermines the Ministry of Health’s preventive and treatment capabilities.\textsuperscript{124} 

\textsuperscript{121} WHO, STI HIV/AIDS Surveillance Report Issue 17 August 2002. Available at: www.wpro.who.int/health_topics/sexually_transmitted_infections/publications.htm

\textsuperscript{122} Ministry of Health of the People’s Republic of China, WHO Regional Office for the Western Pacific. Prevalence Survey of Sexually Transmitted Infections among Sex Workers and Truck Drivers in China 1999-2000. Available at: http://www.wpro.who.int/NR/rd

\textsuperscript{123} These statistics were obtained from the “estimated prevalence of curable STIs among female sex workers” tables

STI/STD and HIV/AIDS:

There is strong evidence supporting the theory that STI infected individuals have 2 to 9 times more prospects of contracting HIV, compared to healthy individuals. Based on medical information from the “Women, Girls, HIV/AIDS World AIDS Day 2004” report, this increased vulnerability is due to numerous biological factors, such as inflammations, infected white blood cells, and ulcerated mucus membranes, among others vectors. Research shows that STI infections increase HIV’s potency, making it more “transmissible”: “[…] strong evidence supports several biological mechanisms through which STI facilitate HIV transmission by increasing both HIV infectiousness and HIV susceptibility. Significant also is the observation of a sharp decline in the concentration of HIV in the genital secretions when the infection is treated.” It seems that females with STDs are even more vulnerable to HIV than males because of their biological susceptibility to infections. This topic will be studied in more detail in the part entitled “STI/STD and Chinese Women”, towards the end of this chapter.

Some assumed that prostitutes, many of which are STI/STD-infected, contributed (and still contribute) in the spread of HIV because of their diseased state. Proponents of this view use sentinel data from the Yunnan province, a well-known region for its higher-than-average HIV infections, mostly due to high IV drug use and rampant prostitution. Statistics showed that STD related HIV infections have increased twofold from 1998 to 2000. (Previous statistics from the U.S Census Bureau listed 0.1 to 0.9 percent of HIV prevalence in STD patients) According to the “Yunnan Provincial Government Health

125 Women, Girls, HIV/AIDS World AIDS Day 2004
127 Epidemiological Fact Sheet on HIV AIDS and STI China 2000
and Epidemiology Center October 2000 studies”, HIV infection rates among STI patients and Sex Workers have doubled in 2000, reaching 2%. However, epidemiological data obtained from “HIV/AIDS Profile China Mainland 2000”, indicated a low occurrence of hybrid STD/HIV infection among CSWs, concentrating instead in another high-risk population, namely, IV drug users:

Epidemiological Data
Epidemic State: Concentrated

Low levels of HIV infection were seen in the sex worker and STD patient populations in China during the 1990s. Very high levels of infection were seen in IV drug users, especially in areas where the drug industry has thrived, in Yunnan Province bordering Burma, and the former Soviet Republic/China border areas.

Furthermore, the “HIV/AIDS in China and USAID Involvement 2001” statistics clearly point out that, although STI rates were still high within the Sex Worker population, the dreaded STI/STD-HIV combination was practically inexisten. Therefore, it is safe to state that, at the time of the study (2001), a spread of HIV through an STI epidemic among Sex Workers seemed dubious. However, this does not imply that there is no relation between the STI epidemic and HIV spread, far from it: In 1998, according to “HIV/AIDS Profile China Mainland 2000”, it seemed that the highest HIV prevalence among STD patients was located in South East China, close to the Myanmar/Burma, Thai and Vietnamese borders. American analysts from the U.S Embassy in Beijing are keen on supporting the fact that HIV transmission via sex increases in regions with high STD infection rates: “The sexual transmission of HIV seems already well-established in Yunnan, and perhaps soon will become prominent in some of the southeast coastal


131 HIV/AIDS in China and USAID Involvement. 2001
provinces that suffer high STD rates.” According to the following map, made by the U.S Census Bureau in September 2000, the provinces with the highest percentage of HIV infection among STD patients (0.1 to 0.9 percent) appear to be the south east provinces mentioned earlier. Namely, Yunnan, Guangxi Zhuang, Guangdong, and Fujian: 

Seroprevalence of HIV-1 for STD Patients
China, Mainland: 1998

Incidentally, that is the region where the majority of China’s IDUs are located. Conversely, it is clear that those numbers are incomplete: There were no statistics in 1998 about HIV infections among STD infected individuals in Northern and Central China. A study made in 2000 by the “China STI and HIV/AIDS Sentinel Surveillance Report” shows that there are between 1.8% and 8.1% of STD infections among male patients in STI/STD clinics:


- In 2000, several locations also had evidence of concentrated or nascent HIV epidemics among male STD patients.

Table 6: Percentage of HIV positivity among male STI patients at sentinel clinics.

<table>
<thead>
<tr>
<th>City</th>
<th>HIV Positivity</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menglian</td>
<td>8.1%</td>
<td>9/110</td>
</tr>
<tr>
<td>Bingchuan</td>
<td>6.1%</td>
<td>9/147</td>
</tr>
<tr>
<td>Guangxi</td>
<td>4.8%</td>
<td>6/126</td>
</tr>
<tr>
<td>Wenzhou</td>
<td>2.3%</td>
<td>8/344</td>
</tr>
<tr>
<td>Chuxiong</td>
<td>1.8%</td>
<td>5/280</td>
</tr>
<tr>
<td>Guangxi Province: Liuzhou</td>
<td>2.0%</td>
<td>6/303</td>
</tr>
</tbody>
</table>


The “Joint PRC MOH and UN Theme Group in China report” for 2003 did their own analysis and came out with the same results, corroborating the “STI/HIV Sentinel statistics” of 2000: "The HIV prevalence rate among STD patients is relatively low (in the provinces where HIV infection is reported among STD patients, the prevalence rate was less than 1.8%), but in some individual HIV sentinel surveillance sites in Yunnan, the prevalence rate among STD patients was as high as 8%. The above figure suggests that HIV transmission is currently spreading into the general population through unsafe sexual behavior, which might possibly become one of the dominant risk factors of a

generalized HIV epidemic in China.” However, this same “Joint PRC MOH and UN Theme Group in China report” for 2003 also reached the same conclusions and stated that the rate of sexually transmitted HIV rose from “[...] 5.5% in 1997 to 11.0% in the end of 2002.” Therefore, it is important to remember that those numbers, although official and from reliable sources, sometimes contradict the position held by the various ministries and organizations. The following example being an obvious result from the lack of coordination between the multitude of STD and HIV Sentinel Sites and Prevention Centers in the PRC: “This national STI surveillance program [the National Center for STI Control at the Institute of Dermatology and STI in Nanjing] is responsible at this time to the Chinese Academy of Medicine rather than the CAPM [Chinese Academy of Preventive Medicine] and, as of the time of our assessment, was not reporting HIV among reported STIs. We were told that efforts to improve coordination between these two systems were underway. (What currently happens regarding reporting if and when HIV is diagnosed in persons attending STI clinics was not made clear to the assessment team.)”

**STI/STD that increase HIV contamination:**

Health professionals have ascertained that every STI/STD causes damage to the genital derma area and mucosa, therefore facilitating HIV contamination. According to the World Health Organization FAQ section on HIV/AIDS, the infections that dramatically increase the chances of HIV transmission are Syphilis, Chancroid, Gonorrhea, and Genital Herpes. According to the U.S Embassy Beijing 2000 report, syphilis seems to


138 WHO, Regional Office for South-East Asia, HIV/AIDS SEARO Publications on HIV/AIDS-Tuberculosis and HIV Questions and Answers page. Available at: http://www.searo.who.int
be one of the most vicious diseases favoring HIV infection\textsuperscript{139}: The disease's symptoms, usually appearing after 3 to 6 weeks, include small lesions, rashes, and ulcers, affect the genitals. The Human Immunodeficiency Virus exploits these tears and lesions to enter the system and infect it.

**STIs, HIV, and Chinese Women:**

Biologically, women are five times more vulnerable than men to Sexually Transmitted Infections; STDs are the leading cause of health problems, such as complications during pregnancy and childbirth, pelvic inflammatory disease, infertility among women of reproductive age, and eventually cervical cancer.\textsuperscript{140} As stated in the 2004 report "Women, Girls, HIV/AIDS", some 500,000 young women throughout the globe are infected daily by an STI. Most females in China know little if any about STDs and STI/STD protective measures. Additionally to widespread ignorance about the diseases, certain factors, such as ineffective treatment in clinics, the high cost of service, and low levels of "user-friendliness" for women, increase this feeling of shunning among females seeking treatment.\textsuperscript{141} Other variables such as excessive distances between clinics and certain rural areas, lack in qualified female doctors, and the stigma attached to people with STIs/STDs, also make women more reluctant to seek treatment, self-medicate, or ignore the infection until it becomes chronic or reaches a terminal phase.\textsuperscript{142} Another issue that directly concerns women is the presence of Reproductive Tract Infections (RTIs), most of which are caused by STIs. According to the Joint assessment between UNAIDS and the Chinese


\textsuperscript{140} Women, Girls, HIV AIDS World AIDS Day 2004

\textsuperscript{141} ibid

\textsuperscript{142} UNAIDS, HIV/AIDS: China's Titanic Peril 2001 report. Available at: www.youandaids.org/unfiles/chinastitanicperillast.pdf
MOH, RTI are, along with STDs, an important cause of HIV transmission, and they affect 60% of Chinese women in certain rural areas. They are often left untreated because of the same limitations listed earlier for STD treatment. As we pointed out at the start of this section, females are two to four times more vulnerable than males in falling prey to HIV infection. There are four main reasons, outlined here: First, the female reproductive system’s mucosa is more vulnerable than the male’s genitalia to HIV infection during intercourse. Second, the male’s semen and other secretions contain more HIV than the female discharge. Third, forced sex, not uncommon in China where slavery of girls and forced marriages is widespread, increases the chance of generating lesions and tears during intercourse. These lesions make it easier for infections to enter the bloodstream. Last, STI/RTI related lesions make the female mucosa even more vulnerable to HIV contamination. Thus, these high rates of RTI become even more hazardous to Chinese women, because they allow for a swifter transmission of HIV from one infected person to another: “In summary, the widespread prevalence of RTI in Chinese women put them at great risk of contracting HIV, which is a problem that has to be urgently addressed.” Furthermore, one should take into consideration the fact that, of the approximate 120 millions of Migrant Workers (2004 Statistics), at least 30% are females: In 1997, some 780,000 female Migrant Workers entered Beijing looking for job opportunities, of which approximately 350,000 were unmarried, and in majority in their late teens early twenties. Tests carried out in this segment of the female population showed that RTI rates were higher than in urban women of the same age group. On the light of these numbers, it is easy to see that the need for counseling about HIV, STIs,


145 ibid


147 ibid
RTIs, and unwanted pregnancies: "Bearing in mind these demographics, it is easy to see a great need for reproductive health services." Unfortunately, it is somewhat difficult for these rural women to seek such services in the city, due to several traditional and civil obstacles: Most of the abortion clinics, which also provide condoms and information about STDs and HIV, were originally designed for married urban residents, and access to them is complicated: "However, it is more difficult for migrants from rural areas to access health services in cities than for permanent urban residents. Due to traditional concepts about premarital sex, the nation-wide family planning clinics that could provide condoms and information are usually seen as a service for resident married women." Another barrier is the total lack of awareness among rural girls about their sexuality, RTIs, and preventive tactics. The following study showed that, even though many cohabited with male partners, most of those interviewed were not aware that condoms could protect them from STIs, HIV, and unwanted pregnancies. Others never though about them or stated that they were too expensive:

"In a study among 146 young female migrants in 5 Chinese cities, it was shown that many cohabited with boyfriends. Most of them lacked the most basic knowledge about their bodies, reproductive health, STI, and did not approach a family planning clinic for preventive counseling - only if they needed an abortion. [...] Some said they never thought of condoms, others thought they are too expensive. [...]Furthermore, none of the respondents mentioned condoms as a means of protection from STI/HIV."

Add to that the desire to please their partners by means of unprotected intercourse, or the latter’s refusal to wear them, and we can start understanding the reasons behind the high


149 Ibid

150 Ibid
STIs/STDs rates among this population. Since the majority of migrant workers come from rural areas, it would be wise for the Chinese Ministry Of Health to focus an important part of its preventive operations in these areas.

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Part 2- Tuberculosis (TB):

Definition of Tuberculosis and its symptoms:

What is Tuberculosis?
Tuberculosis is one of Humanity’s oldest diseases, Greek historians talk of it as “the scourge of armies” and Egyptologists found inactive Tuberculosis bacillus in certain pharaohs’ mummies. The exact definition of the disease, as stated by Microsoft Encarta Encyclopedia 1996 is very informative. It says that Tuberculosis (TB) is a

“[…] Chronic or acute infectious disease caused by the bacillus *Mycobacterium tuberculosis* [also called Koch’s Bacillus], which may affect any tissue of the body but is usually found in the lungs. The name tuberculosis is derived from the formation by the body of characteristic cellular structures called tubercles, in which the bacilli are trapped and walled off.”152

Hence, the disease is a serious (and usually lethal) one caused by Koch’s bacillus. The most damaging form of the illness is when the bacillus settles down in the patient’s lungs, where it replicates and eats up lung tissue, thus initiating what became medically known as Pulmonary Tuberculosis.

The Symptoms of TB:
According to Encarta’s definition, the first stages of tuberculosis often present no symptoms. However, indications of later stages of the disease are fevers, fatigue, sweating during nighttime, loss of weight and appetite. Additionally to these symptoms, patients with pulmonary TB suffer from chest pains, coughing, and bloodstained

152 Tuberculosis, Microsoft Encarta Encyclopedia, CD-ROM 1996
sputum.\textsuperscript{153} Since Antiquity, people have been looking for a cure, to no avail. In the early 19\textsuperscript{th} century, two French physicians, G. L. Bayle and R. Laënnec established TB's forms and stages. Sadly, they died from the disease before finding a cure. In 1874, an American physician, Dr. Trudeau, also sick from the disease, established the Trudeau laboratory, a model sanatorium. In 1882, German microbiologist Robert Koch discovered the bacillus responsible for the disease, and created the Tuberculin diagnosis test in 1890, thus setting the groundwork for finding a cure.\textsuperscript{154} In the early 1920s, French bacteriologists Albert Calmette and Alphonse Guérin researched the disease, and created the BCG (Bacillus Calmette-Guérin) vaccine. However, this vaccine was not widely used in the United States.\textsuperscript{155} In 1944, American microbiologist S. Waksman discovered streptomycin, and paved the road for medicine such as para-aminosalicylic acid and isoniazid (1948) as well as other drugs that revolutionized the treatment of TB.\textsuperscript{156}

Nowadays, the disease is curable but requires hospitalization of the patient at first. The latest drugs take an average of six months to two years to fully restore a diseased individual to health.\textsuperscript{157}

\textsuperscript{153} Tuberculosis, Microsoft Encarta Encyclopedia, CD-ROM 1996

\textsuperscript{154} ibid

\textsuperscript{155} ibid

\textsuperscript{156} ibid

\textsuperscript{157} ibid


Tuberculosis: Risk assessment and means of transmission

Tuberculosis: Risk Assessment

United Nations Health Specialists describe TB as a disease of poverty, found especially in developing countries. A pandemic of the disease is usually found in regions with feeble public health systems.\(^{158}\) The disease witnessed a worldwide resurgence during the last 20 years, especially in “safe, industrialized” countries like the United States, once again demonstrating that the disease strives in pockets of poverty.\(^{159}\) In Asia, especially in India and China, TB is endemic and poses serious health problems to millions. Each year, hundreds of thousands die because of it, and some one million develop active (contagious) tuberculosis.\(^{160}\)

Tuberculosis: Means of transmission

Apparently, the bacillus mostly infects “through sputum, either in airborne droplets or by dust particles, and rarely by excreta or food products”\(^{161}\) but also from drinking unpasteurized milk from infected cows.\(^{162}\) Tuberculosis (TB) has a rather peculiar incubation behavior, varying from one individual to another. Usually, the bacillus remains dormant (inactive TB), sometimes for years, developing into a disease upon weakening of the body’s immunity. Although large numbers of people are infected with Tuberculosis, only a few individuals develop “contagious” active TB.\(^{163}\) The Frequently Asked Questions section of the WHO Regional Office for South-East Asia dubs TB as “a

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\(^{159}\) Tuberculosis, Microsoft Encarta Encyclopedia, CD-ROM 1996


\(^{161}\) Tuberculosis, Microsoft Encarta Encyclopedia, CD-ROM 1996

\(^{162}\) Acquired Immuno Deficiency Syndrome, Compton’s Interactive Encyclopedia, CD-ROM 1995

\(^{163}\) Tuberculosis, Microsoft Encarta Encyclopedia, CD-ROM 1996
worldwide problem⁶⁴ and warns against its spread, especially in areas of heavy HIV infections.⁶⁵ This statement allows us to suggest that HIV/AIDS infections facilitated the resurgence of TB in parts of the Western world. According to the "United Nations 2001 Report on HIV/AIDS in China" and Encarta 96, people at risk are those who inject drugs, live in certain settings (overcrowded locales, unhygienic sites, nursing homes, prisons, shelters for the homeless), are in contact with TB infected people (family members, friends, health workers), and/or have low immunity because of age or disease.⁶⁶ The "HIV/AIDS: China's Titanic Peril UNAIDS report 2001", clearly displays the devastating on impact of TB on a marginal, high-risk population such as prisoners.⁶⁷ It appears that ignorance, poor hygiene, poverty, and the absence of an effective health care system in the PRC facilitated the replication of both TB and HIV; populations affected by one are usually vulnerable to the other, and vice versa.⁶⁸

**Tuberculosis and HIV/AIDS: A daunting connection**

In China, TB infected one third of the general population (some 400 million Chinese) and is a major health issue yet unsolved by the government.⁶⁹ Literature on HIV/AIDS affirms that there is an important connection between TB and HIV: It seems that PLWA

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⁶⁴ WHO, Regional Office for South-East Asia, HIV/AIDS SEARO Publications on HIV/AIDS-Tuberculosis and HIV Questions and Answers page. Available at: http://www.searo.who.int

⁶⁵ ibid

⁶⁶ Tuberculosis, Microsoft Encarta Encyclopedia, CD-ROM 1996


⁶⁸ ibid

⁶⁹ ibid
are particularly at risk from the disease\textsuperscript{170}, with the occurrence of one infection greatly facilitating the other’s spread rate and increasing its potency and lethality. Tuberculosis was labeled the leading AIDS Opportunistic Infection responsible for fatalities in developing countries. In China, studies show that TB affects one out of three HIV infected persons, speeding up the breakdown of the immune system, leading to AIDS and death.\textsuperscript{171} Two publications focus on this relationship, the U.S Embassy Beijing 2001 and the UNAIDS 2001 reports: The first stated that

“China has a very large number of persons infected with TB, a disease that has proven to be a major (and in some places, the largest) co-infection problem among HIV-infected persons in all countries with established HIV epidemics. This TB co-infection problem is compounded by the clear demonstration in several studies that HIV and TB each accelerate the clinical progression of the other infection.”\textsuperscript{172}

This was also substantiated by UNAIDS which affirmed that TB speeds up HIV replication in the body and halves the survival of co-infected (TB and HIV) people. Most importantly, and basing this interpretation on statistics from various countries, it seems that “[...] the HIV/AIDS epidemic will worsen the TB epidemic, and vice versa. [...] When HIV/AIDS is introduced into a population with a very high prevalence of TB, like China, the effect can be devastating.”\textsuperscript{173} Therefore, in order to prevent more mortality among HIV/AIDS patients, it is crucial to curb the impact of TB in China, and avoid the

\textsuperscript{170} UNAIDS, HIV/AIDS: China’s Titanic Peril 2001 report. Available at: www.youandaids.org/unfiles/chinastitanicperillast.pdf

\textsuperscript{171} UNAIDS’ Pamphlets: Care And Support, April 2003


\textsuperscript{173} UNAIDS, HIV/AIDS: China’s Titanic Peril 2001 report. Available at: www.youandaids.org/unfiles/chinastitanicperillast.pdf
appearance of an HIV/TB co-epidemic throughout the provinces.\textsuperscript{174} This frightening parallel is confirmed by the WHO on their TB and HIV/AIDS web site, and introduces yet another alarming variable which further complicates treatment, being the emergence of drug-resisting strains of TB in Asia.\textsuperscript{175} Unfortunately, there is no link in China between HIV prevention and treatment, and TB programs: Medical professionals do not check TB patients for HIV, nor do they include them in the list of those vulnerable to HIV infection.\textsuperscript{176} Likewise, HIV patients are seldom checked for TB:

"Although some HIV-infected persons may have their TB status assessed, this step is not yet a routine component of clinical care for HIV infection. TB clinics or TB patients are not yet included among China’s current sentinel surveillance populations for HIV."	extsuperscript{177}

These limitations have to be addressed as soon as possible by the Chinese government in order to elude the specter of an HIV/TB co epidemic in the near future.

