

**CONTROLLING MOTHER-TO-CHILD
TRANSMISSION OF SYPHILIS AND HIV IN CHINA:

A COMPARATIVE POLICY ANALYSIS TO INFORM
PROMOTION OF POLITICAL PRIORITISATION FOR
ELIMINATION OF MOTHER-TO-CHILD
TRANSMISSION OF SYPHILIS**

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DEDICATION

For Peijun and Yoyo

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ABSTRACT

Despite a large and growing burden of mother-to-child transmission (MTCT) of syphilis in China, the problem languished on the national policy agenda prior to 2010 when the Ministry of Health first committed to eliminating the infection (by 2020). In contrast, MTCT of HIV became one of the country's foremost public health priorities in the early 2000s despite its relatively lower burden and less cost-effective interventions. Based on review of literature and policy-relevant documents, a puzzle was raised of why China responded contrastingly to MTCT of syphilis and MTCT of HIV, both of which shared a number of issue characteristics and can be eliminated by integrated interventions. To resolve the puzzle, this PhD study was conducted to identify those factors driving or hampering political prioritisation within the Chinese health policy arena, through investigating the two policy cases. Policy-relevant data were collected through stakeholder interviews, documentation review as well as observation of relevant activities, and analysed by using a nine-factor framework.

A set of highly interrelated factors were identified as accounting for the significant slowness in China's policy response to MTCT of syphilis. These factors include (1) relative neglect of the issue at global level; (2) dearth of international financial and technical assistances; (3) a poorly unified national policy community, (4) absence of capability political entrepreneurs to lead the initiative; (5) policymakers' insufficient understanding of the problem; (6) unclear policy alternatives; as well as (7) a prevailing negative framing of syphilis that resulted in serious stigmatisation. However, not all these factors functioned at subnational level of China, but whether or not and how MTCT of syphilis was prioritised at provincial and municipal levels was mainly influenced by performance of the local policy communities.

Drawing upon the findings, this study concluded with a set of recommendations for promoting political prioritisation for control of MTCT of syphilis and other neglected health issues in China. Special attention was given to how to maintain consistent political priority at multiple administrative levels in order for the country to eliminate MTCT of syphilis in the near future. In addition, the analytical framework was modified to advance its applicability in studying the Chinese health policy process.

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
China CARES	China Comprehensive AIDS Response
China CDC	Chinese Center for Disease Control and Prevention
CISDCP	China Information System for Disease Control and Prevention
CPC	Communist Party of China
CPPCC	Chinese People's Political Consultative Conference
DALY	Disability adjusted life year
DRC	Development and Research Center
EPS	Epidemic Prevention Station
FSW	Female sex worker
GDP	Gross domestic product
GARPR	Global AIDS Response Progress Reporting
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	Human Immunodeficiency Virus
IAD	Institutional analysis and development
MCH	Maternal and child health
MDGs	Millennium Development Goals
MOF	Ministry of Finance
MOH	Ministry of Health
MSM	Men who have sex with men
MTCT	Mother-to-child transmission
NCAIDS	National Center for AIDS Control and Prevention

NCMS	New Cooperative Medical Scheme
NCSTD	National Center for STD Control
NCWCH	National Center for Women and Children's Health
NGO	Non-governmental organisation
NPC	National People's Congress
PHCC	Patriotic Health Campaign Committee
PMTCT	Prevention of mother-to-child transmission
PRC	People's Republic of China
RPR	Rapid plasma reagin
SARS	Severe acute respiratory syndrome
SCWGA	State Council Working Group on AIDS
SDGs	Sustainable Development Goals
STD	Sexually transmitted disease
STI	Sexually transmitted infection
TPHA	<i>Treponema pallidum</i> haemagglutination assay
TPPA	<i>Treponema pallidum</i> particle agglutination assay
UCL	University College London
UEBMI	Urban Employees' Basic Medical Insurance
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNFPA	United Nations Population Fund
UNGASS	UN General Assembly Special Session
UNICEF	United Nations Children's Fund
URBMI	Urban Residents' Basic Medical Insurance
US CDC	U.S. Centers for Disease Control and Prevention
WCH	Women and children's health
WHO	World Health Organization

Chapter 1 Mother-to-child transmission of syphilis in China: has it been prioritised highly enough as it deserved?