\textsuperscript{174} UNAIDS, HIV/AIDS: China’s Titanic Peril 2001 report. Available at: www.youandaid.org/unfiles/chinaatitanicperillast.pdf

\textsuperscript{175} WHO, Regional Office for South-East Asia, HIV/AIDS SEARO Publications on HIV/AIDS-Tuberculosis and HIV Questions and Answers page. Available at: http://www.searo.who.int


\textsuperscript{177} ibid
B- Socio-Economic Facilitators:

“The Socioeconomic Impact of AIDS in China, August 2002” states that HIV’s potential for destruction is great because it targets primarily the economically active population (those aged from 15 to 50), spreads extremely quickly, is extremely costly to treat, and is lethal.178 To boot, the disease has a very strong socio-cultural and economic impact on a country, primarily because it limits growth, halts development, favors social instability, and amplifies poverty, in addition to reducing the active population.179 Additionally, HIV/AIDS creates food shortages, nullifies consumer power, decreases the quality of life of those infected and of their family, raises orphans, magnifies losses in human capital, reduces employee productivity, augments sick days and multiplies medical expenditures.180 The PRC became especially vulnerable to HIV/AIDS especially since it shifted its financial system from a “state planned” to a “market driven” economy in 1978. This evolution allowed the emergence of a Chinese middle class, whose sudden affluence and having more money “[...] to spend on alcohol, drugs and commercial sex [...]” drastically increased their likelihood of contracting HIV.181 This epidemic will in turn have repercussions on the PRC’s economic development and social stability in the coming decade.182

This chapter will begin with an analysis of the Chinese HIV/AIDS epidemic on society, later shifting its focus to the economic impact of the outbreak.

178 The Socioeconomic Impact of AIDS in China, August 2002

179 We Care do you The UN Theme Group on HIV AIDS takes stock of the international response to AIDS in China at the start of the new millennium Updated on April 1, 2004

180 UNAIDS A Joint Response to HIV AIDS 2002


The Social impact of HIV/AIDS in the People's Republic of China:

HIV/AIDS and Poverty in China

As mentioned earlier, China’s moving away from a planned economy has contributed to an increase in high-risk behavior, usually amongst the “nouveaux riches” and Chinese entrepreneurs. During the First Chinese Conference on STD/AIDS Prevention and Control in 2001, Peter Piot, UNAIDS’ Executive Director, said “[That] China provides compelling evidence of the speed with which social conditions can change and along with them, the conditions for the spread of HIV [such as wide social disparities, limited access to basic services and increased migration].”

Poverty in the PRC is also an HIV vulnerability factor: During the old days, poverty mostly affected rural populations. However, increasing commerce and services sectors and decreasing farming and heavy industry drew many to the cities. This led to rising rates of urban poverty, and left the new urban “underclass” to deal with “hard social and economic challenges.” According to UNAIDS 2001 report on HIV/AIDS in China, the “transition from a planned economy to a market driven economy” led to a dramatic increases in reckless urbanization and unemployment. This joblessness especially affected adolescent girls and women, and led to prostitution as an easy source of income. If you add to that a feeble social security and overloading health services, you would have ample reasons for the spread of HIV/AIDS in China: “The dismantling of the social

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184 ibid
185 ibid
security system now expose the unemployed, those needing medical attention, women, children and young people to previously unknown vulnerability.”

Unfortunately, rising rates of HIV/AIDS infections will also boost poverty as well as widen the gap between “[…] the richest and the poorest” both in urban and rural areas.\(^{187}\) According to the Joint Chinese MOH/ UNTG on HIV/AIDS in China, December 2003, the majority of those with HIV/AIDS live in underdeveloped – and often overcrowded – rural areas, where health, educational, and agricultural resources are scarce.\(^{188}\) A 2002 estimate (The Socioeconomic Impact of AIDS in China, 2002) showed that at least 68% of HIV/AIDS patients lived under the poverty line\(^ {189}\), and the report on the global AIDS epidemic’s 2004 executive summary affirmed that the outbreak “[…] is intensifying chronic food shortages in many countries [such as China] where large numbers of people are already undernourished. The epidemic is significantly reducing countries’ agricultural workforce and families’ income with which to buy food. This is especially damaging for people living with AIDS who need more calories than uninfected individuals.”\(^ {190}\) This further exacerbates poverty, undermines social stability, and forces many people, who had just started their ascent towards a better way of life, to return to their previous status because of high HIV/AIDS medical expenditures.\(^ {191}\) Additionally, HIV/AIDS related discrimination and stigma leads to job loss and expulsion from schools, thus increasing the possibility of social instability. The UNAIDS/MOH (2003) concluded that, unless the


\(^{188}\) ibid

\(^{189}\) The Socioeconomic Impact of AIDS in China, August 2002


epidemic is curved, it would have dramatic negative impacts on society and the economy, but also on national security and prosperity. Another problem brought forth by discrimination and job loss is the need to find alternate means of subsistence; the easiest two being sex work and plasma selling, very high risk behaviors that allow a faster spread of the disease to a previously untainted general population. Despite these facts, UNAIDS warns against the use of simplifying assumptions such as qualifying HIV, like TB, as “purely a “disease of the poor.” and reminds proponents of this view that the epidemic affects all stratum of society.

A specific segment of the PRC population is even more vulnerable to the epidemic; that group is Chinese women. Economically, Chinese females feel the impact of HIV/AIDS more strongly than males because of the following causes: First, more women live in poverty than males, moreover, “Many women lack the economic independence to leave relationships that put them at risk of HIV”, and are considered by law as “second rate citizens” in terms of inheritance, property and child custody. Additionally, Chinese women, especially in rural areas, are under or uneducated, and therefore condemned to become caregivers in a household:

“[Chinese girls can legally stop attending school after the 9th grade, and most do in order] to care for the sick, help run the household or support the family. This deepens the spiral of poverty. [Sociologists found out that in] countries with high HIV prevalence, girls’ enrolment in school has dropped in the past decade. [This,

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193 The Socioeconomic Impact of AIDS in China, August 2002

in turn, has affected the behavior of these women's own children making them less likely to attend school—and more likely to become infected."195

Because this line of work - as well as other factors such as desertion, divorce, etc - usually leaves women with little time for income generation and productive tasks, and is yet another reason behind poverty, many females resort to prostitution, and more often than not, have unprotected sexual relations in order to generate additional income or simply survive.196 All these factors led the WHO's "Women, Girls, HIV/AIDS World AIDS Day" 2004 report to link directly poverty, HIV/AIDS, and women and urge the Chinese Government to swiftly deal with this unholy trinity.197

**Orphans and the impact of HIV/AIDS on children:**

Another key population heavily affected by HIV/AIDS in the PRC is children: UNAIDS as well as UNICEF and UNESCO consider HIV/AIDS as "a significant obstacle to children achieving universal access to primary education by 2015."198 A survey made in August 2002 by "The Socioeconomic Impact of AIDS in China" found that the majority of those infected with HIV/AIDS are (young) adults, often having dependants such as elderly parents, young siblings, and infants.199 Another survey carried out by the Joint PRC MOH/UNAIDS in selected parts of China for 2003, disclosed that 16% of 143 People Living with HIV/AIDS (PLWHAs) have children younger than five, most of them to be orphaned before reaching adulthood.200

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196 ibid
197 ibid
199 The Socioeconomic Impact of AIDS in China, August 2002
The HIV/AIDS epidemic often forces those infected and their caretakers to sell assets and borrow money in order to purchase treatment. This continual drain of financial resources to make the final moments of PLWHAs bearable, the treatment of OIs, combined with funeral expenses often results "[…] in a lack of support for the elderly as well as children."\(^{201}\) Those who suffer most from this state of destitution are the newly orphaned children, who are deprived both emotionally (from their parental love), socially (from their lack of values and guidance) as well as materially. The latest point is especially important, because it often results in discontinued education, thus limiting the children’s future integration in the workforce. Ultimately, this "[…] breakdown in intergenerational knowledge may play a part in a country’s economic decline"\(^{202}\) Moreover, the orphans "face increased risk of violence, exploitation and abuse" at the hands of unscrupulous guardians and are often malnourished, driven to prostitution, forced into hard labor and dispossessed of their inheritance and property by their foster families.\(^{203}\) The following 2001 UNAIDS estimate (Figure 8) clearly shows that some 15,000 children have lost at least one parent (most often the mother) to HIV/AIDS and that, unless drastic measures are taken by the PRC government, those numbers will rise to 260,000 by 2010.\(^{204}\)

\[\text{Figure 8: Maternal AIDS Orphans (10 thousand)}\]

\[^{201}\] The Socioeconomic Impact of AIDS in China, August 2002


\[^{203}\] Ibid

\[^{204}\] The Socioeconomic Impact of AIDS in China, August 2002
The Economic impact of the HIV/AIDS epidemic in China:

Many of us used to think AIDS as a health issue. We were wrong. AIDS can no longer be confined to the health or social sector portfolios. AIDS is turning back the clock on development.

James D. Wolfensohn, World Bank

Other economists, claiming that HIV/AIDS affects society and economy in three stages, echo this quote by Wolfensohn. According to “The Socioeconomic Impact of AIDS in China, August 2002” edition, the outbreak influences a country’s economy threefold: First, on a micro level; then, on a sectoral and regional level; and finally on a macro level.\(^{205}\) In industrialized and western nations, HIV patients frequently lives years without developing AIDS, and even those who have the syndrome remain enough, allowing society/companies to slowly prepare for the early retirement of these individuals. Sadly, Chinese HIV patients quickly develop and die from AIDS, Thus having dire consequences for the community. The rest of this chapter will study the impact of HIV/AIDS on China’s GDP and health expenditures first (the so-called Macro level), then on individuals and their families (Micro level), and finally on businesses (the so-called sectoral level).

The Microeconomic (individuals and families) impact of HIV/AIDS in China:

Let us begin with a study of the microeconomic impact of HIV/AIDS. The first thing that often happens to most newly HIV infected persons is loss of employment due to discrimination: According to a survey made by Liu Kangmai in 2000, 50% of PLWHAs had to quit their jobs after their HIV status became known, while 21% kept on working, and 2% transferred to another position. A fifth of those surveyed refused to answer, most probably fearing repercussions.\(^{206}\) An additional primary impact of HIV/AIDS on the micro-economy is the financial issue brought forward by the loss of employment and rising medical costs “which bring about social issues such as families living in poverty,

\(^{205}\) The Socioeconomic Impact of AIDS in China, August 2002

\(^{206}\) ibid
raising orphans and caring for elderly living on their own.” Another Liu Kangmai study (The Socioeconomic Impact of AIDS in China, 2002) of 274 PLWHA in some eight Chinese provinces and the capital ascertained that the family lost almost a third of its annual income after the “breadwinner” developed AIDS, mainly because of discrimination, but also because of his/her physical impossibility to work. According to the following graph (Figure 6), taken from “The Socioeconomic Impact of AIDS in China” August 2002 review, AIDS patients living urban areas spend approximately 24 days per year, “[... while their less fortunate compatriots living in underdeveloped areas stay] 14.7 days in provincial hospitals and 7.2 days in county-level hospitals.” Medical costs per day of hospitalization differ greatly from one region and type of hospital to another: Those living in developed areas have a daily expense of 490 Renminibi (The People’s money, RMB, alternatively known as Yuan), whereas provincial and country hospitals charge RMB311 and RMB132 respectively for patients of underdeveloped regions:

![Figure 6: Average inpatient days and average daily inpatient cost](image)

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208 The Socioeconomic Impact of AIDS in China, August 2002

209 ibid

210 ibid
Add to that an average yearly cost of RMB17500 for treatment, excluding HAART (This is an additional RMB82000-104000 per year, even for generic drugs). In average, the annual income of a rural inhabitant is RMB2253, and that of an urban inhabitant RMB6280.

Figure 7: Comparison of costs (RMB)

A recent study showed that almost 76% of AIDS patients paid the medical bill themselves, 10% received treatment in government hospitals, and 8% were covered by insurance companies. These prohibitive costs clearly overshadow the yearly income of most urban residents and illustrates that HIV/AIDS treatment is a considerable burden for households.\textsuperscript{211} This forces many to use their savings, sell assets, borrow money, and reduce spending on other necessities in order to pay for treatment, which eats up, on average, some 30% of a family’s monthly income. This will, in turn, affect other members of the household, such as children (who will have to stop attending school in order to reduce costs, very common for girls), women (who might resort to prostitution as

\textsuperscript{211} The Socioeconomic Impact of AIDS in China, August 2002

\textsuperscript{212} ibid
an extra source of income\textsuperscript{213}, and the elderly. Let us now move to the macroeconomic impact of HIV/AIDS in China.

\textit{The Macroeconomic (government and health care) impact of HIV/AIDS in China:}

The macroeconomic impact of the Chinese HIV/AIDS epidemic can be divided into direct and indirect costs, the first being mostly cumulative medical spending by the Chinese government, and the latter representing productivity losses and potential decreases in forthcoming Gross Domestic Product (GDP).

We will begin our analysis of the direct cost of HIV/AIDS, by scrutinizing public spending: Partial statistics (Figure 9) on governmental and international organizations spending on HIV/AIDS in China from 1985 to 1992 show an investment of some 30 million Yuan. The Chinese MOH increased spending on HIV/AIDS prevention and treatment of AIDS patients by 15 million Yuan from 1993 to 1998.\textsuperscript{214}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure9}
\caption{HIV/AIDS investment in three provinces (10 thousands)}
\end{figure}

\textsuperscript{213} Surveys show that customers are willing to pay up to 60\% more for sex without protection, thus drastically increasing HIV transmissibility

\textsuperscript{214} The Socioeconomic Impact of AIDS in China, August 2002

\textsuperscript{215} ibid
According to "The Socioeconomic Impact of AIDS in China" estimates, the number of patients in China is on the rise, and will amount from 1.1 to 2.2 million infections in best and worst-case scenarios respectively, in the upcoming decade (2002 to 2010), costing the State a minimum 10 billion Yuan in medical expenses.\textsuperscript{216} According to WHO, there were, in 2004, 7,400 adults (aged 15 to 49) receiving ARV therapy at the expense of the government. UNAIDS 2003 estimates indicate that 100,000 adults require this treatment.\textsuperscript{217} Current spending on HIV detection, prevention, and treatment in selected provinces is a mere RMB 0.06 per capita, when it needs to be RMB 0.5 a year per capita. In 2001, health care expenses for the total AIDS patients in China were 215 million RMB, and costs are expected “to reach 1.98 billion RMB, 3.55 billion RMB and 6.01 billion RMB in Early, Late and High [projection] respectively [in 2010].”\textsuperscript{218} Early, Late, and High are levels in Chinese HIV/AIDS prevention. Costs in millions of Yuan are outlined in Figure 10 below:

\begin{figure}[!h]
\centering
\includegraphics[width=0.5\textwidth]{figure10.png}
\caption{Total Direct Costs (million RMB)}
\end{figure}

Although the impact on China’s macroeconomy and society is still embryonic, it is not to be underestimated. Estimates indicate that, at best, the country’s GDP will record a

\textsuperscript{216} ibid

\textsuperscript{217} UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf

\textsuperscript{218} The Socioeconomic Impact of AIDS in China, August 2002

\textsuperscript{219} ibid
decrease of 22.5 billion Yuan, compared to a “No-AIDS” scenario, whereas in a worst-case scenario, the reduction in GDP would amount to 40 billion Yuan over a period of 10 years.\(^{220}\) I have quoted “The Socioeconomic Impact of AIDS in China” because I felt that it adequately and succinctly conveyed the information regarding this issue:

“[…] the loss to GDP is estimated to be RMB 7.6 billion in 2010 in the Early scenario, a cumulative loss of RMB 22.5 billion in ten years. In the High scenario, the GDP lost to AIDS will reach RMB 15.9 billion in 2010, a cumulative loss of RMB 40 billion in ten years (see Figure 12).

In the above scenarios, the cost of HAART therapy is not included. If considering such treatment which costs RMB 100,000 annually (recently drops to about RMB 30,000) and the percentage of users remaining the level (0.024%) in this survey, the GDP lost will amount to RMB 16 billion in 2010, a cumulative loss of RMB40.2 billion in ten years in the High scenario. If the percentage of HAART therapy users increases to 10% in 2010, the loss of GDP will reach RMB22.5 billion in 2010, a cumulative loss of RMB57 Billion in ten years.

Figure 13 shows the AIDS’s impact on economic growth. During 2000-2010, the decline of GDP growth rates is not obvious in the beginning in each of three scenarios. But the GDP growth rates would drop by 0.01, 0.019 and 0.03 percentage points in the Early, Late and High scenarios in 2010 respectively.”\(^{221}\)

\(^{220}\) The Socioeconomic Impact of AIDS in China, August 2002

\(^{221}\) ibid
In average, countries with high rates of HIV/AIDS infections ("countries with HIV/AIDS prevalence rates of 20% [...]"") witness annual GDP drops of 2.6% in average.222 According to experts from the American Embassy in Beijing, China is no exception, with a 10 years cumulative GDP losses ranging from US$2.7 to 4.8 billion223, thus threatening to "ruin the gains [...] made with great difficulty [by the PRC] since reform and opening to the outside world began [in the late 1970s]."224 In 2002, Yunnan province studies were conducted in the of China to determine the mean age of death of patients suffering from AIDS: The aim of this analysis was to determine the loss in productive years, later averaging these into costs. Researchers found that the median age of death was between 28 and 38 years old. For the sake of simplicity, it was assumed that an AIDS patient would live up to 35 years old and then die, thus having a loss in income contribution to GDP of some 25 years of productive life. Computations on the model averaged a total indirect loss/ production waste of one hundred and ten thousand Yuan per AIDS infected individual. "[Statistically, AIDS patients live] between 3 and 12 months, [therefore averaging] annual direct loss of 17,500 [... which, according to Figure 11, combined with the total indirect loss sums up to 130,000 RMB]"225

![Figure 11: Total, Direct and Indirect Cost per AIDS patient (10 thousands)](image)

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222 The Socioeconomic Impact of AIDS in China, August 2002

223 Beijing Environment science and technology section November 29 2002


225 The Socioeconomic Impact of AIDS in China, August 2002

226 ibid
The impact of HIV/AIDS on businesses in China:

AIDS has a profound impact on workers and their families, enterprises and national economies. It is a workplace issue and a development challenge

Juan Somavia, ILO Director-General

The impact on businesses is direct, mainly because AIDS affects the active population, thus reducing its growth rate. Moreover, the “Report on the Global AIDS epidemic’s Executive Summary for 2004” expects the epidemic to affect companies in many ways, such as absenteeism related costs, repeated enrollment, organizational disruption, and loss of qualified personnel. Because recent surveys did not show that HIV/AIDS has had a significant impact on the macroeconomy of the South East Asia region, many businesses have been slow in developing processes to deal with the threat. Recent research indicates that this is a tactical mistake, costing the region nearly US$ 4 billion annually in lost output for 2003, and is estimated to rise to US$17 billion per annum by 2010. China is especially at risk because of the rapid spread of the epidemic, and the country’s weak health care system. This will result in increasing costs and reduced profitability for Chinese firms, ill equipped to deal with increasing HIV/AIDS case among their workforce. “The China Business Review” edition of July/ August 2003 outlines three types of costs termed Primary, Secondary, and Tertiary costs businesses incur when faced with the specter of HIV/AIDS. I have reorganized them into two labels, tangible and intangible costs: Tangible costs, as its name indicates, are material expenses incurred by the company and related to HIV/AIDS. The most important costs are those

227 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf


related to employee absenteeism, which is expected to rise with PLWHAs and is dramatic to firms that rely on a skilled workforce\textsuperscript{232}: According to a Beijing-based study conducted between 1994 and 1999, infected individuals spend in average some 90 days per year in the hospital, excluding "[…] an additional 2.7 outpatient visits per year." The study stressed that because "[…] of the highly personal nature of Chinese business relationships, moreover, the absence of key workers may amplify the impact of HIV/AIDS."\textsuperscript{233} Furthermore, certain healthy employees often take time off to care for HIV-infected family members. This irregular attendance has a toll on the remaining employees, who have to work longer and harder to compensate for lost productivity. This increases both the firm's costs (overtime pay) and workplace stress. Sometimes, the family of the deceased worker might demand that the firm pays for the memorial service and related expenses.\textsuperscript{234} Other important costs include paying insurance premiums, early retirement packages to HIV infected individuals, AIDS antiretroviral treatment drugs (aizibing jiweiji), hiring and training new employees, death benefits, etc. On the other hand, intangible expenses, such as low morale due to fatalism, industrial accidents because of AIDS related sickness, also contribute to a company's loss. The most damaging blow is that directed at the company's image: Should the firm offer tri-therapy to its infected workers, with the rising costs (between US$1,200 and 5,000 per year per patient) that entails, or refuse to pay, being labeled as lacking humanity and becoming shunned by the consumers? An additional problem faced is that investors may withdraw their venture, therefore depriving businesses from access to capital.\textsuperscript{235} There is a third, indirect impact of HIV/AIDS on businesses, the epidemic affecting the country's economy as a whole. The HIV epidemic, being the exact opposite of the SARS in term of target population, affects the workforce and has a negative effect on the workers' families in term of useable income, mounting debts, declining savings, interrupted education for


\textsuperscript{233} ibid

\textsuperscript{234} ibid

\textsuperscript{235} ibid
the young, and an overall reduction in spending. This decreasing demand for goods and services "often spells macroeconomic decline, not only in areas where HIV/AIDS is prevalent, but across the country or region."236 Although seemingly trivial, the impact of the Chinese HIV epidemic on the nation's economy is rapidly rising. The first and most dangerous stage, affecting the households, is well under way, and has already restricted the PRC's social development by increasing poverty. It is just a matter of time before the outbreak targets economic growth and erases 20 years of sacrifices. Chinese companies are now at a crossroad: Although costly at first, the implementation of HIV/AIDS preventive tactics and educational programs within the "danwei" or work unit can drastically alter the epidemic's spread, and save not only lives, but also prevent future decreases in profitability.237 Additionally, implementing such programs would not only benefit workers, but also indirectly influence the families, friends, and relatives of employees, providing them with a reliable source of HIV preventive information.238 Despite that, a 2002 survey showed that less than 10% of Beijing-based companies had drafted policies to deal with STD/STI/HIV/AIDS, and only 26% had established policies to deal with Hepatitis, with "Only 3 percent of the companies reported that they had policies and programs specifically designed to address HIV/AIDS in China."239 It is vital to realize that the company should never, under any circumstances, implement mandatory HIV testing for its employees since this practice would increase discrimination towards those infected, and most probably result in workplace discord.240


237 ibid

238 ibid

239 ibid

240 ibid
C- Cultural and Behavioral Facilitators:

One reason behind the spread of HIV in China is due to cultural facilitators. The most common ones are masculine/feminine traditional behaviors, fear of public embarrassment, and discrimination towards certain types of activities. Let us start with the expected traditional behaviors: it has become apparent that some concepts about masculinity in China encourage men to indulge in high-risk behaviors such as abusing substances such as alcohol and drugs, as well as having multiple sexual partners. Additionally, many men have been raised with the preconceived notion of being “macho”, shrugging away fear of diseases and enduring discomfort, thus making them less likely to seek health care or use condoms during sex. The main reason behind low condom use is that many males consider “[...] women who talk about safe sex and prevention as “impure” and “easy”.”

This is especially hazardous for it not only put men but also their numerous (most of the time extramarital relations with CSWs) sexual partners at risk. It is therefore vital to include behavior modification tactics within HIV/AIDS prevention campaigns, aimed specifically at Chinese men:

“Working with and persuading men (and women) to change some of their attitudes and behaviors related to gender expectations has enormous potential to change the course of the HIV epidemic and to improve the lives of their families and partners. Thus, in China, involving men in prevention policies and programs is essential to curb the epidemic [and prevent it from reaching the general population].”

241 The Socioeconomic Impact of AIDS in China, August 2002


243 ibid
After traditional beliefs comes the fear from embarrassment. Many STI infected patients choose to patronize illegal clinics, trust their health to “quack” doctors/ pharmacists, and avoid having HIV tests because the concept of patient-doctor privacy in China is very weak. This is due to two things, first being the large number of patients/ low number of doctors in cramped locales, making private consultations impossible. The second reason is that HIV and sexually transmitted infections are to be reported to public health officials, thus condemning the patient socially: “a group of U.S. visitors watched a demonstration of an AIDS database recently where the names and hometowns of people infected with HIV scrolled down the screen.”\textsuperscript{244}

This brings us to discrimination towards PLWHA. Because of misconceptions about the way HIV/AIDS is transmitted and lack of information about the epidemic, most Chinese believe that the disease is something that happens to other people, therefore staying away from educational and awareness raising campaigns.\textsuperscript{245} Another preconceived idea about HIV/AIDS is that it only affects foreigners or people indulging in premarital sex, drug use, prostitution, or homosexual relations\textsuperscript{246}, groups already discriminated against. Thus, by association, this makes the topic of HIV/AIDS prevention somewhat taboo:

“[...] the related and partially overlapping issues of stigmatized and illegal behaviors are also of major concern. Many behaviors and activities associated with HIV transmission (e.g., prostitution) are illegal or stigmatized or, as with heterosexual sex, are themselves topics that are difficult to address in public


\textsuperscript{245} The Socioeconomic Impact of AIDS in China, August 2002

discussion (e.g., intravenous drug use, heterosexual sex, homosexual sex, paid
donation of blood products, needle and syringe re-use, etc.)”

According to a survey revealed in “The Socioeconomic Impact of AIDS in China, August 2002”, it seems that PLWHA, although given sympathy and assistance by parents/spouses suffer rejection from friends, with almost 40% cutting off all ties with the infected individuals. Moreover, many HIV/AIDS victims are expelled from work or villages and become subject to social pressures when their identities become known. Survey findings show that of the 33.3% HIV infected persons who have made open their identities as PLWHA, “[...] 7.14% receive concern but no assistance, 28.56% are treated with indifferent attitude from people [...] 28.56% are given a cold shoulder from people nearby, and 64.3% come across with people who keep a distance away.” Thus, this vicious circle of fear, discrimination and hidden infection contributes to the spread of HIV/AIDS in the People’s Republic of China, as well as being serious obstacles to the design and implementation of effective HIV prevention programs.

Another facilitator behind increasing HIV transmission in China is the widespread lack of knowledge, awareness and education, and the belief in multiples misconceptions regarding HIV/AIDS. Let us begin with a study of awareness levels about HIV/AIDS in the PRC: Although over 80% of respondents in case studies in selected sites in China had heard about HIV and AIDS (more about the latter rather than the former), only a minority knew about the main transmission roads, and fewer still were familiar with preventive tactics. According to a 2003 survey conducted by UNAIDS, 40% of those


248 The Socioeconomic Impact of AIDS in China, August 2002


250 ibid
interviewed had no knowledge whatsoever on how HIV prevention. The only exceptions being soon-to-be-married young women and students “[…] from which] 90% and 95%, respectively, were knowledgeable about modes of transmission.” These numbers corroborate previous data from “Knowledge, Attitudes, and Practices” (KAP) 2001 tests obtained from various sources such as national research institutes, local, and international non-governmental organizations operating in the PRC such as the Australian Red Cross and Save the Children UK. These results proved that “[…] information, education and communication on HIV/AIDS have yet to reach many regions and people [in China].” Directly linked to awareness is education: In general, people “[…] denied basic information, education and skills to deal with HIV are much less empowered to reduce their own risk of infection […]” compared to those with higher levels of knowledge. There are two main problems with education in the PRC. According to “China’s Titanic Peril” (2001),

“[…] there are challenges in terms of the quality of education and the disparities between regions, between boys and girls, in terms of schooling, learning achievements, between different ethnic groups and between regular and special education. Learning is still focused on passive memorization of textbooks, which is also encouraged by the examination format. The content of schoolbooks is often irrelevant or unfamiliar to rural children. Tests and test scores are given disproportionate importance as a measurement for learning. Little importance is given to problem solving skills and creative thinking. As a result, this non-child

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252 Sexual Relations Among Youth In Developing Countries, 2001 (Occasional UNDP/UNFPA/WHO/World Bank Special programme of research, development and research training in human reproduction)


254 ibid
centered school environment hampers the acquisition of skills needed by young people to protect themselves from HIV.”

The second issue is that HIV/AIDS interdiction and prevention programs only focus on publicity and are limited to urban areas, with behavior intervention only being conducted in a few pilot areas. This means that many key populations, such as rural residents and individuals from high-risk groups, that have the greatest need for the information, are forgotten/ not targeted by these programs. Additionally, most of the publicity campaigns are not linked to the local HIV/AIDS situation, for example, presenting IDU HIV avoidance ads in regions with very high Blood contamination rates and with little drug use. On top, according to a survey in “The Socio Economic Impact of HIV/AIDS in China”, it seemed that only 34% of Chinese officials knew the correct knowledge about AIDS, thus indicating that although the urban population is targeted, only a third is actually understanding the data presented to it.

Another concern regarding most HIV prevention ads is that they are solely organized during the month of December, usually around World AIDS Day, and for the most part only in medium to large sized cities. The problem with this approach is that it has a very low frequency (once a year) and targets only urban areas, totally forgetting rural regions where most of the cases are found. To boot, these activities are generic, without a clear aim, and not tailored to fit the needs of minority populations or those living in secluded and underdeveloped regions. These factors, and the fact that the Medias lack initiative, make the campaigns rather ineffective.

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256 The Socioeconomic Impact of AIDS in China, August 2002

257 Ibid

The main result from unsuccessful prevention is the rise of misconceptions as well as an increased sense of fear, hopelessness and discrimination, which in turn boosts up aggressive predispositions towards HIV/AIDS infected individuals: A common phobia in China is “contracting HIV from mosquito bites, using the same bathroom or utensils with a HIV-infected person, rather than through injecting drug use.”

“The Socioeconomic Impact of AIDS in China” mentions that many rumors about HIV/AIDS have spread fast in the PRC, terrorizing the public and threatening social stability, and are mostly due to the blatant ignorance about HIV’s means of transmission. For instance, the Liaoshen Evening News July 26, 2000 edition had an article stating that PLWHA injected their blood into watermelons, thus creating a ripple among consumers, who started to believe that eating watermelon causing AIDS. This caused watermelon sales to decrease, resulting in minor economic losses. Another rumor, which started spreading in Tianjin, Beijing and Shijiazhuang, affirmed that some malevolent AIDS patients were randomly pricking people with syringes filled with HIV blood as revenge on society.

Therefore, it is not surprising for people to have the following reactions on how to deal with PLWHAs: Three fourth of those surveyed said that they would avoid those infected, with 75% of the former believing that the disease was the result of low morals. Another survey, this one in Neijiang, Sichuan Province reported that 88% of those interviewed (1,010 people out of 1,148) said that PLWHAs should be isolated from society, with an additional 30% thinking that HIV infected people should be cared for in closed sanatoriums. Despite these comments, 97% of those consulted expressed interest about learning more about HIV/AIDS. Therefore, it is apparent that the “lack of knowledge

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260 The Socioeconomic Impact of AIDS in China, August 2002


262 ibid
and misunderstanding are two of the main reasons behind discrimination towards PLWHAs, and act as catalysts for the spread of the HIV epidemic.²⁶³

The surveys and analysis presented throughout this chapter have established the importance and urgency of improving HIV/AIDS awareness in China. Despite all the excuses regarding cultural, medical, political, and other limitations, the greatest advantage is that people recognize the importance of HIV prevention and demonstrated eagerness in learning more about STI and HIV/AIDS. As mentioned before, it is important to lessen the preventive measures targeted towards so-called “risk groups”, in order to avoid making them into scapegoats. This would result in chastising the few and leaving the many ignorant about HIV’s preventive tactics, socially irresponsible towards those infected, and vulnerable to infection.²⁶⁴ Furthermore, legal and preventive measures must not be coercive and/or discriminating in nature; public officials must realize that going down this path without understanding the complex features of HIV/AIDS vulnerability, will be counterproductive and have opposite outcomes.²⁶⁵ Additionally, and because HIV positivity can ruin the infected person (and his family)’s lives, those with the greatest need will refuse testing and counseling for fear of being discriminated against: “Testing has to be voluntary and perceived as useful for one’s future. If testing means no treatment in addition to losing your job, denial to get a marriage license, even getting chased away from your village, nobody will want to take an HIV test.”²⁶⁶


²⁶⁵ ibid

²⁶⁶ ibid
D- Political Financing, Governmental Facilitators, and Legal Restrictions:

I have decided to divide this chapter into three main parts, each segment often having sub-divisions, all analyzing a specific sector related to the Central Government’s response to HIV/AIDS in China. The main fields of focus are political financing, governmental facilitators, and legal restrictions.

Political Financing:
The first major political limitation China faces in its fight against the HIV/AIDS epidemic is financial in nature. As stated by HIV/AIDS Prevention and Control Chinese MOH researcher Wu Zunyou, in his interview with “Southern Weekend” journalists “[...]
the lowest estimate of the cost of HIV prevention education and behavioral intervention for China’s four million prostitutes and six million drug addicts would be roughly USD 1 billion.”267 Because this sum is beyond the financial capabilities of the PRC, the Central Government has decided to allow other governments and NGOs to participate both technically and financially in interdiction efforts.268 According to research made by “The Socioeconomic Impact of AIDS in China” August 2002 edition, a six-month program to increase people’s awareness rate by 30-50% and condom use by 30-50% would cost some 200-400 Yuan per person. If the target population is 10% of those individuals in high-risk groups, a cumulative 100-200 million Yuan will be required. If the government decides to reach 60% of the general population, the costs will rise to a minimum range of 720-1440 million Yuan per year. This annual expenditure is more than double the amount assigned by the Government for the whole Five-year plan. Two HIV/AIDS researchers, Schwartländer and Stover, estimate that, by 2005, an average of 3.25 billion Yuan would


268 ibid
be required in order to achieve reasonable coverage of prevention interventions.\textsuperscript{260} This amount was confirmed in 2003, when "preliminary estimates by both international and national experts" amounted the preventive resources to approximately 3.30 billion Yuan (US$400 million) "[...] in the next five years for nation wide HIV/AIDS advocacy and prevention activities."\textsuperscript{270}

China's need for more financing in HIV/AIDS prevention programs was acknowledged by the Chinese government, which began a gradual increase in monetary resources, from a yearly 15 million Yuan in 1995 to 100 million Yuan for 2000.\textsuperscript{271} However, these allotments are woefully inadequate, with HIV/AIDS prevention experts estimating a minimum of 650 million Yuan per annum. This would be extremely challenging to Chinese health departments, who have to juggle between funding for HIV/AIDS prevention and control, and financing prevention funding for other diseases.\textsuperscript{272} Unfortunately, many believe that other epidemics, such as the Tuberculosis and Hepatitis outbreak, are more important to quell than wasting time organizing HIV interdiction campaigns.

To boot, another central financial problem faced by governmental agencies is the lack of funds needed to perform a Western Blot (WB) test, required to confirm HIV in blood samples. This results in discounting negative -but unconfirmed by WB- blood samples in official statistics, thus explaining the contrast between official HIV cases and UNAIDS estimates. (Additionally, this causes errors in blood safety protocols, showing no incidence of infection most of the time)

\textsuperscript{260} The Socioeconomic Impact of AIDS in China, August 2002


\textsuperscript{272} The Socioeconomic Impact of AIDS in China, August 2002
**Governmental Facilitators:**

Another important reason behind the spreading of HIV/AIDS is due to a series of governmental facilitators, such as cover-ups by local government officials, inefficient allocation of resources, and lack of cooperation between ministries, departments, as well as between national and local governments. Let us begin with a study of the reasons behind local cover-ups of HIV epidemics:

Local officials fear that the appearance or rise in HIV cases in counties, municipalities, or administrative regions under their control would come across as ineffectiveness in the eyes of the Central Government, which of late is extremely strict with national objectives such as securing the blood supply or fighting prostitution and drug use. Such incompetence would result in termination of office, diminished funding, decreased tourism, reduced foreign and national investment, and/or discrimination. The fear of losing their position, combined with their own lack of awareness and "understanding concerning the devastating effects that HIV/AIDS can cause to their population and to development." Encouraged (and encourages still) local government officials to suppress any HIV related information, be it by lying about the presence of cases, actively covering up any large scale epidemic (both from the local as well as central governments), opposing research on HIV/AIDS, hindering/ harassing Sentinel Sites personnel, but also threatening local doctors, epidemiologists, and PLWHAs. Sometimes, actions from local health officials are less drastic, and are illustrated with (many) under-reporting/ under-stating HIV/AIDS in attempts to avoid being accused with health system failure.