“No other country has seen such a precipitous increase in reported syphilis cases in the penicillin era. In 2008, an average of more than 1 baby per hour was born with congenital syphilis in China ... A disease with social roots, syphilis has become a major scourge lurking in the shadows of a country that has rapidly ascended to the status of a global economic powerhouse.”^a

1.1 Introduction

In China, syphilis was eliminated in the 1960s but returned in the late 1970s alongside the country’s “reform and opening-up”.¹ Despite a massive and rapid increase in the reported incidence² as well as existence of cost-effective and feasible interventions,³ syphilis, particularly mother-to-child transmission (MTCT) of the infection was neglected on the national policy agenda for decades. In contrast, MTCT of HIV became one of the country’s foremost public health priorities in the early 2000s despite its relatively lower burden⁴ and less cost-effective interventions.⁵ The result has been that, by 2011, more than two-thirds of the potential cases have been avoided.⁶ Although the two maternally transmitted infections are closely linked and can be prevented by integrated interventions, the significant slowness in the policy response to MTCT of syphilis may have contributed to the shockingly high incidence. Based on comparison of the two policy cases, a puzzle is presented of why China responded so differently to the two similar issues, given that epidemiological and technical evidence was not always translated into political priorities.

It was not until 2010 that the Ministry of Health (MOH) of China issued the *2010-2020 Plan for Syphilis Control and Prevention*⁷ indicating, for the first time, political commitment to combating MTCT of syphilis, particularly through the dual elimination with MTCT of HIV. The effective control of MTCT of syphilis can be achieved not

^a Tucker, J. D., Chen, X.-S. & Peeling, R. W. Syphilis and social upheaval in China. *N. Engl. J. Med.* **362**, 1658–1661 (2010).

only when the decision-makers are convinced of the inherent imperative of conquering it with MTCT of HIV simultaneously, but also when higher level of political priority is afforded to it at both national and subnational levels. Herein, this PhD study is carried out to resolve the puzzle about health policy making in China, through identify those factors accounting for the contrasting policy responses to MTCT of syphilis and MTCT of HIV. It is hoped that findings of the study can provide lessons for promoting political prioritisation for control of MTCT of syphilis, in order for China to move towards the elimination goal.

This chapter presents the background of the study, through reviewing published literature, open-access reports, and policy documents. It starts with an overview of the global burden of MTCT of syphilis, the availability and effectiveness of existing interventions, as well as international and national initiatives to control the infection. It then reviews the resurgent burden of MTCT of syphilis in China since the late 1970s, as well as political and programmatic responses to the epidemic at both national and subnational levels.

The second half of the chapter compares the conditions of MTCT of syphilis and MTCT of HIV in China, the two of which have been recently targeted for dual elimination both by the World Health Organization (WHO) and Chinese Government. A number of characteristics of the two issues (including disease burden, risk factors, feasibility and cost-effectiveness of interventions, as well as delivery pattern of health care services etc.) are described and compared to discover similarities and differences. Following that, China's policy responses to both epidemics are compared, with particular focus on timing, existence and level of policies and plans, resource allocation, as well as coverage of prevention of mother-to-child transmission (PMTCT) programmes. Based on the comparisons, the main research question of this PhD study is raised, followed by an overview of how it is going to be addressed in the succeeding chapters.