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274 ibid

275 ibid

276 ibid


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Exceptions exist, such as the local government of Yunnan province, which was very open about its own HIV outbreak and full collaboration with international organizations as well as with local NGOs to reduce the number of cases and implement a comprehensive prevention program.\(^{279}\) Sadly, this is not the norm, and many local governments have yet to consider HIV prevention, education, and research an important priority.\(^{280}\) Additionally, the institutional structures and practices in place do not allow the Central Government to enforce and implement laws on HIV prevention locally, nor makes it possible to monitor the local government’s actions and detect HIV cases without input from the latter.\(^{281}\) Other problems falling under this category (government facilitators) are the deliberate misallocation of resources related to HIV/AIDS prevention, and a series of other inefficiencies. Let examine these limitations in chronological order: In 2001, even though the Central Government had made some progress in the areas of HIV related policies, legislations, and regulations, vital fields such as harm reduction strategies, sex education, and population specific HIV prevention programs\(^{283}\) were found to be seriously deficient and, if put into action, limited to small-scale pilot projects.\(^{284}\) Generally, the overall HIV/AIDS response in China (as described in the Five-year Action Plan) still emanates from the MOH, with the epidemic solely considered as a medical problem.


\(^{280}\) ibid


\(^{282}\) ibid

\(^{283}\) These programs were aimed towards homosexuals, drug users, migrant workers, the youth, and commercial sex workers


However and despite the fact that

“[...] China has long traditions of vertical administration, there [were] some [cases] of local and regional [multi-sectoral efforts]: [...] In Yunnan province in 1996, the government set up an AIDS office directly under the Vice Governor. Pingxiang City in Guangxi province and Shishi City in Fujian province are examples of cities with well functioning multi-sectoral leading groups.”

However, this approach is not universal in the PRC, with nearly all provinces under the Health Bureau’s control, thus making timely responses to the epidemic harder. Additionally, little use was made of many untapped opportunities such as NGOs (both international and local) which were muzzled or had limits imposed on by the government; this underutilization of vital resources, if employed properly, could have limited the spread of HIV/AIDS. In 2002, problems within the Central Leadership arose, and no consensus regarding HIV/AIDS prevention in severely hit regions could be reached, thus making interdiction operations impossible or wasteful. Moreover, interdepartmental cooperation was as limited as in 2001, with “[...] relevant departments [unaware of] their shared responsibility and consequently [...] reluctant to invest either human, material or financial resources in the anti-HIV/AIDS campaign.”

In 2003, these issues were still unresolved, with coordination and cooperation still weak between international aid and national projects and planning. Finally, according to the “Global Report on HIV/AIDS”，

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288 The Socioeconomic Impact of AIDS in China, August 2002

289 ibid

resources were still misallocated, and existing national AIDS bodies and plans were seldom implemented, nor translated into efficient and concerted action as of June 2004.\footnote{UNAIDS, Global Report on AIDS Epidemic, June 2004. Available at: http://www.unaids.org/bangkok2004/GAR2004_html/GAR2004_00_en.htm}

An additional two government-related facilitators subsist, the first one being the relative ineffectiveness of the National HIV Sentinel Surveillance sites, and the second having to do with general health care issues making HIV epidemics in China more potent. Let us start with an investigation of the limitations of the HIV Sentinel Surveillance (HSS) sites: First, it is imperative to remember that the main driving forces behind the HIV epidemic are behaviors that render individuals vulnerable to infection. Therefore, utilizing HSS to gather information on knowledge and on the level and intensity of risk behavior related to HIV/AIDS is essential in allowing the identification of populations most at risk for HIV infection, as well as increasing public officials’ understanding of the epidemic’s dynamics. Sadly, Chinese behavioral surveillance systems are rare, lacking, and unrepresentative of the high-risk populations:

“Results […] indicate [that] the behavioral surveillance system is weak and the number of surveillance sites is insufficient. […]on top.] the selection and location of the sentinel sites and the population groups selected for observation are not appropriate.”\footnote{To date (2004), there are too few HIV/AIDS prevention programs in China, and those in place are aimed at urban citizens. This is a serious problem because the majority of IDUs live in rural areas not covered by those programs}

To boot, because some of these at-risk populations often intermix, (for example CSWs being IDUs and blood donor at the same time) make it extremely difficult to know how these hybrids acquired their HIV status.\(^{294}\)

The main reason behind the existence of HSS is to provide public policy officials with information on high-risk groups (Mainly through case reports, site surveillance and monographic surveys\(^{295}\)) consequently allowing these administrators to take effective decisions regarding HIV prevention, but also to stay continuously up to date with the spread of the epidemic. However, it seemed that many of "[these populations such as] TB patients, men who have sex with men (MSM), minority (non-Han) populations, incarcerated persons or persons admitted to hospitals"\(^{296}\) were under-reported as of summer 2001, with only 5% of AIDS cases in the PRC being reported.\(^{297}\)

Another negative thing about the HSS system in China is that its data collection protocols are inefficient, focusing too much on certain provinces to the detriment of others, thus biasing and limiting the utility of the information collected. For instance, Yunnan had 41% of the all the sites as of 2001, and the limited number of monitoring stations of remaining provinces rendering the data collected useless.\(^{298}\) Additionally, these provincial monitoring programs focus solely on specific communities such as minority groups, IDUs, TB patients, among others, while ignoring the general population, thus giving wrong readings about HIV trends in China. Another issue is that certain provinces such as Yunnan have a more comprehensive surveillance system, studying many groups and


\(^{297}\) HIV/AIDS in China and USAID Involvement. 2001


83
subgroups, while other areas (such as neighboring Guizhou province) are more limited in their endeavors, primarily because of weak financial and technical resources. In 1995, there were only 42 HIV surveillance sites across China. The number increased to 60 in 1997 and to a hundred in 2000\(^ {300}\), reaching 158 by the end of 2002, with "many affiliated with detoxification centers for drug users and re-education centers [for CSWs] run by the Ministry of Public Security."\(^ {301}\) This number is dramatically low, with the MOH estimating the need for a minimum of 10,000 sites in order to appraise thoroughly the entire magnitude of the epidemic\(^ {302}\), across all the at-risk groups.\(^ {303}\) Yet another problem with these surveillance sites is that many monitoring stations conduct tests without submitting/sharing the results to a central authority, resulting in a disorganized, often chaotic database.\(^ {304}\) Frequently, HSS are not used to their fullest, and, with data collection methods neither inefficient nor standardized, make comparing data across sites/provinces difficult. As a result, most of the information gathered by the case reporting system is of limited practical use, of poor quality, prone to errors, therefore insufficient in guiding prevention, treatment and care operations.\(^ {305}\) All these problems outline the failure of the PRC’s Public Health Surveillance System in determining precisely the number of PLWHAs, both in high-risk groups and amongst the general populations\(^ {306}\), and highlight

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\(^ {300}\) The Socioeconomic Impact of AIDS in China, August 2002


\(^ {302}\) ibid

\(^ {303}\) The Socioeconomic Impact of AIDS in China, August 2002


the need for a shift from the current parallel system to a more integrated one, which would ease STI/STD/HIV/AIDS prevention.\textsuperscript{307}

Let us now focus on other health care related issues that facilitate the PRC HIV epidemic: First, China’s health care system is changing, becoming less social and closer to a fee-for-service type of system, in order to reduce State spending. This shift is most likely to affect rural society more than urban areas, with health care costs to individuals rising.\textsuperscript{308} Additionally, it appears that, according to findings from the joint UN/ MOH 2003 report, PLWHAs are deprived of basic health care by medical institutions, with some unable to receive treatment/ care, because many of these health care centers lacked proper facilities.\textsuperscript{309} This is confirmed by later information from UNAIDS pamphlets 2003, which "[state that] Many AIDS patients don’t have access to basic counseling, home care, hygiene, nutrition or inexpensive medications such as painkillers."\textsuperscript{310} Another repercussion is the fact that many HIV infected people (as high as 95%\textsuperscript{311}) are unaware of their status, due to inadequate medical services.\textsuperscript{312} This, combined to the lack of reliable information on HIV/AIDS, is allowing the epidemic to spread from high-risk groups to the general population: "However, suppression of information about the widespread HIV problem in rural China means that many people are not told they have HIV. Hospitals often simply tell people with AIDS "we can't help you here" or say cryptically "you have number four." In this atmosphere, people with HIV bounce from hospital to hospital,


\textsuperscript{308} ibid


\textsuperscript{310} UNAIDS' Pamphlets: Care And Support, April 2003

\textsuperscript{311} WHO Regional Office for South-East Asia, HIV/AIDS. HIV/AIDS: Facts and Figures

HIV-infected prostitutes keep working, and HIV-infected blood donors keep selling blood.”

Yet another facilitator is the insufficient level of training Chinese doctors undergo before graduating: Although rural primary care physicians are better than before, the U.S Embassy Beijing 2000 reports that they still “[…] only enjoy three years medical vocational school training after graduation from junior high school.” This results in having many -particularly non-urban- physicians unable to diagnose AIDS, especially when local government officials deny HIV presence in their province. This was confirmed when the Joint UN/ MOH 2003 report observed the evident lack of professionals for HIV/AIDS care in the PRC, both in terms of quantity and capacity. (A more recent report claims that the country had fewer than 200 doctors with any specialist skills in diagnosing and treating AIDS opportunistic infections.)

It appears that, even in the capital, “communication between the Ministry of Health [and] the Beijing city health authorities [is poor, with] lower-level officials not always [reporting] in a timely and accurate fashion.” This was most apparent during the SARS outbreak, which resulted in the sacking and reprimanding of nearly “1,000 provincial and local-level officials for their inadequate handling of the epidemic.” It seems that the

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318 ibid
Central Government is strongly suspicious of foreign assistance, which slowed SARS epidemic control and preventive efforts and will certainly create problem in effectively dealing with current (HIV/TB/STI/STD) and future crises.\textsuperscript{319} Although the government ultimately and effectively resolved the SARS epidemic by mobilizing society and improving communication between the provinces and the center, it is still unclear “if these developments will translate into more effective responses to [future] dynamic crises.”\textsuperscript{320} The China Business Review, July-August 2003 edition stated that SARS was the only health emergency that was able to grab the attention of the country’s leaders as well as that of the international community.\textsuperscript{321} Luckily, the disease was controlled effectively via preventive measures such as screening and quarantine before the number of cases and fatalities rose to unacceptable levels. However, it would prove difficult to tackle HIV/AIDS using these SARS-effective methods, HIV being mostly spread by behaviors, and affecting a much larger population than SARS, which only affected the elderly and infants.\textsuperscript{322}

In summary, it is vital to enhance the current HSS systems, by integrating surveillance, education, family planning, voluntary counseling and treatment, awareness campaigns, and social measures to reduce poverty.\textsuperscript{323} Finally, it is important to realize that there will be problems with preventive operations for as long as most of the HIV program funding will derive from provincial and local health budgets, and the HIV prevention/interdiction projects fall under provincial autonomy.\textsuperscript{324}

\textsuperscript{315} UNAIDS, HIV/AIDS: China’s Titanic Peril 2001 report. Available at: www.youandaid.org/unfiles/chinas Titanicperil1last.pdf

\textsuperscript{320} UNAIDS, HIV/AIDS: China’s Titanic Peril 2001 report. Available at: www.youandaid.org/unfiles/chinas Titanicperil1last.pdf


\textsuperscript{322} Ibid


Legal Facilitators:

We now come to the final catalyst, the series of laws that facilitates the spread of HIV/AIDS in China. According to a U.S Embassy Beijing report, there are three types of laws and regulations that render make HIV Prevention and Control difficult. After some research, I have discovered that it is much simpler to condense these laws into two categories, direct limitations and indirect restrictions, the first openly impairing HIV prevention or treatment effectiveness, and the second implicitly making preventive strategies and treatment difficult. Because it is sometimes difficult to distinguish if a law directly or indirectly affects HIV interdiction, I recommend that the reader regard this division as somewhat fluid rather than unchanging/ edged in stone.

I like to consider any law or regulation based on fear and prejudice (which contributes to fuelling the epidemic instead of curbing it) as a Direct Legislative Facilitator (DLF) for HIV/AIDS. I have decided to list chronologically the most important “direct impact” laws, which, I believe have had/ are having/ will have an immediate effect on the HIV situation in the PRC. The first DLF is 1989’s “Law on Prevention and Control of Infectious Diseases”, approved and issued by the National People’s Congress, and that considered HIV infection and AIDS contamination as notifiable diseases in China. This means that PLWHAs “are to be nominally reported to Provincial Epidemic Prevention Stations,” which will in turn advise the national authorities. The main thing this law did (and does) is create panic among HIV infected people and AIDS patients, who as a result hide their status from society by refusing STI/ HIV testing to avoid being “registered” and added to the national database. In 1990 and 1991 respectively, two laws, the “Decision of the Standing Committee of the National People’s Congress on the Prohibition of Narcotic Drugs” and the “Decision of the Standing Committee of the


327 ibid
National People’s Congress on Forbidding Prostitution” were introduced and implemented. These legislations reaffirmed the fact that the use and selling of narcotics as well as sex work were and still are illegal activities seriously punished in the PRC. The 1990 drug prohibition law gives total control to the Ministry of Public Security, who became responsible for supply reduction via force, and combating drug usage “by proposing voluntary detoxification to arrested [IDUs. Those...] unwilling to undergo voluntary detoxification are transferred to rehabilitation [centers] and subjected to [forced] detoxification and rehabilitation.”

Since sex work is unlawful, CSWs neither are registered nor subject to medical check-ups, unless arrested by Public Security personnel. The law recommended/recommends the re-education of arrested sex workers and their clients. Although these two laws might seem like Indirect Legal Facilitators (ILFs), I believe that they have a direct impact on two high-risk populations, IDUs and Sex Workers (including the sexual partners of both groups): Because the regulations chose to implement a moral/legal approach to a socio-economic problem, it became doomed to failure. Most importantly, the legislations did not capitalize on the fact that the arrest and placement of at-risk groups makes the HIV/AIDS education extremely simple, on target, and relatively easier to conduct than mandatory lectures on the legality of the abuse. Another drawback is the missed opportunity of making needle exchange programs and 100% condom use campaigns parts of the national response to HIV/AIDS prevention, rather than having them as province-specific pilot projects. In 1995, the State Council reinforced the “stick” approach previously used against drug abuse with its promulgation of its “Procedures for Compulsory Drug Addiction Rehabilitation”, yet again disregarding the opportunity of targeting IDUs with mandatory and specialized HIV/AIDS education campaigns. The year 1997 witnessed an amendment of the “Decision of the Standing Committee of the National People’s Congress on Forbidding Prostitution”, making the intentional spread of STI and HIV punishable according to


329 For further information about the implementation of sound tactics regarding HIV/AIDS interdiction campaigns in the PRC targeted at intravenous drug users, please consult the “Appendix D” section in the category “case studies and appendixes” found at the end of this thesis.
criminal law. This led many CSWs to choose the “head in sand” approach by avoiding STI/HIV testing and continuing their work voluntarily unaware of their status. In 2001, there was a recrudescence of DLFs in many provinces: “In May, Chengdu City [(Sichuan province)] passed a law requiring people working in hotels, restaurants, travel agencies, public baths, swimming pools and beauty salons to be tested annually for STI and HIV,” and allowing the expulsion (instead of counseling or treatment, another mistake) of those who tested positive. It also forbade STI patients or PLWHAs from marrying. Soon afterwards, similar laws started appearing in other cities and provinces. Encouraged by these legislation, Hebei province was the first to join the camp of “discriminators” with the banning of STI/HIV infected individuals from enrolling in the army, attending school, marrying, “[…] or working in child-care, food-related or service industries.” Likewise, the Beijing municipality demanded from businesses to report any “suspected AIDS patient” to local health authorities, also calling for mandatory HIV testing of CSWs, their clients and other “possible spreaders of AIDS,” in police custody. Similarly, Liaoning province issued a law forcing PLWHAs “to undergo segregated medical treatment, which could, if necessary, be forcibly implemented by the Public Security authorities”. One final example described to U.S Embassy Beijing researchers was a prohibition on displaying condoms in “plain view” such as street or building distributing machines, thus limiting the ability of HIV/AIDS educators from teaching people at risk of heterosexual HIV transmission on proper condom use. The list of the aforementioned laws is by no means all encompassing, I having chosen the most significant ones as samples from a wide-ranging series of “direct effect” regulations instituted by public officials in response to the HIV/AIDS crisis.


331 ibid

332 ibid

Let us shift our attention to another series of regulations, whose indirect nature nevertheless having a significant impact on the spread of HIV/AIDS in China. As seen previously, it seems that “a number of laws, policies and regulations have been issued at various levels of government and institutions since 1985.” Since the evolution of HIV/AIDS prevention and control, and taking into account the in-depth knowledge gained, it became evident that many of these laws and regulations, while useful in their time, no longer matched the current situation, often opposing present interdiction strategies: “There exists incongruity or even contradiction between the relevant policies and regulations on HIV/AIDS currently in action. Some of the early laws and regulations no longer fit the current situation.” These inconsistencies became and still are the source of many “indirect” problems, (primarily between official regulations and provincial policies), also resulting in the sluggish implementation of effective prevention strategies, frequently reducing the latter into small-scale pilot projects with limited reach. As before, I will start with a scrutiny of the many laws and regulations passed by the Central and local governments, demonstrating along the way the negative impact of these policies on HIV prevention programs, and facilitating the spread of the epidemic: The earliest law with HIV/AIDS prevention in mind dates from 1984, and was approved and issued by the National People’s Congress. Its name was the “Pharmaceutical Administration Law of the People’s Republic of China” and it aimed at banning the import of blood products. Although seemingly useful, this law was responsible for many blood shortages in the PRC, which in turn led to the creation of illegal blood collecting stations, a spearhead of HIV transmission in China. Another ILF is 1995’s “Law on Maternal and Infant Health Care”, a regulation clearly prohibiting matrimony and childbearing for people with STI/HIV/AIDS. This policy is dangerous because it forces PLWHAs to avoid family planning clinics, where free testing and condom distribution


335 ibid

are offered. In 1998, the Propaganda Department of the Communist Party and eight other agencies and ministries cooperated in the publishing of a guideline, entitled “Principles for HIV/AIDS Education and Communication”. This regulation describes the basic standards for “HIV/AIDS education and communication through Mass [Medias, as well as the inclusion of] related policies, key messages for HIV/AIDS prevention and condom promotion among high-risk groups.”337 One of the focuses of this law is its insistence on the fact that condom possession is not a proof of prostitution. Sadly, this legislation is still unimplemented and is often ignored by local/provincial regulations, which encourage public security officials to arrest women carrying condoms. “In 1999, the Central Radio Station, CCTV and provincial Bureaus of Broadcasting, Film and Television were requested to consider HIV/AIDS prevention education as”338 a priority for propaganda, to be advertised through the mass media. It based its decision on the “China Medium and Long Term Plan for HIV/AIDS Prevention and Control” which stated that HIV/STI education was to be integrated into state sponsored advertising:

“Regular public HIV/STI health education messages through the mass media are considered an efficient method for preventing the HIV/STI epidemic from spreading. Mass media at all levels, and in all places should make their own plans for conducting HIV/STI prevention propaganda.”339

This law is excellent in theory, but has been short circuited by Chinese medias, who, although aware of the law, still charged “[... the] usual commercial rates for HIV prevention advertisements, thus severely limiting the amount of advertising that could be done.”340 Later in 1999, the Chinese MOH issued a new law entitled “Principles for


338 Beijing Environment science and technology section November 29 2002


Management of People Infected with HIV and AIDS Patients" whose objective was the protection of PLWHAs from discrimination and abuse, and the prevention of HIV/AIDS:

"The regulation consists of various chapters: (1) HIV test confirmation and counseling; (2) Fight against discrimination and promotion of the rights of people living with HIV to study, work and receive social welfare (punishment by law is considered for people deliberately transmitting HIV); (3) Confidentiality of personal information related to people living with HIV and AIDS patients; (4) Provision of appropriate medical care to people living with HIV/AIDS; (5) Provision of education, support and social subsidy if needed; (6) Provision in prison environments of education, medical observation and medical treatment, if needed outside prisons; (7) Protection of HIV positive migrant laborers, who should not be sent back to their place of origin without appropriate reasons."\(^{341}\)

Regrettfully, most of these points have fallen victim either to previous laws or to local regulations. I have decided to elaborate more on "chapters" two, three, and four, vital tenets deliberately overruled: Chapter 2 of the "Principles for Management of People Infected with HIV and AIDS Patients" clearly states that the basic rights of PLWHAs, such as employment and education, are to be respected. However, the 1995 "Law on Maternal and Infant Health Care" which clearly opposes the civil liberties of PLWHA, was/is still valid and used as a launching platform to discriminate against those with HIV. The 1999 document was seen by the Central Government as an update to the 1995 law, further stressing the right of PLWHA to hold a job, pursue an education, "[...] obtain medical treatment, participate in social activities."\(^{342}\) In November 2000, the MOH issued another document encouraging PLWHA to "delay marriage and seek a [voluntary] medical opinion before getting married."\(^{343}\) Nevertheless, many still fall back to the 1995 law when dealing with PLWHAs for it is simpler and more comforting to those ignorant of HIV's means of spread. As seen before, it is technically impossible for Chinese


\(^{342}\) ibid

\(^{343}\) ibid
doctors to give private consultations due to a lack of space and time. This, coupled with the unnaturalness of patient confidentiality, makes the application of chapter three very difficult.  

Chapter 4 calls for the “Provision of appropriate medical care to people living with HIV/AIDS” a resolution contradicted by many local and provincial HIV/AIDS and STD prevention and control practices:

“For example, some local policies state that AIDS patients should accept quarantined treatment and if necessary, the security agencies should intervene, which is obviously in contradiction with the “Perspectives of Management for People Living with HIV/AIDS and AIDS Patients” issued by the MOH.”

Therefore, it is vital for the Central Government to scrap, or at least rewrite, many of these laws if the PRC is to take realistic action against the spread of HIV/AIDS.

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V- The PRC’s evolutionary response to the HIV/AIDS epidemic from 1986 to 2004:

The aim of this final chapter is to outline the evolution of the Chinese Central Government’s approach in dealing with the HIV/AIDS crisis from 1986 until 2004. I have chosen to focus on five crucial areas, namely Prevention Awareness and Education (PAE), State HIV/AIDS Spending (SHAS), Sentinel Sites Enhancements (SEE), Medical Treatment and HIV Research (MTHR), and NGOs and Foreign Aid Utilization in HIV/AIDS PAE campaigns. Because much about preventive tactics, HIV/AIDS education, HSS systems, state financing, and other important issues has been mentioned in other chapters of this thesis, some might experience a slight feeling of “déjà vu” while reading this section. However, rest assured that the data included in this part is for the most part novel, and the rephrasing of information, if any, is vital for understanding the evolutionary response of the Chinese government.

I will begin with an analysis of the Prevention Awareness and Education (PAE), a field that includes preventive operations targeted mainly towards high-risk populations such as CSWs, IDUs, and Blood Donors, among others.

Prevention Awareness and Education (PAE):

In definition, HIV prevention strategies are defined by providing care and support to PLWHA, and targeting populations at risk/ HIV-vulnerable with prevention campaigns. This includes reaching out to vulnerable communities through nation-wide educational campaigns, treating STI and TB patients (another group vulnerable to HIV infection), among others. Of course, behavior change encouraging risk reduction, coupled to
condom and needle social marketing also plays a crucial role in PAE strategies. Additionally, it is imperative to begin the implementation of Voluntary Testing and Counseling procedures, making home and institutional care for those presenting the symptoms of HIV/AIDS available, as well as preventing the iatrogenic spread of HIV via appropriate measures such as testing, awareness campaigns, etc…  

HIV/AIDS prevention, awareness, and education tactics, strategies, and campaigns in the PRC have evolved tremendously, going through many stages since the disease’s appearance in the mid 1980s. I have decided to organize these phases into chronological periods, naming each era accordingly.

**Shattering the eggshell: the origins of HIV/AIDS PAE protocols 1986-1993**

A year after China witnessed its first HIV/AIDS case in 1985, the Central Government decided to establish a National AIDS Committee as an overseer of this “bourgeois” disease. The year 1987 witnessed the launching of the first HIV/AIDS PAE ever conceived in the PRC, and entitled the “National Programme for AIDS Prevention and Control”. The Chinese MOH, believing that these cases were few and far between, and affected only fringe groups did not take any preventive measures for two years (1988 and 1989), waiting until 1990 before “[adopting] a medium term plan for the prevention and control of AIDS.” From 1991 to 1993, Chinese health officials rested on their laurels with clear consciences, believing to have properly set up appropriate controls and procedures, dreadfully unaware of the Tides that would come crashing down on their sand castles.

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346 Epidemiological Fact Sheet on HIV/AIDS and STI China 2000

347 HIV/AIDS in China and USAID Involvement. 2001

348 ibid

349 ibid

96
**Infancy, 1994-1996:**

This period began with the rise of HIV/AIDS cases throughout China, in what Zhang called the “Outbreak” phase. The evolution of the epidemic was worrisome enough to have Chen Minzhang, then Minister of Health, participating in the 1994 Paris AIDS Summit as the delegate of the Chinese Government.\(^350\) This “symbolic” gesture, along with the signing of the “Paris Declaration” was the first political commitment by the PRC to the global AIDS prevention effort.\(^351\) One year later, the MOH updated its national approach to deal with HIV/AIDS, publishing a document entitled “Suggestions on Strengthening AIDS Prevention and Control,” suggesting numerous strategic proposals to combat the expanding of HIV\(^352\), and stating the importance of prevention, Public Health Education, in addition to “[... ] dealing with deeper causes together with superficial problems and comprehensive management.”\(^353\) Another undertaking was the creation of the National AIDS Control Center and the increase in financing of the new National AIDS Committee.\(^354\) Finally, the government, alerted by rumors of blood contamination in selected provinces, decided to rewrite its security protocols and increase the scrutiny of its blood banks and plasma stocks, as well as the drafting of “[... ] a series of laws and codes to address this issue.”\(^355\) The “Regulations on the Management of Blood Production” based on the “Law of the People’s Republic of China on the Prevention and Control of Infectious Diseases” was issued in 1996, and outlined the protocols to be


\(^{351}\) HIV/AIDS in China and USAID Involvement. 2001

\(^{352}\) The Socioeconomic Impact of AIDS in China, August 2002


\(^{354}\) HIV/AIDS in China and USAID Involvement. 2001

followed regarding the collecting, testing, and distribution of blood products.\textsuperscript{356} Additionally, a coordinated board system was set up at State Council level, utilizing previously established mechanisms for multi-sectoral co-operation and national level participation.\textsuperscript{357} This 1996 amendment allowed different Ministries to carry out training courses for their staff as part of their awareness augmentation programs.\textsuperscript{358}

\textbf{The sprouting of the wings (1997-2000):}

The face of the Chinese HIV epidemic changed significantly after the first United Nations Theme Group/Ministry of Health Joint Assessment report entitled “China Response to AIDS” was issued in 1997. Since then, the status of the outbreak worsened despite enhanced preventive and control strategies in China.\textsuperscript{359} In 1998, the PRC’s government “set up a state coordinating meeting system for AIDS/STDs prevention and control and formulated a Medium- and Long-term Plan for AIDS Prevention and Control (1998-2010).”\textsuperscript{360} This plan, formulated jointly by the MOH, the State Planning Commission, and the State Science and Technology Agency, was expected to provide guidance on projects to both domestic and international actors, enhance the PRC’s preventive strategies while minimizing the epidemic’s impact on the nation’s modernization efforts.\textsuperscript{361} Another important step taken was the approval and issuing by the National People’s Congress of the “Law on Blood Donation”: This legislation restates


\textsuperscript{360} The Socioeconomic Impact of AIDS in China, August 2002

\textsuperscript{361} HIV/AIDS in China and USAID Involvement. 2001
“that commercial blood donations for medical purposes are [illegal] and [reaffirms the fact] that all blood collected for medical transfusions [has to come] from voluntary donors.” Later that year, the “Chinese Association of STD and HIV/AIDS Prevention and Control” carried out a Prevention, Education, and Safe Sex project in Shenyang, Nanjing Beijing, and Harbin targeting both heterosexuals and male homosexuals. The year 1999 witnessed the passing of an important law labeled “Principles for Management of People Infected with HIV and AIDS Patients”, whose intent is to protect PLWHAs while preventing the spread of HIV/AIDS. This regulation guarantees employment/educational opportunities for HIV/AIDS patients and for their families, while protecting their right to privacy and safeguarding their rights for medical treatment. The legislation also makes HIV testing for those seeking marriage or pregnant mandatory. This was the first time that a law giving legal recourse to PLWHA was implemented in the PRC. During that year, “the China Contraceptive Supply center (CCSC) successfully conducted a condom social marketing [pilot] project among young people in two districts of Beijing and Shanghai, promoting their condom [“AiShi”] (Lovetime).”

Established in 2000 and enduring for three years, the HIV/AIDS Coordinating Board in Zhejiang Province -including representatives from 34 member sections- campaigned for and implemented a movement aiming at increasing HIV/AIDS Prevention and Control.

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The campaign, spread across the province, targeted "counties, villages, markets, train/bus stations, docks, airports, local squares, and workplaces, [and was warmly welcomed by the local population.]"\(^{368}\)

**The Flight of the Dragon (2001-2004):**
Since 2001, China embarked upon a series of actions, campaigns, and plans aimed at controlling the HIV/AIDS epidemic as well as increasing popular awareness and education about the disease. Each journey begins with a single step, and I believe the first "intent to action" took place early 2001, when Health Minister Zhang Wenkang ratified the "Declaration of Commitment on HIV/AIDS" at UNGASS, thus reaffirming "China's on-going political commitment [to dealing with] the HIV/AIDS [crisis]."\(^{369}\) The second step taken was the setting up of a state coordinating meeting system for HIV/AIDS/STIs Prevention and Control (P&C), and the formulation of an Action Plan for Preventing and Managing HIV/AIDS. This later came to be known as the "China Plan of Action for Containment and Control of HIV/AIDS 2001-2005"\(^{370}\), and whose purpose was to "[identify] the strategic objectives and responsibilities of relevant departments and local governments."\(^{371}\) In agreement with this approach, the Ministry of Education (MOE) released three important documents aiming at increasing awareness about HIV/AIDS in China. These texts ("Guidance on Enforcing the Actions on Preventing HIV/AIDS in China 2001-2005", "Notification of Reinforcing HIV/AIDS Control in Schools", and "Outline of HIV/AIDS Prevention in Schools") provide clearer definitions and "[... standards for school HIV/AIDS training materials, curricula and indicators for


\(^{369}\) ibid

\(^{370}\) ibid

\(^{371}\) The Socioeconomic Impact of AIDS in China, August 2002
monitoring and supervision." The MOH and MOE were not the only ministries or state departments with HIV/AIDS protocols, for there have been many other governmental divisions carrying out their own strategic planning, and starting systematic work. (These steps were facilitated by the existence of mature internal coordination systems in place between branches)

For the first time in the PRC, World AIDS Day (December 1) was held, reaching millions of Chinese: According to the U.S. Embassy Beijing’s environment science and technology section, no less than 18 separate transmissions, aired on the China Central Television (CCTV), discussed HIV/AIDS prevention, awareness, education, and transmission. According to data from the U.S Embassy Beijing, the campaign was organized by the ministries of Health, Transportation, Railways, and Education, with support from a series of local governmental and non-governmental organizations. Another feature was the broadcasting of the “Fluttering Red Ribbon” concert on AIDS day: “The [show] was [initially] held on November 12, 2001 in Beijing, [and] organized by the [ministries] of Health, Publicity, Education, and the State Bureau of Broadcasting and Radio for World AIDS Day 2001.” Additionally, a series of public education and HIV/AIDS interdiction campaigns were held in specific provinces, namely in Shaanxi and Xi’an, where some 200,000 condoms were distributed. Another condom distribution campaign, targeting migrant workers, was also held in 2001: the AiShi

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374 Beijing Environment science and technology section November 29 2002

375 Ibid


377 Beijing Environment science and technology section November 29 2002
(Lovetime) condoms were marketed through the Chinese Railway network in hopes of educating the trains’ passengers. The government was not the only entity increasing its preventive operations in 2001: The homosexual community, through its newsletter and website “Friends Exchange”, started its dissemination of knowledge about sexuality, STDs and HIV/AIDS. The year 2002 is for UNAIDS experts, “the first time [China] publicly acknowledged the scale of the HIV/AIDS problem,” and began mobilizing a multisectoral response by setting up a coordinating body directly reporting to the State Council. It was during that year that the country witnessed many campaigns aiming at increasing HIV/AIDS awareness and promoting education. These actions were of two types, large-scale projects with a national reach, and small scale/ pilot projects targeting certain populations, localities, or provinces. We will begin with a study of the national campaigns first, and then shift our focus to the local scene.

**Large-scale projects:**

In early 2002, the National Population and Family Planning Commission instituted the “Reproductive Tract Infection, HIV/AIDS and STD Comprehensive Prevention and Care Project” in an attempt to include “[..] HIV/AIDS control in national reproductive health education and interventions.” Later that year, the “All-China Federation of Trade Unions” started training its personnel across its different branches, in addition to conducting “[..] awareness raising campaigns for trade union staff, and [distributing] education materials” across five provinces and cities. (Including Beijing) The MOH and the All China Women’s Federation jointly initiated another state-sponsored

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379 ibid

380 UNAIDS China Fact Sheet 2004 (Shorter version)


382 ibid
nationwide campaign entitled “HIV/AIDS Prevention, Health for the Whole Family”, this operation later gaining nation-wide momentum through local Women’s Federation chapters. The MOH, the MOE, and the Youth League organized another successful 2002 “joint-venture” going by the name of “Red Ribbon Action” whose objective was to offer “[HIV/AIDS education and prevention related] services in rural areas during the summer holidays of college students.” (According to the 2004 Global Report on HIV/AIDS, the Central Government should develop similar ventures by associating more with national youth councils, health-care provider networks, religious networks and other structures allowing the use of established communication channels for conveying facts) Moreover, the “Chinese Central Communist Party School” organized a cycle of speeches, presentations, “and other awareness-raising activities on HIV/AIDS prevention and control” for its senior cadres, in an attempt to educate them about the disease. At the end of 2002, government officials agreed to lift the restrictions against condoms advertising and marketing but were unable to limit the commercialization of substandard locally produced condoms.

Small projects:

Early in 2002, the “Beijing’s Municipal Disease Control Bureau announced plans to focus on the following [eight] points in its HIV/AIDS control programs”: Primarily, increasing the supervision and testing of “blood and blood products used in hospitals to

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384 ibid


guarantee the absence of HIV.” Then, eliminating illegal blood collection, immediately followed with an STI/STD/HIV/blood donation awareness raising campaign. Intervening in vulnerable populations (CSWs and IDUs) comes fourth. Point number five warrants the expansion of anti-narcotics operations and an increase in drug education programs. Improving health care services for PLWHAs is another priority for the Beijing’s Municipal Disease Control Bureau, as is intensifying the HIV/AIDS Testing System. Finally, continuing exploration of potential HIV/AIDS Prevention and Control was affirmed. On December 1 2002 (World AIDS Day), over 20 hospitals as well as universities in the city of Zhengzhou launched a series of campaigns aimed at increasing HIV awareness among health officials and young people. Additionally, “the China Association of STD and HIV/AIDS Prevention and Control developed an HIV/AIDS education project, [targeting] taxi drivers and [their] passengers in Shenyang [City] (Liaoning province).” Anhui province pioneered ‘train the trainers’ program to circulate HIV-related information among health-care workers: Initially, fifty-five staff members underwent basic training at various health institutions, later substantiated by workshops conducted in local provincial health-care settings. According to surveys done by Wu in mid 2002, 100% of the participants had obtained basic HIV-related knowledge, thus distancing them from the medical staff from other counties, who still struggled with HIV/AIDS related ignorance. Efforts towards educating high-risk populations also increased during 2002, with many pilot projects targeting prostitutes. One such example is the series of campaigns promoting condom use among entertainment establishments’ employees, and 100% condom policies for CSWs in the cities of Wuhan and Nanjing.