1.2 Why prioritise control of MTCT of syphilis globally?

1.2.1 The emerging global burden

Syphilis is a sexually transmitted infection (STI) caused by the spirochetal bacterium *Treponema pallidum* subspecies *pallidum*.⁸ Depending in which of the four stages (primary, secondary, latent, and tertiary) it presents, syphilis causes various signs and symptoms including diffuse rash, genital ulcers, gummas, and neurological and cardiac symptoms.⁹ It has serious effects on reproductive and neonatal health, and increases the risk of HIV acquisition and transmission.^{10,11}

Syphilis infection in the mother, if left untreated, can be transmitted to the fetus either transplacentally or during passage through the birth canal by contact of the newborn with a genital lesion.¹² Work by the WHO and others has shown that untreated or inadequately treated syphilis in pregnant women can result in a spectrum of adverse outcomes of pregnancy in 53.4 – 81.8% of cases,¹³ including late abortion (after 16 weeks) or stillbirth in 25% of cases, neonatal death in 11%, prematurity or low birth weight in 13%, and infants with clinical evidence of syphilis infection in 20%.^{14–18} Compared to women without syphilis, the risks of adverse pregnancy outcomes are significantly higher among those who are infected but receive no treatment.¹³ In addition, later when the offsprings of infected mothers are over the age of 20 years, a range of neurological disorders which respond poorly to treatment, such as parietic neurosyphilis, may occur.¹⁹

On basis of multinational antenatal surveillance data, global estimates of syphilis in pregnancy and associated adverse outcomes have been calculated. Globally, in 2012, 930,000 pregnant women were estimated to be actively infected with syphilis, and a total of 350,000 adverse pregnancy outcomes (including 143,000 early fetal deaths (22 to 28 week) and stillbirths (> 28 week), 62,000 neonatal deaths, 44,000 preterm or low birth weight infants, and 102,000 syphilis-infected newborns) were estimated to be attributed to maternal syphilis.²⁰ Comparing these estimates with those calculated for the year of 2008,²¹ the global burden has decreased by approximately 40% over the four-year period which can be due to the reduction in syphilis prevalence levels in general populations and some improvement in the coverage of interventions for screening and treatment of pregnant women.²⁰ Nonetheless, the global burden of

disease associated with MTCT of syphilis is believed to have at least similar, and sometimes higher mortality than other important vertically transmitted infections, for example, HIV and malaria in pregnancy are estimated to cause 250,000 - 290,000²² and 200,000²³ perinatal deaths every year, respectively.

1.2.2 Interventions to control MTCT of syphilis

MTCT of syphilis is preventable and treatable, and the adverse pregnancy outcomes caused by maternal syphilis infection are predominantly avoidable.^{19,24} Preventing maternal transmission of syphilis relies upon a number of strategies: preventing and treating syphilis among adults (including among women of reproductive age), meeting the unmet demand for contraception, encouraging early antenatal care, and screening all pregnant women through a blood test, with penicillin treatment for those found to be infected.^{14,25,26} In a systematic review of effectiveness of interventions to improve antenatal syphilis screening, Hawkes et al. concluded that the syphilis-attributable incidence and perinatal death could be reduced by 50% by implementing a comprehensive intervention package.¹⁸ Components of the package included encouragement of early antenatal care entry, decentralisation of screening and treatment, improvement of clinical management, and strengthening of health system. In a correspondence letter to Hawkes and colleagues, Chen and Yin further pointed out the importance of introducing premarital syphilis screening in addition to the antenatal interventions to prevent MTCT of syphilis in syphilis prevalent countries.²⁷ In 2002, Walker DG and Walker GJ argued for a task-force by international health agencies such as the WHO and the Global Fund to Fight AIDS, Tuberculosis and Malaria, which gives a focused but flexible commitment to dealing with MTCT of syphilis, rather than one relying only on traditional antenatal screening and treatment.¹⁹

Screening tools for maternal syphilis

Because most syphilis-infected pregnant women are asymptomatic, serological screening should be conducted to identify the infected cases.²⁸ There are a wide range of diagnostic tools for syphilis. Traditional laboratory diagnosis in adults is based on initial use of a non-treponemal screening test which detects antibody to reaginic antigen in both *Treponema pallidum* and some human tissues, such as the Venereal Disease Research Laboratory (VDRL) test and the rapid plasma reagin (RPR) test. If

a screening test is positive, the serum is then tested by a confirmatory treponemal test, using an antigen of *Treponema pallidum*, such as the *Treponema pallidum* haemagglutination assay (TPHA) and the *Treponema pallidum* particle agglutination assay (TPPA).²⁵ A combination of the two types of tests is recommended.