388 Beijing Environment science and technology section November 29 2002
389 ibid
Another at-risk group targeted was IDUs: Guangxi Zhuang Autonomous Region and Guangdong Province witnessed syringes and needles social marketing pilot projects, during which local Center of Disease Control employees oversaw the gathering of second-hand syringes and needles. These ventures facilitated the purchase of sterile injection equipment at discounted prices in designated pharmacies, and were conducted in collaboration with local health agencies to strengthen Behavioral Change and Control among IDUs, "[encouraging] them to stop sharing needles and other injection equipment." Finally, an attempt to spread HIV information without depending on Mass Media was initialized with the launching of several websites towards the end of 2002, and of which the following is a small selection:

- China AIDS Network (http://www.cnuaids.com) sponsored by the China-U.K. AIDS Project
- AIDS Online (http://www.china-foss.com), sponsored by the China Foundation for the Prevention of STD's and AIDS with support from UNICEF
- AIDS Club (http://www.aidsclub.com), a website by and for HIV-positive persons
- Baicheng Medicine (http://www.bwmmedicin.com), website of a pharmaceutical development company that offers AIDS counseling
- Same Will Network (http://www.samewill.org), chat rooms related to HIV/AIDS
- AIDS Youth (http://www.songahiv.com) information and discussion rooms for young people interested in HIV/AIDS
- National Center for STD and AIDS Prevention and Control (http://www.chinaids.org.cn)
- UNAIDS (http://www.unaids.org/unaids), information in both Chinese and English

In 2003, there were 840,000 cases of HIV/AIDS in the PRC (of which some 80,000 had developed full blown AIDS), with over half of them infected through contaminated drug injecting equipment and plasma pooling in illegal blood collecting stations. Because of

393 The Socioeconomic Impact of AIDS in China, August 2002


396 Beijing Environment science and technology section November 29 2002
recent changes in behaviors, there has been a significant boost in HIV infections through sexual transmission (Mostly from CSWs), mostly in metropolitan areas and the eastern and southern coasts of the PRC.\textsuperscript{397} This led the Chinese leadership to reaffirm its political commitment to counter the HIV/AIDS threat at the United Nations General Assembly Special Session on HIV/AIDS by \textquotedblleft[promulgating] a series of policies and regulations confirming this decision.\textsuperscript{398}

Five commitments were made by Dr Gao Qiang -executive vice minister of the Chinese government- to improve existing HIV/AIDS Prevention and Control efforts. The Joint UN/ MOH 2003 report lists these pledges as the following:

\begin{itemize}
\item \textbf{1.} Strengthening government efforts by clarifying targets, identifying responsibilities and improving evaluation, supervision and monitoring; holding persons or departments accountable for negligence if HIV/AIDS is spread by ineffective work.
\item \textbf{2.} Providing free ARV medicines to low-income HIV/AIDS patients in urban areas and all patients in rural areas; to provide medical assistance to people suffering from infectious diseases and train people in HIV/AIDS prevention and treatment.
\item \textbf{3.} Improving laws and regulations, intensifying interventions, launching public awareness campaigns, promoting drug-free communities and healthy sexual life, and cracking down on illegal activities.
\item \textbf{4.} Protecting the legitimate rights of HIV/AIDS patients and opposing social discrimination against them; integrating antiretroviral treatment, care and financial aid to HIV/AIDS patients living in poverty.
\end{itemize}


5. Increasing international cooperation on HIV/AIDS by welcoming continued financial and technical support from other countries and international organizations.**399

Soon afterwards, all provinces, municipalities, and autonomous regions (Except Tibet) “established their own Long/ Medium Term Plan and Plan of Action” through strategic planning processes established by the MOE, MOH, Ministry of Transportation (MOT), and Ministry of Justice (MOJ), including additional cooperation from the trade unions, Women’s Federation, and the Youth League. Moreover, government departments released a series of documents, to act as guidelines in diverse areas such as functional responsibility, promoting education, HIV surveillance and testing, interventions in high-risk populations, supervising PLWHAs, and STI/STD management.**400 In addition to these steps, the government implemented “community development capacity building in local communities [and ] in areas with high level of HIV/AIDS [...]and whose main objectives are] poverty reduction, education, nutrition, livelihood and health support. ”**401 Besides, the Chinese Administration has declared a policy of vigorous behavioral intervention among groups at higher risk of HIV infection, and implemented some controversial measures such as condom promotion, needle exchange programs and methadone maintenance therapy.**402 Examples of steps taken include the distribution of educational material about HIV/AIDS by printing it on the verso of train tickets as well as Information, Education, and Control (IEC) campaign targeting migrant workers and


400 Ibid

401 Ibid

carried out by the Ministry of Railways in nine major railway stations. Another example is the standardization of blood and plasma donation, and the establishment of a nation-wide blood donation system. This has made HIV testing for all blood products mandatory for blood banks, while at the same time encouraging voluntary donations. This resulted in safer iatrogenic transfusions and storage of non-contaminated blood through the establishment or rebuilding of 459 blood collection stations. Other examples include a spectacular investment in AIDS treatment and care, and the creation of a new coordinating body by the State Council level. In regions with high levels of epidemics, provincial authorities introduced “[…] leading groups and working mechanisms” allowing multi-sectoral cooperation and public participation. As of 2004, a multitude of projects aimed at reducing HIV transmission among high-risk groups was implemented. The populations targeted were CSWs, IDUs, and Blood Donors: During the first quarter of 2004, the Chinese government established a national policy for conducting comprehensive health education through mass media, and developed a national condom promotion strategy, appended with guidelines for conducting harm reduction projects. This led to the founding of pilot projects focusing on condom promotion in selected Chinese cities, but to little avail. This failure later compelled the Central Government to learn from its neighbors’ experiences with HIV/AIDS, especially the Thailand’s “100% Condom Utilization Programme”, which led to the implementation of similar tactics as prototypes in more than 10 of China’s 23 provinces. Unfortunately, numerous challenges stemming from the lack of political and social support prevented a similar spread for needle exchange programs and methadone maintenance projects for HIV/AIDS interdiction among injecting drug users. Additionally, the lack of access to care and treatment for PLWHA has made it difficult to initiate significant programmes to


404 ibid

405 ibid

prevent transmission among IDUs, which remain heavily vulnerable to the epidemic.\textsuperscript{407} Likewise, despite official assurances that authorized blood banks have adequate safeguards (Such as screening for HIV, NAT testing, etc.), many hospitals still obtain blood from uncertified sources.\textsuperscript{408}

\textbf{State HIV/AIDS Spending (SHAS):}

The analysis of State HIV/AIDS Spending (SHAS) is a very good indicator of a country’s level of involvement in HIV PAE, with low spending signifying denial and a hefty financial investment representing a real commitment for HIV interdiction. As in the PAE section, I will perform a chronological study of state HIV/AIDS financing.

According to incomplete archives and statistics from the December 2003 “Joint Assessment of HIV/AIDS Prevention, Treatment and Care in China”, it appeared that by the end of 1992, there was some 30 million RMB invested by Chinese authorities and international agencies on HIV/AIDS Prevention and Control in the PRC.\textsuperscript{409} The MOH later reassessed and increased this budget was to 55 million Yuan for the 1993-1998 period.\textsuperscript{410} This was also substantiated by internal organization, reaching about 62 million Yuan for the institution of HIV/AIDS control programs over an eight-year period (1993-2001). This encouraged the Central Government, which allocated a total budget of 1 billion Yuan for the 10th Five-Year Plan for HIV/AIDS prevention and treatment.\textsuperscript{411} In


\textsuperscript{408} ibid


\textsuperscript{410} Ibid

\textsuperscript{411} The Socioeconomic Impact of AIDS in China, August 2002
1996, the Chinese Ministry of Finance budgeted 5 million Yuan for HIV/AIDS Prevention and Control, later augmented by Central Government to 15 million CNY per year from 1998 to 2000.\textsuperscript{412} The year 2001 witnessed the highest increase in SHAS to date, with the PRC committing approximately US$ 300 million to dealing with the epidemic.\textsuperscript{413} The “State Development and Reform Commission” (SDRC, former SDPC) transferred 1.25 billion Yuan from national bonds, and 1 billion Yuan from local governments (an approximate grand total of $114 million\textsuperscript{416}), building 459 new blood banks in mid-west China and improving their equipment, thus increasing the safety of blood products. Additionally, the decision of increasing the budget by 100 million CNY per year was decided by the Central Government.\textsuperscript{415} On the local level, five provinces increased their HIV/AIDS budget to more than 5 million Yuan per year per province, with Henan allocating “[…] the largest amount of money to HIV/AIDS in 2001 with 14 million CNY.”\textsuperscript{416}\textsuperscript{415} In 2002, the Central Government considered supplying anti retrovirus drugs free of charge to PLWHAs not covered by health insurance. Moreover, the SDRC assigned an additional 2.9 billion Yuan “from national bonds in order to support the capacity building of the [Centers] for Disease Control at the provincial, prefecture and county level in mid-west China.”\textsuperscript{417} Furthermore, provincial spending on HIV/AIDS prevention and interdiction increased, with Guangdong and Henan budgeting 10 and 14


\textsuperscript{414} HIV/AIDS in China and USAID Involvement. 2001


\textsuperscript{416} ibid

\textsuperscript{417} ibid

110
million CNY respectively.\textsuperscript{418} A series of important decisions were taken in 2003: First is the implementation of “the principle of government funding, [allowing] the raise [of funds] through various channels.”\textsuperscript{419} Next is the declaration of Executive Vice Minister Dr Gao Qiang at UNGASS in September 2003, confirming the free distribution of ARV medication to rural AIDS patients with low income as well as infected farmers.\textsuperscript{420} In October 2003, the Board of the Global Fund approved the joint PRC/ UNAIDS application for US$ 97.8 million to be used for Voluntary Testing and Counseling, PAE, as well as for the treatment of infected people in seven provinces.\textsuperscript{421} (Those were former blood donors contaminated through plasma pooling during the 1990s, and who fallen ill or are beginning to fall ill in large numbers). Yet another positive feature is the increased openness shown by the PRC in dealing with the epidemic, as demonstrated in the Joint UNAIDS/ MOH 2003 report and the allocation of 1.2 billion USD to HIV/AIDS Prevention, Treatment and Care for 2003–2004. Some UNAIDS researchers believe that this commitment to PAE\textsuperscript{422} and the willingness of the Government (both Central and provincial) to “invest more than 10 billion CNY to strengthen the health care system and professional capacities on HIV/AIDS prevention and control” were enhanced by China's experience with the SARS outbreak.\textsuperscript{423} Consequently, provincial governments augmented their HIV/AIDS Prevention and Control budget, with their allocations almost as high as those allotted by the Central Government, with more than half of the provinces setting up


\textsuperscript{419} ibid

\textsuperscript{420} ibid

\textsuperscript{421} UNAIDS, UNAIDS at country level Progress Report September 2004. Available at: data.unaids.org/Publications/IRC-pub06/JC1048-CountryLevel_en.pdf


special funds for HIV/AIDS. Therefore, it appears that, over the years, direct State HIV/AIDS financing has increased from as little as 5 million Yuan in 1996 to as much as 100 million in 2002, as shown in the following graph from the Joint UNAIDS/ MOH 2003 report:

**Table 4 Direct investment on HIV/AIDS prevention and control by the central government (1996-2002)**

![Graph showing investment trends](image)

Unfortunately, the amount invested by the Central and provincial governments, although significant, are still inadequate to implement surveillance, PAE, control, and interventions. According to “The Socioeconomic Impact of AIDS in China, August 2002”, more is needed in order to circumvent the infection of some seven to ten million Chinese (respectively late and high scenarios) in 2010. Increasing the financing of HIV/AIDS control and interdiction would seem lofty, however this investment would ultimately save more money in the long term: “If only the impact on macro-economy is

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425 ibid
taken into account, the economic losses reduced will reach 17.5 billion and RMB 8.1 billion [Yuan] respectively. Therefore, the earlier the investment, the better the effect.”

Sentinel Sites Enhancements (SEE):

As said before, effective HIV avoidance tactics requires both care, support, and the PAE of high-risk populations. However, it would be impossible to plan such a wide spectrum of operations with only a couple of indicators and estimates. Therefore, the PRC created HIV Sentinel Surveillance (HSS) sites to help identify the “general strengths and weaknesses of health systems as [well as the high-risk populations.]” Officially, the PRC initiated its HIV/AIDS Surveillance program in 1986, later (in 1989) making HIV/AIDS reporting mandatory by law. However, the Ministry of Health (MOH) and the NCAIDS waited until they had obtained support from the WHO in 1995 to establish a meager presence (Only 42 sites) in 23 selected provinces, the majority of which were in Yunnan. In 1999, China began conducting behavioral surveillance (BS) in 22 provinces, as a joint operation with the World Bank Loan Project and in the China-UK AIDS Project provinces, focusing its attention on high-risk populations and vulnerable groups. (These groups were later surveyed, and the information obtained was declared national security and made confidential) In summary, these HSS systems allowed the detection and

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426 The Socioeconomic Impact of AIDS in China, August 2002
427 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf
429 ibid
430 ibid
monitoring of the HIV epidemic in several south and western Chinese provinces (such as Yunnan and Sichuan) in the late 1990s. By 2001, the number of sites had more than doubled, going from 42 in 1995 to “101 clinic-based or facility-based sentinel sites, [with] at least one [per province or autonomous area].” Populations studied include STI patients, CSWs, IDUs, migrant workers (more specifically long-distance truck drivers), and pregnant women. (It was suggested to incorporate new military recruits, but this group has yet to be included). The Modus Operandi of HSS a described by U.S Embassy Beijing is as follows:

“The program uses unlinked anonymous blood testing methodologies during a 2-3 month period twice a year. Based on a national protocol, sites collect blood specimens as well as demographic and limited behavioral data on a standard data collection form. Specimens are tested at the provincial level using two ELISA screening tests. Demographic and test result data are electronically submitted to the NCAPC central office from the provincial EPS at the end of the survey period. Data is maintained at the national level using a password-protected EPI-INFO database. Summary reports of findings are disseminated yearly to both the Ministry of Health and to officials in each province.”

The MOH, using technical assistance provided by the Chinese CDC, had put in place a pilot program for behavioral surveillance programs since 1995. This project was updated as of 2001, and expanded to have an effect on both national and provincial levels. As an example, Hubei province launched a monitoring network in order to reach the populations at risk, namely Illegal Blood Sellers, IDUs, STI/STD patients, CSWs, and long-distance drivers.

431 HIV/AIDS In Asia Pacific Region 2003


433 ibid

434 ibid

435 Beijing Environment science and technology section November 29 2002
The reason behind the success of this particular surveillance site is due because the system achieve high participation from institutions such as the Wuhan City Blood Bank, the Tongji Hospital, the Hospital of the Wuhan Iron and Steel Company (employing the drivers), the Wuhan Dermatological Disease Institute, and the Wuhan Security Bureau. Year 2001 also witnessed in-depths analysis of effective behavior intervention for high-risk populations by the Ministry of Public Security and the Ministry of Health, developing into pilot interventions in many Chinese provinces, providing Health Care workers and HSS technicians with useful experience.

Additionally, several provinces began comprehensive monitoring by “combining HIV/AIDS, STD and serum surveillance with [behavioral] surveillance.” Though still under development, the protocols seem accurate.

I will again quote the U.S Embassy Beijing, for it describes succinctly the data gathering and distribution procedures used in the PRC:

“This Data are collected from at least one categorical STI clinic and/or hospital-based Dermatology/ STI clinic in each county and township and are then passed from the clinic to the county EPS through the prefecture level EPS to the province level and then to the National Disease Control Department of the Ministry of Health in Beijing. Duplicate data are sent to the National Center for STI Control at the Institute of Dermatology and STI in Nanjing, in what appears to be a parallel reporting system. Apparently, this latter center, which we did not have an opportunity to visit, is considered to represent the Ministry of Health as the national coordinating and implementing body for STI programs.”

436 Beijing Environment science and technology section November 29 2002


438 ibid

By 2002, the number of HSS in China had reached 158 sites, almost four times the number of monitoring stations in place in 1995, notwithstanding the multitude (almost 420) provincial sites established independently over the years. (Sadly, there is no coordination/sharing of data between these 2 systems\(^{460}\)) Additionally, 2002 witnessed the publication of the “Standards for HIV/AIDS Surveillance”, and the “Comprehensive Surveillance Guidance and Plan for HIV/AIDS/STD (trial)” by the Ministry of Health and the Chinese Center for Disease Control as “[technical] guidance documentation on HIV/AIDS surveillance in China.”\(^{461}\) This, combined with the setting up of “127 County Community-based HIV/AIDS Comprehensive Care and Treatment Pilot” called “China CARES” by the MOH in strategic regions, allowed the implementation of a comprehensive care pilot project including “condom promotion, needle social marketing, prevention of MTCT in pilot locations, [and anti-retroviral therapy.]”\(^{462}\)

Since 2003, a nation-wide surveillance network was established, covering all 31 provinces, autonomous regions, and municipalities. In addition to the implementation of this complex, a professional team for surveillance and monitoring was trained. These two factors allowed for the improved utilization of behavioral and epidemiological information, thus significantly enhancing existing and future HIV/AIDS PAE protocols.\(^{463}\)

\(^{460}\) HIV/AIDS In Asia Pacific Region 2003


\(^{462}\) ibid

\(^{463}\) ibid
**Medical Treatment and HIV Research (MTHR):**

The field of HIV/AIDS medical treatment and research is often sidestepped by many countries, for it requires in depth financial and technical investment, even industrialized nations lack. The fact that the PRC demonstrated interest in tackling this issue clearly shows that China’s leadership has indeed decided to counter the epidemic.

In early 1998, China witnessed the creation of two unique support centers for PLWHA, namely the “Home of the Red Ribbon” (AKA “Beijing’s Ditan Hospital”) and the “Home of Loving Care” (located in Beijing’s You’An Hospital). The first medical center for the treatment and care of HIV/AIDS was established in August 2000, in Wenxi, Shanxi province, and went by the name of “Warm Heart Center”. This complex, backed up by local government subsidies and support was the first of its kind to provide care, training, and counseling for PLWHAs and volunteers alike, in a healthy and non-discriminative atmosphere. The success of the program made other provinces such as Hubei consider opening similar “Warm Heart” centers in their own areas. In 2001, China joined other nations doing research on HIV/AIDS, by inaugurating its HIV research program in the Beijing Ditan Hospital, designated by health care experts as “the national reference hospital for HIV/AIDS treatment and clinical research [in the PRC].” The focus is on anti-viral clinical research and the usability of Traditional Chinese medicine and herbs in HIV treatment, and is part of a joint Ditan Hospital/ MOH Center for AIDS Prevention and Control effort. Year 2002 was very positive for many PLWHA, for it was during that period that the State Council, with the blessings of various ministries and administrations (Health, Finance, Taxation, and Customs)

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447 ibid
exempted imported ARV drugs from customs and taxes for a 5-year period, effectively lowering their price by 50 to 65%, thus making the medicine available for some well-off PLWHA.\textsuperscript{448} Because the drugs are only exempted for five years, the "State Development and Reform Commission" has ordered local pharmaceutical manufacturers to produce these same drugs in generic forms, with the "State Food and Drug Administration" (SFDA) setting up fast track procedures for the testing, examination, and sanction of domestically produced drugs:

"Currently, four kinds of anti-retroviral drugs (AZT, d4T, DDI, NVP) made by two domestic drug producers have been approved by SFDA. These drugs will make up 2 kinds of combination regimes. Drug costs will be reduced to about 3,500 to 4,000 CNY per year per AIDS patient. Such actions will dramatically enhance the availability and affordability of treatment."\textsuperscript{449}

In addition to budding AIDS drugs production, the MOH has prepared a document for the adequate distribution of these generic medicines, entitled "Guidelines for the Management of Anti-retroviral Drugs Used on HIV/AIDS (temporary)."\textsuperscript{450} The final development for 2002 was the planning by the MOH of implementing a "100 County Community-based HIV/AIDS Comprehensive Care and Treatment Pilot", in provinces most affected by the HIV/AIDS epidemic.\textsuperscript{451} This project was initialised in 2003, when the "China Cares Program" established "[...] 51 community-based HIV/AIDS comprehensive care pilot [centers] in regions with the greatest number of HIV/AIDS cases [...]" and whose aim included the introduction of local ARV drugs in treating


\textsuperscript{449} ibid

\textsuperscript{450} ibid

PLWHAs, "health care and education, intervention, MTCT prevention, and voluntary counseling and testing," with the number of centers expected to reach 127 within a year. Since AIDS medicine became cheaper, approximately 6 000 people in central China were able to receive antiretroviral treatment. Furthermore, more basic and applied HIV/AIDS research was conducted during 2003, with the aim of promoting prevention and treatment. Examples of projects studied included "national level HIV molecular epidemiology surveillance to detect the HIV sub-type distribution in the population, HIV vaccine research, [and the] development of the laboratory network." Additionally, efforts were directed towards reinforcing Research and Development of HIV/AIDS reagents, as well as undertaking medical experiments for both ARV and herbal drugs, and the founding of modern laboratory networks, whose creation and utilization would make HIV/AIDS Prevention and Care effective.