Non-treponemal tests are sensitive, simple, and cheap. However, they are not available in many low-resource settings because the tests cannot be done on whole blood and require a microscope or rotator for processing. According to the WHO, up to one-third of women attending antenatal care clinics are not tested for syphilis.²⁹ Additionally, misinterpretation of the results may occur because reading of the result is subjective. Treponemal tests require expensive laboratory equipment and technical expertise, and are therefore available in reference laboratories only. Although being theoretically more specific than non-treponemal tests, treponemal tests may give false-positive results as well.^{25,28}

At the present time, the above tests can be replaced by several highly sensitive and specific rapid treponemal tests, which use whole blood, require minimal training, no equipment or special storage, release results in a few minutes, and cost less than US\$ 1 per person. These tests offer the possibility of on-site screening for pregnant women in primary health care settings or in areas where laboratory services are not available, and are affordable in all but the poorest countries.^{24,25,28} In a recently published review of the impact of introducing rapid syphilis testing on HIV and syphilis testing uptake in antenatal care, Swartzendruber and colleagues demonstrated that rapid syphilis testing may increase antenatal syphilis and HIV screening rates, and contribute to the improvements of antenatal care in low and middle income countries.³⁰ In addition, dual rapid testing methods for detecting syphilis and HIV antibodies simultaneously have been developed in recent years, which have shown encouraging results in laboratory evaluation, such as simplicity of procedure, ease of interpretation of results, and acceptable sensitivity and specificity.³¹

Treatment for maternal syphilis

Treatment for maternal syphilis is simple.²⁵ When given in early stages of pregnancy, a single dose of penicillin, which is widely available in primary health care settings and costs only US\$ 0.5, can effectively prevent vertical transmission of syphilis to the

fetus.^{24,32,33} Although very few studies have assessed the risk of serious adverse events due to penicillin treatment in pregnant women, no reports of adverse reactions were found. Galvao et al. concluded in their systematic review that the risk of treating pregnant women with benzathine penicillin to prevent MTCT of syphilis is very low and does not outweigh its benefits.³⁴ Penicillin treatment is even effective for pregnant women with syphilis of long duration, of whom the pregnancy outcomes after treatment are similar to those of uninfected women.¹⁷ As mentioned earlier, the new rapid diagnostic tests for syphilis make treatment of maternal syphilis more effective and increase the rate of women treated.²⁵ Because the new tests can be performed immediately on-site, they allow infected pregnant women to be identified and treated at a single visit to the primary health care settings. Not only prevent maternally transmitted syphilis infection in the babies, but these interventions also benefit the pregnant women and allow their potential partners to be traced and treated as well.²⁵

Tests and treatment for MTCT of syphilis

Many infected infants are asymptomatic at birth. The interpretation of seroreactive tests for syphilis in infants younger than 15 months is complicated because of the transplacental transfer of maternal immunoglobulin G (IgG) to the fetus. Therefore serodiagnosis of MTCT of syphilis is not recommended for infants born to seropositive mothers.²⁸

Current treatment regimens for MTCT of syphilis, as recommended by the WHO, involve administration of parenteral penicillin every day for 10 days. In order to ensure that the infant receives the full course of treatment, hospitalisation is often recommended.³⁵ Researchers has estimated that the medical costs of managing an infant with infected with syphilis are approximately US\$ 6,738 per case in the US, and the hospital cost for syphilis-infected newborns is more than three times larger than that for healthy infants.^{36,37}

It is clear that diagnosis and treatment for MTCT of syphilis are significantly more difficult and resource-consuming compared to diagnosis and treatment of maternal syphilis. Thus, preventing MTCT of syphilis through screening all pregnant women for syphilis and treating those found to be infected is far preferable.²⁵

Cost-effectiveness of the interventions

Using various modelling approaches, economic evaluations have indicated that antenatal screening for syphilis is cost-effective in both developed and developing countries,^{3,38–40} and even at very low prevalences, e.g. 1%.^{14,40} In a cost-effective analysis of scaling up screening and treatment of maternal syphilis, Kahn et al. systematically examined eight varied country scenarios, and found that integrating syphilis screening and treatment into antenatal care would be cost saving or highly cost-effective in all the generic country case scenarios. Countries with high maternal syphilis prevalence, low current service coverage, and high cost of health care would likely benefit most.³⁶ In addition, converting MTCT of syphilis cases into disability adjusted life years (DALYs), the cost per DALY saved has been estimated to be between US\$ 3.97 and US\$ 10.56, which is lower than the costs per DALY saved by other widely implemented interventions.²⁵

Importance of early access to antenatal care

Because transmission of maternal syphilis to the fetus usually happens between the 16th and 28th week of pregnancy, infected women who were identified and treated promptly in the first or second trimester of their pregnancy were more likely to have a healthy infant, compared to those who sought health care in the third trimester.^{18,25,26} For instance, Newman et al. have estimated that, globally, approximately 66% of syphilis-related adverse pregnancy outcomes occurred in mothers who were neither tested nor treated for syphilis during antenatal care.²¹ The WHO has recommended that all pregnant women be screened for syphilis at first antenatal care visit within the first trimester and again in late pregnancy. At delivery, women who for some reasons do not have test results should be tested/retested. Women testing positive should be treated and informed of the importance of being tested for HIV infection. Their partners should also be treated and plans should be made to treat their infants at birth.²⁵

Early antenatal care attendance is likely to be increased by, as suggested by Hawkes et al., strengthening health system and improving quality of antenatal care services, screening syphilis and HIV during women's first visits to antenatal care, and community engagement programmes to enable pregnant women to seek antenatal care as early as possible.²⁶

1.2.3 Control of MTCT of syphilis and MDGs and SDGs

Table 1-1: A comparison of the MDGs and SDG 3 targets related to maternal and child health and HIV/AIDS control, and how the elimination of MTCT of syphilis would have contributed and will contribute to the achievement of these goals and targets

The MDGs	The SDG 3: Ensure health lives and promote well-being for all at all ages	Contribution of the elimination of MTCT of syphilis
<p>MDG 4: Reduce child mortality</p> <p>Reduce by two thirds, between 1990 and 2015, the mortality rate in children under 5 years</p>	<p>Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births</p>	<p>Mortality rates among children under the age of 5 years can be reduced as a result of reduced incidences of low birth weight, perinatal death and maternally transmitted syphilis infection.</p>
<p>MDG 5: Improve maternal health</p> <p>Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio</p>	<p>Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births</p>	<p>Maternal health can be improved as a result of fewer spontaneous abortions due to maternal syphilis infection and reduced incidence of syphilis in pregnant women.</p>
<p>MDG 6: Combat HIV/AIDS, malaria, and other diseases</p> <p>Halt by 2015, and begin to reverse, the spread of HIV/AIDS</p>	<p>Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</p>	<p>Integration of PMTCT of syphilis and PMTCT of HIV allows mothers and infants to be tested and, where necessary, treated for both HIV infection and syphilis. Because STIs, including syphilis, increase women's chances of being infected with HIV, screening and treatment for syphilis can help reduce the risk of HIV transmission.</p>
	<p>Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes</p>	<p>The elimination of MTCT of syphilis is based upon universal coverage of antenatal syphilis screening and treatment for those tested positive, integration of PMTCT of HIV and syphilis services, improvement of clinical management, and strengthening of health system etc., therefore can significantly contribute to the achievement of universal access to sexual and reproductive health services.</p>

In 2001, all member states of the United Nations (UN) adopted the Millennium Development Goals (MDGs), including three goals (MDG 4, 5, and 6) that directly relate to maternal and child health and HIV/AIDS control by the target date of 2015.²⁴ In 2015, the MDGs were replaced by the Sustainable Development Goals (SDGs).

SDG 3 set more ambitious targets (Target 3.1, 3.2, and 3.3) compared to MDG 4, 5, and 6, and included an additional target relating to universal access to sexual and reproductive health services (Target 3.7). A comparison of the MDGs and the SDG 3 targets and how the elimination of MTCT of syphilis would have helped and will help achieve these goals and targets are shown in Table 1-1.