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456 ibid
NGOs and Foreign Aid Utilization in HIV/AIDS PAE campaigns:

Since 1993, a number of AIDS-related associations and Non Governmental Organizations (NGOs) have appeared in China. These associations are involved "in a variety of activities including training courses and education at the primary stage to encourage community participation, interventions in high-risk populations and patient care and treatment."^457 NGOs are of three types: UN-family, international, and local NGOs. The China UNAIDS Theme Group reports that the WHO, UNAIDS, UNFPA, UNICEF, and the World Bank began working and providing both technical and financial surveillance-related support to national and provincial surveillance programs starting 1999. Specifically, assistance encompasses "[the distributing] of HIV test kits, [the enhancing] of Second Generation HIV surveillance, [the financing] for HIV/AIDS/STI sentinel/ risk behavior surveillance, [as well as assisting] the development of country-specific guidelines for HIV/STI surveillance."^458 In April 1999, a MOH-planned, two-year WHO-funded intervention project targeting sex workers was initiated in a town of Yunnan province, renowned for its rampant prostitution. The aim of the program was to provide CSWs with HIV/AIDS information and to encourage the women to educate others working in sex work. Feedback indicated that the campaign was a total success, resulting in increased HIV awareness and condom use among the targeted population.^459 In 2001, another joint local government/ WHO project promoting 100% condom use was started in Wuhan and Jingjiang, leading to a swift increase in condom utilization among CSWs working at the targeted entertainment establishments. Additionally, mid-


assessments indicated decreased STI occurrence, thus encouraging Hainan, Hunan, and other provinces to promote 100% condom use campaigns. \(^460\) In order to assist in the initialization of various HIV/AIDS Prevention and Control, "UNAIDS Geneva has granted Programme Acceleration Funds (PAF) to UNAIDS co-sponsors, allowing for the initiation of several condom social marketing and IEC projects in collaboration with the China Contraceptive Supply Center (CCSC) and the Health Department of the Chinese Railway Administration."\(^461\) Since the Chinese railway system extends over 65,000 kilometers, has more than 5,500 stations, and services over a billion passenger a year, advertising through that medium would reach two high risk populations (railway workers and migrant works) as well as the general population, represented by daily passengers and their families. \(^462\) Additionally, a Country Coordination Mechanism (CCM), inspired by the "State Council Coordination Mechanism on AIDS/STD" was established in 2002, with the objectives of meeting the "Global Fund to Fight against AIDS, TB and Malaria" requirements, strengthening coordination among institutions, and mobilizing the sectors to enhance the fight against those diseases. \(^463\) The final action of 2002 was the joint MOH/ CDC/ UNICEF program to prevent MTCT in Henan, and to promote pilot work in other "vertical HIV transmission" affected regions. \(^464\) As of 2003, HIV/AIDS awareness campaigns via Condom Social Marketing were successfully implemented at 40 train stations, under the patronage of the United Nations Population Fund, the Ministry of Railways, and the China Contraceptive Supply Center. \(^465\) The Land Transportation


\(^462\) ibid


\(^464\) ibid

\(^465\) UNAIDS' Pamphlets: Condoms, April 2003
Ministry and the Health Ministry later initiated a similar campaign, distributing “educational materials and condoms to people [most of them being young truck drivers] using China’s busiest transport routes.”66

There are multitudes of multinational NGOs operating in the PRC, focusing solely on HIV/AIDS prevention. The most preeminent are the Australian Red Cross, Marie Stopes International, the Ford Foundation, Save the Children UK, Médecins Sans Frontières, Oxfam-HK, the Salvation Army, and many others such as the Shanghai-based DKT International and the Qingdao Double Butterfly condom distribution (part of the joint Chinese-British AIDS prevention project).67 Yet another is the China-UK AIDS Project, which provides financial aid to children of PLWHA (allowing them to continue their education), “and supports agricultural tax-exemption and micro-credits.”68 The best illustration of a three-dimensional “[…] approach to HIV prevention and care is the joint Save the Children (UK) - Ruili Health Coalition’s [2001] community care activities in Ruili County, Yunnan province [a region renowned for having the highest HIV prevalence rates in China.]” This “Holistic Community Care Approach”, based in the Dehong Women’s and Children’s Health Care Center69 was successful because it effectively involved many of the community’s stakeholders in PAE activities. The project has five target populations (CSWs and their clients, IDUs, PLWHAs, AIDS orphans, and young people) and four main objectives, specifically prevention and risk reduction, treatment and care, empowerment and advocacy, and capacity building. The success of


69 ibid
this approach clearly sets an example for other counties and provinces throughout China to emulate.\footnote{470}

We finally turn our attention to the last group of NGOs and associations, the “locals”: Governmental departments established many NGOs because of the officials’ inability to deal with “sensitive” AIDS prevention activities. Examples of these NGOs include the “Chinese Association of STD/AIDS Prevention and Control”, the “Beijing Association of STD/AIDS Prevention and Control”, the “China Foundation for HIV/AIDS Prevention”, and the “China Preventive Medicine Association”.\footnote{471} According to the “Beijing Environment science and technology section” of November 2002, there were some other organizations sponsoring events or education campaigns, which I have organized into a table and categorized as either medical, state, or social NGOs:

<table>
<thead>
<tr>
<th>Medical NGOs</th>
<th>Social NGOs</th>
<th>State-controlled NGOs</th>
</tr>
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<tbody>
<tr>
<td>China Medical Association</td>
<td>China Red Cross</td>
<td>China Family Planning Association</td>
</tr>
<tr>
<td>Epidemic Prevention Centers</td>
<td>China Youth League</td>
<td>All China Federation of Trade Unions</td>
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<tr>
<td>Health Education Institute</td>
<td>All-China Women’s Federation</td>
<td>Railways Administration</td>
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<tr>
<td>Administration of Quality Supervision and Inspection and Quarantine</td>
<td>Teacher Training Centers</td>
<td>State Council</td>
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<td>China Academy of Preventive Medicine</td>
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<td>State Power Corporation</td>
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<td>Chinese Red Cross Society</td>
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<td>China Civil Aviation Administration</td>
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<tr>
<td>China Foundation for the Prevention of STD’s and AIDS</td>
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<td>China Association for Science and Technology</td>
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\footnote{471} ibid
Because of social stigmas and lack of resources, face-to-face counseling was not limited in scale and scope. However, this was compensated by the national placement of an important number of telephone hotlines for the dissemination of individualized AIDS prevention information.472 One of the first groups to introduce the hotline system was the organization behind the “Friends Exchange” newsletter: In February 1998, doctors, sociologists and volunteers at the Affiliated Hospital of Qingdao Medical College began publishing a series of pamphlets, aimed at increasing safe sex among MSMs. These leaflets later became a newsletter, allowing the group’s researchers to study the behaviors of Chinese homosexuals and provide them with health education and behavior intervention information.473 Another pioneer in the field of PAE is the “Mangrove Support Group” (MSG), registered under the “China Association of STD and HIV/AIDS Prevention and Control”. This association was the first network organization created by infected HIV/AIDS patients, and whose main objective was (and still is) to improve “the quality of life for PLWHA, through life-skills training and [the undertaking] of activities [that] publicize messages relating to HIV/AIDS prevention and control.” So far, the MSG has initiated and successfully conducted numerous events in the Chinese capital and has expanded operations to include the Guangdong, Sichuan and Henan provinces.474


474 ibid
Conclusion:

The "2004 Report on the global AIDS epidemic Executive Summary" called HIV "an extraordinary kind of crisis [that] is both an emergency and a long-term development issue." Even though political leaders have increased their commitment and funding to counter the epidemic, it endures and outpaces; the virus' extreme dynamism, adaptive capabilities, and opportunities for spread, allowed it to spearhead every country in the planet. Currently, the Asian HIV/AIDS epidemic is expanding swiftly, with some 7.4 million PLWHAs in the region. In 2003 alone, the continent witnessed 1.1 million new infections. Because Asia harbors 60% of the planet's inhabitants, the spread of HIV will have severe global repercussions. Three countries, namely China, Indonesia, and Vietnam, have experienced the swiftest HIV epidemics these past few years, (with more than 1 million cases in 2003) as opposed to other Asian countries (such as Thailand, Cambodia, and Myanmar, who were hit earlier and whose epidemics were relatively moderate).

The first Chinese HIV cases appeared in 1985 in coastal cities among Chinese nationals returning from extended stays abroad, and had a limited heterosexual spread. The real reason for the widespread transmission of the virus in the PRC is due to many facilitators. The widespread poverty in rural regions led to drug use and blood selling - respectively the first and second most important causes for the spread of HIV in Yunnan and Xinjiang (1989, drug use), and the Henan region (1995, plasma sale) - as well as prostitution, and employment opportunities in high-risk jobs for migrant workers. Additionally, the blatant

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476 ibid


lack of awareness, the general ignorance, and the numerous misconceptions about HIV abounded and increased transmissibility dramatically, therefore affecting other populations such as pregnant women and young people. Culturally, expected male-female behaviors, the secondary role of women in society, and the taboo associated to certain topics (such as premarital sex, drug use, and homosexuality), also contribute to increase the risk of HIV contamination. There are also some politico-legal variables such as unfair and contradicting laws, corruption, and incompetence.

The presence of political and governmental facilitators makes us question the People’s Republic of China’s ideology, in an attempt to see if this form of socialism actually hindered HIV/AIDS prevention. The current form of socialism in China was enunciated by Deng Xiaoping in 1979 and represents a culmination of Marxist Leninist Mao Zedong thought. It is defined by four principles (the four pillars of Chinese socialism), namely, the Principle of Upholding the Socialist Path, the Principle of Upholding the People’s Democratic Dictatorship, the Principle of Upholding the Leadership of the Chinese Communist Party, and the Principle of Upholding Marxist Leninist Mao Zedong Thought. According to Ren Zhongyi (2000), former Party Secretary of the provinces of Heilongjiang, Liaoning, and Guangdong, and former Central Committee member, the dogmatization of the principles will only lead to stagnation and a dramatization in social issues such as corruption, unemployment, as well as increasing the State’s inability to deal with crisis such as HIV/AIDS. Primarily, let us define and understand each principle before analyzing it in term of HIV interdiction efficiency:

The first Principle of Upholding the Socialist Path states that one should not stray from traditional socialist values such as collective ownership. However, since the Deng Xiaoping reforms of the early 1980s, this has changed, allowing people as well as foreigners to own assets, property, and stocks in State Enterprises. The second principle insists on perpetuating the People’s Democratic Dictatorship, meaning that a majority will dictate its decision to the minority. This evolved from a pure dictatorship based on the class struggle principle to the creation of a multiparty system led by the Chinese Communist Party (CCP). This leadership of the CCP is the core of the four principles
enunciated by Xiaoping and requires a constant evolution and bettering of the CCP’s leaders. The last principle talks about the importance of maintaining the Marxist-Leninist-Maoist ideology. This political thought base juggles with seemingly conflicting ideas but strives for its use as a set of guiding values.479 Now that we have a better understanding of the cardinal principles of Xiaoping, it is time to analyze each one in respect to HIV prevention: Upholding socialism is not a variable that would affect HIV prevention, for it controls the macro environment and has little impact on the micro subsystem. Similar in low-level impact is the Principle of Upholding Marxist Leninist Mao Zedong Thought, which is more of a philosophical-theoretical debate about the legitimacy of using the ideas of these ideologists in an evolutionary manner to find solutions or inspire the CCP to deal with modern day problems. The remaining two pillars of Chinese Communist thought, namely the dictatorship of the people and the one party rule, can and did have a negative impact on HIV/AIDS prevention, awareness building, and education strategies. Starting with Upholding the People’s Democratic Dictatorship, we are able to see that a radical version of it, initiated by Lin Biao and the “Gang of Four”, is actually a socialist model close to that of Josef Stalin’s ideology from the mid 1930s. This “applied dictatorship of the people to the people” targeted “[...] the realms of culture and thought [...]interpreting] "dictatorship" as the right to "oppress” [...forcing people to silence]” (Zhongyi, 2000). Some older elements from the communist party very possibly transmitted this way of thought to their successors, which resulted in the lack of transparency in numerous local governments, led to the drafting of many laws that violated PLWHAs’ basic human rights, and resulted in the Henan blood scandals. The remaining principle, which is the need for a power monopoly in the hands of the CCP, combined to the Confucian Father-figure model (much denied because of its “un-communistic” nature, but well ingrained in Chinese political thought), resulted in the various cover-ups of the severity of the HIV/AIDS crisis. If the CCP had recognized its failure to effectively detect and solve this health issue, it would have lost its political legitimacy, thus endangering one of Deng Xiaoping’s vital pillars. Additionally, the

recognition of its incompetence in dealing with the HIV/AIDS epidemic would have reduced to rumbles the all-important Confucian assumption of the State being the wise, all-knowing, infallible "Father", and the people as the frail, inexperienced "Children". Therefore, and in order to avoid this dramatic loss of face and faith, the local officials possibly turned a blind eye to the situation, camouflaged the health problems' importance, or contemptuously ignored the issue all together.

Nevertheless, and as noted Zhongyi (2000), these four principles have been and still are revised, reconsidered, and enhanced to make China’s leadership more transparent, more accepted, more liberal, more democratic, and more accountable to the people. This means that, although the Chinese socialist ideology had been somewhat of a hindrance for HIV detection and prevention in the past (pre-2000 era), it has undergone significant beneficial changes. For example, the PRC witnessed the rise of new positive elements in the political (such as Former Party Secretary Zhongyi), social (the Jiaodian Fangtan televised show during which disgruntled Chinese call and talk about their problems with the government, allowing the latter to find solutions), and literary (with the appearance of best selling authors such as Yu Jie) arenas.  

Despite these steps in the right direction, there is still much to be done in China: The WHO’s Regional Committee report (2004) reported that the country accounted “for about 840,000 HIV infections, [almost] two-thirds of [South East Asia’s] estimated total.” Since 1999, the number of cases rose 30% per year, foretelling an estimated 10 million infections by 2010, unless serious Prevention, Awareness and Education building strategies are implemented. The number of AIDS-related deaths were estimated to 70,000 cases in 2003 and were projected to reach almost 120 000 by 2005 (WHO, 2005).


481 WHO Regional Office for the Western Pacific Press Releases: WHO urges Member States to act now to avoid a major HIV/AIDS epidemic, fifty-fifth session of the WHO Regional Committee for the Western Pacific 13-17 September 2004, Shanghai, China

Although HIV/AIDS was detected in all of China’s provinces, it seems that the areas with the most cases and highest death toll are poor rural regions, where blood donations occurred in the 1990s. Because of ineffective control and prevention among high-risk groups, it is very probable, according to UNAIDS (2001) that the epidemic will soon engulf the general population with the 726 million segment aged 15 to 49 being the most likely victims.

Hence, it is vital for the Central Government to continue its efforts in prevention, education, and awareness building, and to pick up the pace, in order to avoid Africa’s fate.

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483 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf


485 HIV/AIDS In Asia Pacific Region 2003
Bibliography:

Acquired Immuno Deficiency Syndrome, Compton’s Interactive Encyclopedia, CD-ROM 1995

Acquired Immuno Deficiency Syndrome, Microsoft Encarta Encyclopedia, CD-ROM 1996


Daobao, Fubu. HIV Strains in China, August 6, 1999

Epidemiological Fact Sheet on HIV/AIDS and STI China 2000


HIV/AIDS In Asia Pacific Region 2003

HIV/AIDS in China and USAID Involvement. 2001


Sexual Relations Among Youth In Developing Countries, 2001 (Occasional UNDP/UNFPA/WHO/World Bank Special programme of research, development and research training in human reproduction)

Sexually Transmitted Diseases, Microsoft Encarta Encyclopedia, CD-ROM 1996

Tuberculosis, Microsoft Encarta Encyclopedia, CD-ROM 1996

The Socioeconomic Impact of AIDS in China, August 2002


UNAIDS Pamphlets, Mass Media And HIV/AIDS, April 2003

UNAIDS Pamphlets, Vulnerable populations, April 2003

UNAIDS Pamphlets, Condoms, April 2003

UNAIDS Pamphlets, Young People, April 2003
UNAIDS Pamphlets, Care And Support, April 2003

UNAIDS A Joint Response to HIV/AIDS 2002


UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf


We Care, do you? The UN Theme Group on HIV/AIDS takes stock of the international response to AIDS in China at the start of the new millennium. Updated on April 1, 2004

Beijing Environment science and technology section November 29 2002


WHO, Regional Office for South-East Asia, HIV/AIDS SEARO Publications on HIV/AIDS- Tuberculosis and HIV Questions and Answers page. Available at: http://www.searo.who.int

WHO, Regional Office for the Western Pacific Press Releases: WHO urges Member States to act now to avoid a major HIV/AIDS epidemic, fifty-fifth session of the WHO Regional Committee for the Western Pacific 13-17 September 2004, Shanghai, China. Available at: http://www.searo.who.int

WHO, Regional Office for South-East Asia, HIV/AIDS. AIDS: Some Questions and Answers. Available at: http://www.searo.who.int/en/Section10/Section18/Section2011.htm


WHO, Regional Office for the Western Pacific. HIV infections and surveillance. Available at: http://www.searo.who.int

Wikipedia, the world’s free encyclopedia, list and map of the PRC’s provinces. Available at: http://en.wikipedia.org/wiki/Provinces_of_China


Zheng Xiwen of the AIDS Prevention and Control Center, Chinese Ministry of Health, Beijing 100050

Case Studies and Appendixes:

Case Study 1:

PREVALENCE SURVEY OF STI AMONG FEMALE SEX WORKERS AND TRUCK DRIVERS IN CHINA

A cross-sectional STI prevalence survey was conducted by the National Center for STD and Leprosy Control, China, in conjunction with the Kunming Institute of Dermatology, Yunnan Province and the Tongling Institute of Dermatology, Anhui Province, China. A total of 505 female sex workers, recruited in Kunming from November 1999 to May 2000, and 550 male truck drivers, recruited in Tongling from February to May 2000, participated in the survey. All eligible participants gave written informed consent. Demographic, behavioral and clinical information from the participants were gathered by direct interviews. Tampon swabs and blood samples were collected from the women while urine and blood samples were collected from the men. Tampon swabs were tested using the polymerase chain reaction (PCR) technique for Chlamydia trachomatis, Neisseria gonorrhoeae and Trachomatis vaginalis. Urine was tested with PCR for C. trachomatis and N. gonorrhoeae. Blood was tested for syphilis using rapid plasma reagin (RPR) serology as the screening test, and Treponema pallidum haemagglutination assay (TPHA) as a confirmatory test. HIV testing was carried out using enzyme-linked immuno-sorbent assay (ELISA) and, if positive, Western blot for confirmation. Free treatment was provided to study participants diagnosed with an STI. Among female sex workers, the most prevalent STI was Chlamydia trachomatis (58.6%), followed by Trachomatis vaginalis (43.2%) and Neisseria gonorrhoeae (37.8%). Co-infection with both gonorrhoeae and chlamydia were noted in 25%. Ten percent of the sample were found positive for HIV infection, all of whom were injecting drug users; 9.5% had treponemal seropositivity. The highest prevalence of chlamydial infection or gonorrhoeae was observed among the 15-19 and the 19-24 age groups. Among truck drivers, no positive HIV infection was found. The most prevalent STI was Chlamydia (10.2%) followed by gonorrhoea (7.8%). Treponemal seropositivity was low (0.7%). Two per cent had co-infection with both gonorrhoea and chlamydia.

Case Study 2:

SHORTCOMINGS IN REPORTING NOTIFIABLE STIs

Current STI statistics underestimate the real STI epidemic for several reasons. According to a survey, the underreporting rate ranged from 100% in private clinics to 33% in military hospitals. Why this underreporting?