1.3 Global initiatives for controlling MTCT of syphilis

1.3.1 The WHO plan of action for the elimination of congenital syphilis

In 2007, on the basis of consultation with experts and regional disease control officials around the world,⁴¹ the WHO and global partners launched an initiative for the global elimination of congenital syphilis as a public health problem, outlined in the *Global Elimination of Congenital Syphilis: Rationale and Strategy for Action*.²⁵ Because case definitions for congenital syphilis vary widely by country, the specific targets of the global initiative are that:

- At least 90% of pregnant women will be screened for syphilis by 2015
- At least 90% of syphilis-seropositive pregnant women be treated appropriately by 2015

The elimination strategy for country-level action has been developed on the basis of a series of principles: *a country-driven process* to adapt the strategy and action plan to local situations; *an integrated approach* to link elimination of congenital syphilis with existing maternal and newborn health services, and other services such as PMTCT of HIV; *a rights-based approach* to ensure that all individuals have the knowledge to protect themselves against infection and access to high-quality health care; cross-sectional *partnership and collaboration* between governments, donors, and communities to optimise use of scarce resources. The strategy for elimination of congenital syphilis consists of four pillars, each has corresponding specific objectives of actions to be undertaken. The four pillars are as following:

1. Ensure advocacy and sustained political commitment for a successful health initiative;

2. Increase access to, and quality of, maternal and newborn health services;
3. Screen and treat pregnant women and partners; and
4. Establish surveillance, monitoring and evaluation systems.

In 2012, the WHO issued the *Investment case for eliminating mother-to-child transmission of syphilis* for resource allocation and to raise awareness of the burden of untreated maternal syphilis infection (especially in low- and middle-income countries) and the proposed solutions.⁴² The Investment Case shows that MTCT of syphilis can be eliminated in affected countries through relatively simple, inexpensive, and technically feasible interventions including syphilis screening of all pregnant women and treatment of those found to be infected.⁴³ Expert further consensus suggested that, whenever possible, the term “mother-to-child transmission of syphilis” should be used in place of “congenital syphilis” in order to increase awareness of the full spectrum of adverse outcomes, including stillbirths, neonatal deaths, premature and low birth weight infants, as well as deformities at birth.⁴⁴

1.3.2 The initiative for the dual elimination of MTCT of HIV and syphilis

Globally, the strong response to the HIV epidemic has resulted in PMTCT of HIV services being strengthened in even the most remote areas.⁴⁵ However, as Peeling has argued, although large sums of donor funds and sufficient resources have been made available for PMTCT of HIV programmes, many of the infants in whom HIV is prevented may die of syphilis.⁴⁶ According to the WHO, combining antenatal syphilis screening with a similar programme (such as antenatal HIV or malaria testing) is more cost-effective than providing one test alone because counselling of pregnant women, taking of blood, and testing could be done at the same visit to antenatal care.²⁵ Such integration is the key to long-term and sustainable programmes, and is necessary to improve the efficacy and quality of maternal and child health (MCH) services.⁴⁷ In 2008, the WHO and its partners (including UNAIDS and UNICEF) jointly committed to the dual elimination of MTCT of HIV and syphilis by introducing surveillance of syphilis in pregnancy within the Global AIDS Response Progress Reporting (GARPR) System to monitor progress through three core indicators - syphilis testing, seropositivity, and treatment.⁴⁸ International and regional goals have been set, whilst new screening methods such as dual rapid syphilis and HIV tests on a single device

have been introduced.³¹ The rationale for the dual elimination is that it would/will help to improve a broad range of maternal and child health outcomes and therefore directly contributed/contribute to the achievement of MDG 4, 5, and 6 and SDG 3.⁴⁷