First, many people seek private help and are not registered. Second, the public STI clinics do not always report notifiable STI correctly to local and provincial surveillance sites. In 1999 for example, there was a dramatic decrease of STI in Gansu province. When employees from the Gansu Center for STI Control and Surveillance investigated the number of STI cases in 14 cities and prefectures, they found that of 4,647 notifiable STI cases only 924 had been reported to the relevant administrative institutions. That is, four out of five public clinic cases were missing in the statistics.²

Appendix A:

ESTIMATION OF HIV INFECTIONS, AIDS CASES/DEATHS AND OTHER STI

The under-reporting of HIV/AIDS and STI is well recognized. Therefore, the estimated data of HIV/AIDS and STI is an important measure of the extent of these infections. HIV/AIDS/STI estimates serve as basis for policy development, resource mobilization or allocation, programme planning and monitoring time trends and focusing interventions efforts to control the spread of infections. This article describes the general methods used for estimating the prevalence and/or incidence of HIV infections, AIDS cases, AIDS deaths, and common STI.

How to estimate HIV/AIDS/STI infection statistics:

ESTIMATION OF HIV INFECTION AND AIDS CASES/DEATHS
Prior to effective drug therapy to delay or prevent the progression of HIV infection to the development of AIDS, reporting of AIDS cases was considered to be sufficiently reliable for estimating HIV prevalence by using a backcalculation method. The back-calculation method used annual progression rates from HIV infection to AIDS and reported annual AIDS cases (usually after adjustments for incomplete and delayed reports) to calculate how many annual HIV infections would have been needed to generate the estimated annual number of AIDS cases.

In the late 1980s and early 1990s, a ratio method using an estimated ratio of prevalent HIV infections to prevalent AIDS cases estimated HIV prevalence. Like the backcalculation method, the ratio method required reliable estimates of AIDS cases.

In addition, the ratio of prevalent HIV infection to prevalent AIDS cases changes rapidly over time (from many thousands to one during the first few years of an HIV epidemic. This decline occurs whether HIV incidence increases or decreases because in the absence of effective treatment virtually all HIV-infected individuals progress to AIDS. Thus, at the start of any HIV epidemic, there are virtually no AIDS cases.
The HIV to AIDS case ratio is almost all HIV and no or few AIDS cases. As the HIV epidemic continues, almost all HIV infections will progress to AIDS and the HIV to AIDS case ratio gradually decreases. In a hypothetical situation, where all HIV transmission is stopped, the HIV to AIDS case ratio will decrease to almost 1:1 because virtually all HIV infections eventually progress to AIDS. Thus, after a decade, the ratio may be less than 10 to one.

A simple and useful method to estimate current HIV prevalence in a mature HIV epidemic (i.e. one that has been in progress for about 10 years or longer) is the multiplication of the estimated annual AIDS cases by 20. If the median period for HIV infection to the development of AIDS is assumed to be 10 years, then about 10 years after the start of an HIV epidemic, about 5% of prevalent HIV infections will develop into AIDS on an annual basis.

For example, if the estimated annual number of AIDS cases is 5,000, then the estimated HIV prevalence would be about 100,000 (5,000 multiplied by 20). Conversely, if HIV prevalence is estimated to be 100,000, then by taking 5% of the HIV prevalence one can rapidly calculate the expected annual number of AIDS cases to be about 5,000. This is a quick check and balance method to see if the national estimate of HIV prevalence is compatible with the estimated annual number of AIDS cases and if the estimated annual number of AIDS cases is consistent with the estimated national HIV prevalence.

In the absence of reliable AIDS case estimates or data, epidemiologists have estimated HIV prevalence by using the results of serological surveys and extrapolating these data to the total 15–49 year-old population. This has been, and continues to be, the primary method used in developing countries to estimate HIV prevalence.

As of 2001, no uniform process and/or methods have been developed and distributed by UNAIDS or WHO to national AIDS programmes. As a result, many epidemiologists have developed their own methods, assumptions and biases for using the available HIV serological data to derive a seroprevalence estimate.

Although HIV sentinel surveillance (HSS) systems were not designed to provide data for making HIV prevalence estimates, they have been widely used for this purpose. HIV prevalence in the 15-49 year old population has been calculated according to the following general formulae:

1. The number of HIV infections in each of the major highrisk groups is equal to the estimated HIV seroprevalence rate (from HSS data) multiplied by the estimated number of the HIV-risk group (estimated for a specific population or a province); and
2. The number of HIV infections in the 15-49 year-old population is equal to the estimated HIV seroprevalence rate in antenatal women in the province (from HSS data) multiplied by the estimated number of 15-49 year-olds in the province (from the census estimates). Some potential errors with this method result from: the quality of data collection; representation of the sentinel surveillance system (selection of sentinel sites and groups, sampling); estimation of population sizes (risk groups, 15-49 year-olds); and the lack of consideration of the male to female ratio or urban-rural differential of HIV infection.

For the estimation/projections of AIDS cases, a simple *scenario/modelling approach* was developed during the late 1980s by the Surveillance, Forecasting, and Impact Assessment (SFI) unit of the former Global Programme on AIDS (GPA) of WHO. This approach was designed to provide working estimates and short-term projections (i.e. less than five years) of AIDS cases and deaths. A scenario is an outline for any series of events that can be made up or constructed with or without models to "fit" the observed HIV/AIDS data and trends. The following is an outline of the general methods used in this approach:

1. Assemble and analyze available HIV seroprevalence data to estimate the most recent pattern(s), prevalence and trends of HIV infection for a specific population.

2. Based on these data and other epidemiological observations, different HIV patterns and prevalence levels (i.e. scenarios) can be constructed with some confidence to the year 2005 for specific countries/populations.

3. An AIDS model can be used to derive annual and cumulative estimates and projection of AIDS cases/deaths and other HIV-related conditions, based on the general HIV scenario(s) constructed. *EPIMODEL* is a simple microcomputer programme developed by WHO in the late 1980s to estimate past, current, and short-term projections of AIDS cases and deaths in areas where AIDS case reporting was largely incomplete and unreliable. EPIMODEL is still used widely for this specific task. Most problems encountered by users of EPIMODEL are associated with its misuse.

The basic module of EPIMODEL uses estimates of HIV prevalence and distributes this prevalence by annual HIV-infected cohorts back to the estimated start of the HIV epidemic along a selected epidemic curve. EPIMODEL then applies annual progression rates from HIV infection to the development of AIDS to each of the annual cohorts to calculate annual numbers of adult
AIDS cases and deaths. In 2001, new software was developed to model the course of HIV/AIDS around the world and to further enhance the quality of estimates of HIV/AIDS prevalence and impact. As a result, the UNAIDS/WHO estimates of 2001 incorporate new knowledge and assumptions about survival times for adults and children living with HIV/AIDS.

Recently, the *Asian Epidemic Model* (AEM) was developed. This model has been able to fit 10 years of epidemiological and behavioral data in Thailand. This model uses behavioral inputs to model HIV prevalence trends over time. The AEM was recently applied to the time series of epidemiological and behavioral data in Cambodia. The model contains six major population sub-groups: general population males and females, male clients of sex workers, direct and indirect sex workers, and injecting drug users. The size of each population and behavioral time trends (condom use, frequency of intercourse, etc.) will be determined from analysis of existing behavioral studies in the country. The transmission parameters (e.g. HIV transmission probabilities, STD cofactors, circumcision co-factors) will then be adjusted to fit to time trends in epidemiological HIV data in the country. This model will then produce estimates of new infections that would be more consistent with observed behavioral trends. However this model requires available and reliable biological and behavioral data, and it's not easy to obtain these data in most developing countries.³

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Appendix B:

Due to the colossal size of this appendix (60 pages), the author recommends reading the information online.\(^4\)

\[\text{\footnotesize\textsuperscript{4}}\text{ We Care, do you? The UN Theme Group on HIV/AIDS takes stock of the international response to AIDS in China at the start of the new millennium Updated on April 1, 2004} \]
Appendix C:

Annex: HIV surveillance by site

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Appendix D: HIV/AIDS Preventive strategies related to IDU recommended by the U.S Embassy Beijing

Three components of a comprehensive HIV prevention program have been demonstrated to be effective in slowing and or preventing epidemics of HIV in IDUs in other countries with limited resources: (1) community-based outreach; (2) needle social marketing and (3) a range of drug treatment approaches. None of these have been implemented to date in China.

[...]

There is relatively little variation across provinces in implementation of interventions for preventing HIV in IDUs. The Ministry of Public Security is responsible for China’s drug control program. To date, the prevention strategy has been limited to the development and dissemination of HIV information, education, and communication (IEC) materials. The objective of this approach is to provide accurate information that will increase knowledge, modify attitudes, and will in turn help IDUs change their behaviors and reduce their risks.

[...]

Small pilot projects including needle social marketing and short course methadone treatment are under way in some provinces. Provincial and prefecture level detoxification centers are operating. However, we were told that some persons in detoxification centers have been arrested. Relapse rates related to detoxification are extremely high, ranging from 70 to 90%.

[...]

There is a policy-level commitment to introducing HIV interventions for IDUs in China’s 2001-2005 HIV/AIDS Action Plan. With regard to IDU, that plan includes: (1) strengthening IEC; (2) introducing programs to promoting clean needle and syringe use through social marketing programs; (3) carrying out experimental drug therapy for drug abusers in community therapeutic institutions; and (4) condom social marketing programs.6

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### Appendix E: HIV surveillance by sites

#### HIV rates of CSW in Provinces from Major Urban Areas

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#### HIV rates of CSW in Provinces from Outside Major Urban Areas

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7 UNAIDS, China Epidemiological Fact Sheets on HIV/AIDS and STIs, 2004 Update. Available at: data.unaids.org/Publications/Fact-Sheets01/china_EN.pdf
Appendix F: U.S Embassy Beijing’s recommendation regarding limiting the spread of HIV/AIDS among Commercial Sex Workers (CSWs) in China

The assessment team’s impressions include:

- That the risk behavior of prostitutes and its associated context needs to be better documented, along with their sexual health. This step would likely require the use of more qualitative methods and consideration of how condoms can be made acceptable to prostitutes, their clients, and owners of sex establishments. Attention to STI and other female reproductive tract infections would be important, because the presence of these disorders may be important for prostitutes and the owners of sex establishment in helping them recognize the value of encouraging condom use with clients and consideration of possible interventions such as condom distribution.

- That more active outreach efforts are needed with prostitutes and with owners of sexual establishments. These should include condom distribution and efforts to encourage professional assessment and treatment of STI, as well as HIV testing and further attention to drug use.

- That successful interventions from other countries (e.g., model brothel predecessors to Thailand’s 100% Condom Campaign), as well as examples from China, as they develop, should be disseminated to help local authorities reduce HIV risk among prostitutes. UNAIDS’ best practices models and its surveillance models for rapid assessment could be a source of valuable information on interventions and other activities that have been successful elsewhere.

- That specific attention needs to be given to client populations, in terms of characterizing and specifically influencing their risk behaviors and the risks of subsequent spread to their other sexual partners.

- That multi-sectoral involvement in interventions should be encouraged and facilitated. For example, the illegal status of prostitution would seem to require the involvement of law enforcement organizations in any successful outreach
efforts. NGOs, family planning organizations, and networks of sexual establishment owners are others who will need to be involved.

- That structural aspects of prostitution also need to be addressed. The interaction among poverty, migration, and prostitution needs to be further investigated and addressed. Structural best practices from other countries (e.g., Thailand’s 100% condom use campaign) should be considered and, if appropriate, adapted to China’s needs. These practices could be valuable in reducing entry to prostitution (e.g., income substitution, educational incentives), increasing condom use (e.g., through incentives) and facilitating the exit from prostitution (e.g., micro-loan programs to develop small business).  

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Appendix G: Recommendations from the joint UN Theme group on HIV/AIDS and the Chinese MOH, 2003 report:

- Strive for the replication of pilot sites for overall prevention and care with a stress on care and treatment. The establishment of pilot communities should encourage the participation and involvement of people living with HIV/AIDS together with their families and the general public.
- Establish monitoring and supervision and technical guidance for care and treatment. Treatment should be standardized, and technical guidance given at all levels, especially in terms of diagnostics, treatment and care; appropriate testing technology and the promotion of universal precautions should be emphasized. Promote overall voluntary testing and counseling on the basis of current pilot experience.
- Reinforce the training of health workers on standardized diagnosis, treatment and care.
- Develop fund-raising approaches for HIV/AIDS treatment. Encourage various approaches (government, relatives, community, social welfare and domestic or foreign charities) to share the burden of medical expenses for AIDS patients.
- Encourage multiple approaches to ensure that vital social services are provided to AIDS orphans.
- Continue research on an HIV/AIDS vaccine and explore the potential of traditional Chinese medicine in care and treatment.  

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Appendix E: Description of Chinese legislations and policies related to HIV/AIDS, taken from “HIV/AIDS: China’s titanic peril UNAIDS 2001”:

The current legislation referring to AIDS activities in China comprises the following body of laws and regulations:

1984: The “Pharmaceutical Administration Law of the People’s Republic of China”
Approved and issued by the National People’s Congress, this law bans the import of blood products.

Approved and issued by the National People’s Congress, this law stipulates that foreigners with infection are not allowed into the country. Self-reporting of the personal HIV status is compulsory on arrival in China. However, tests are not required for foreigners applying for a visa unless they intend to stay longer than one year in China. Chinese nationals staying outside China for longer than 3 months are tested systematically after their return, while short-time travelers are not tested.

1989: The “Law on Prevention and Control of Infectious Diseases”
Approved and issued by the National People’s Congress, this law describes how AIDS and HIV infection are notifiable diseases in China. Patients diagnosed with AIDS, and HIV infected persons are to be nominally reported to the Provincial Epidemic Prevention Stations which send regular reports to the national authorities. This law also describes measures for controlling HIV/AIDS.

1990: The “Decision of the Standing Committee of the National People’s Congress on the Prohibition of Narcotic Drugs” and 1991: The “Decision of the Standing Committee of the National People’s Congress on Forbidding Prostitution”
These laws reiterate that drug use, drug trafficking and prostitution are all illegal in China. Control is the responsibility of the Ministry of Public Security. Anti-drug activities
concentrate on supply reduction and on fighting drug abuse by proposing voluntary
detoxification to drug users when arrested by the police. Drug users unwilling to undergo
voluntary detoxification are transferred to rehabilitation centers and subjected to law-
enforced detoxification and rehabilitation. With regard to prostitution, since prostitution
is illegal, prostitutes are not registered and are not subject to medical check-ups except
when arrested by the Public Security. Numerous re-education centers are operational
throughout the country for arrested sex workers and their clients.

Approved and issued by the National People’s Congress, this law prohibits marriage and
childbearing for people with an STI before it is treated (including HIV/AIDS).

Approved by the State Council and issued by the Ministry of Health and distributed to
relevant ministries, it outlines the guiding principles, policy, objectives and measures
governing AIDS prevention and control in China.

These State Council promulgated compulsory procedures reinforce the above mentioned
1990 decision. Drug users are forcibly sent to rehabilitation camps. Those who resume
drugs after the compulsory treatment are sent to “reeducation-through-labor centers”
administered by judicial departments, where they are forced to undergo treatment side by
side with “reeducation through physical labor.” Chinese drug control policy is very strict
and drug related crimes are severely punished. China has promulgated more than 30
relevant laws, statutes and regulations in the building of its anti-drug legal system.

1996: The “Regulations on the Management of Blood Production” based on the “Law
of the People’s Republic of China on the Prevention and Control of Infectious
Diseases” (according to term definitions, “blood production” here means plasma
production)
Approved and issued by Ministry of Health, this regulation stipulates the rules for
plasmapheresis, including the eligibility of plasma donors, requirement for sites where
plasma can be collected, and it determines the channels between specific sites where plasma is collected and processing factories. It stipulates that testing of blood will be done both at plasma collection sites and in factories. All plasma collection sites and factories in the country should receive re-confirmation of their certificate prior to the end of June 1997. Non-compliance with the regulations should be severely punished. These regulations meant to prevent the transmission through plasma and blood products of large numbers of hepatitis and HIV cases.

1998: The "Law on Blood Donation"
Approved and issued by the National People’s Congress, this law stipulates that commercial blood donations for medical purposes are prohibited and that all blood collected for medial transfusions should be from voluntary donors.

1998: Regulation on “Principles for HIV/AIDS Education and Communication”
Nine ministries and agencies including the Propaganda Department of the Communist Party jointly issued this regulation. It describes the basic principles for HIV/AIDS education and communication through the mass media, and other channels, and includes related policies, key messages for HIV/AIDS prevention and condom promotion among high-risk groups. This regulation stipulates that condom possession should not be taken as a proof of prostitution.

1998: Booklet on HIV prevention messages
“Ten key messages on HIV/AIDS prevention” that should become the basis for education of the general public through the mass media.

This State Council issued plan clarifies strategies for the prevention and control of HIV/AIDS between 1998 through 2010. It requests governments at different levels to integrate HIV/AIDS prevention and control programmes into the local plans for social, economic development and investment. The plan emphasizes the prominent role of prevention and health education. It also sets out indicators for activities, and goals for the
education of the public. It lists requirements for government departments at all levels, and aims at maintaining the AIDS epidemic at relatively low levels.

1999: A Document on “Broadcasting the 1999 Kunming Horticulture Exhibition and Public Advertisement on HIV/AIDS Prevention and Control” was issued by the National Bureau of Broadcasting, Film and Television.

In 1999, the Central Radio Station, CCTV and provincial Bureaus of Broadcasting, Film and Television were requested to consider HIV/AIDS prevention education as one of the two priority topics for propaganda through the mass media. It emphasizes that the “China Medium and Long Term Plan for HIV/AIDS Prevention and Control” clearly indicates that “mass media such as central and local newspapers, radio stations, television, etc. should integrate HIV/STI education into their own work plans. Programmes with information on HIV/STI prevention should be broadcast on a regular basis through mass media.” Regular public HIV/STI health education messages through the mass media are considered an efficient method for preventing the HIV/STI epidemic from spreading. Mass media at all levels, and in all places should make their own plans for conducting HIV/STI prevention propaganda.

1999: “Principles for Management of People Infected with HIV and AIDS Patients”

The Ministry of Health issued the regulation and intended to protect people infected with HIV and AIDS patients, and to prevent the spread of HIV/AIDS. The regulation consists of various chapters: (1) HIV test confirmation and counseling; (2) Fight against discrimination and promotion of the rights of people living with HIV to study, work and receive social welfare (punishment by law is considered for people deliberately transmitting HIV); (3) Confidentiality of personal information related to people living with HIV and AIDS patients; (4) Provision of appropriate medical care to people living with HIV/AIDS; (5) Provision of education, support and social subsidy if needed; (6) Provision in prison environments of education, medical observation and medical treatment, if needed outside prisons; (7) Protection of HIV positive migrant laborers, who should not be sent back to their place of origin without appropriate reasons.

The State Council promulgated this plan of action on 25 May 2001, published by MOH in June 2001. The plan defines the working objectives for 2002 and 2005, highlights strategies for action in priority areas, lists essential resources including institutional, policy and financial needs. For instance, emphasis is put on guaranteeing blood safety, care and raising public awareness. In the area of care, by the end of 2002, at least 50% of people living with HIV/AIDS nationwide should have access to community and home care. At least 70% of hospitals at the county/city level should be capable to provide standardized services including HIV/AIDS diagnosis, treatment, counseling, prevention and care, while 50% of township health clinics should be able to provide counseling, prevention and care for HIV/AIDS and STI. By the end of 2005 these figures should reach 90% for counties, 75% for townships and 50% for premarital clinics. In the area of IEC, major national and provincial radio, TV and press are requested to broadcast or publish information messages related to HIV/AIDS/STI prevention and voluntary blood donation at least once a week.\(^\text{10}\)