Since then, countries have been scaling up programmes towards the dual elimination. Activities and initiatives in regions such as the Americas,⁴⁹ Asia and the Pacific,⁵⁰ and Africa⁵¹ have drawn attention to the need for internationally standardised processes and criteria to assess and validate elimination of both infections. Such criteria and processes are necessary for both progress assessment towards the global health goals set for 2015 and planning beyond 2015. In 2014, in partnership with UNAIDS, UNFPA, UNICEF and other partners, the WHO issued the *Global Guidance on Criteria and processes for Validation: Elimination of Mother-to-Child Transmission of HIV and Syphilis*,⁴⁷ indicating commitment to establishing a comprehensive global structure and developing tools for validation of the dual elimination. This document provides a description of the global targets and indicators, and outlines minimum global processes and criteria for validation of elimination of MTCT of HIV and syphilis. The minimum elimination impact targets are:

- For HIV, ≤ 50 new paediatric infections per 100,000 live births annually and a transmission rate of either $< 5\%$ in breastfeeding populations or $< 2\%$ in non-breastfeeding populations;
- For syphilis, ≤ 50 cases of congenital syphilis per 100,000 live births annually.

Specific levels of service delivery also need to be met to accomplish elimination of MTCT of HIV and syphilis. There are four process targets, including:

1. Antenatal care coverage (at least one visit) of $\geq 95\%$;
2. Coverage of HIV and/or syphilis testing of pregnant women of $\geq 95\%$;
3. Antiretroviral treatment coverage of HIV-positive pregnant women of $\geq 90\%$;
4. Treatment of syphilis-seropositive pregnant women of $\geq 95\%$.

Compared to the targets set by the plan of action in 2007,²⁵ the new global criteria has raised the standards for coverage of antenatal syphilis testing and treatment uptake of mothers living with syphilis by 5%, respectively. An important component of the

validation structure is the global validation advisory committee which includes 17 members representing different international agencies and countries including China.⁵² In 2015 and 2016, a small number of countries (including Thailand, Cuba, Armenia, Belarus and Moldova) have been validated by WHO for eliminating MTCT of both syphilis and HIV.^{53,54}

1.3.3 National responses to the global initiatives

Since the launch of the global initiatives, national political environments for control of MTCT of syphilis are, seemingly, more supportive than ever before. More countries have improved surveillance of maternal syphilis, introduced universal syphilis screening in pregnancy, as well as integrated PMTCT of HIV and syphilis into routine antenatal care.^{20,55,56} The number of countries complying with the GARPR reporting requirements has increased by almost 40% from 88 in 2008 to 122 in 2012.²⁰ The U.S. Centers for Disease Control and Prevention (US CDC) has reframed a reduction in MTCT of syphilis incidence as a “winnable battle” for which major progress can be made with sustained, coordinated effort.⁵⁷ Nonetheless, the overall progress of achieving universal coverage of interventions for maternal syphilis is patchy, and in some regions of the world the picture was even worse now than in 2008. Although more countries are now complying with the GARPR reporting requirements, the actual ability to deliver interventions has shown less promising progress. The newest estimation showed that around 64% of syphilis-positive pregnant women never receive any syphilis-screening during pregnancy (of whom, 16% do not receive any antenatal care at all), and in sub-Saharan Africa (where 63% of all pregnant women who are syphilis seropositive live), the proportion of women not screened for syphilis in pregnancy actually increased by 49% during the period 2008-2012.²⁰

The relatively low availability of the interventions for controlling MTCT of syphilis in many countries can be due to insufficient political and financial resources to address the need, particularly for maternal syphilis screening and antenatal care strengthening.⁵⁶ The result has been that antenatal syphilis screening remains an additional rather than a normal part of the routine antenatal care.⁵⁸ At implementation level, expansion of maternal syphilis screening coverage is affected by costs or other barriers, religious or cultural norms, lack of political or commercial support, or

inertia.⁵⁹ A study of the scale-up process of antenatal syphilis screening in Mozambique has revealed that effective programmes are related to adequate workforce, facilities, coherent systems of care, community involvement, donor management, advocacy, and leadership.⁶⁰ In addition to a heavy disease burden, and unavailable interventions in some regions, the lack of capable individuals who lead promotion of the idea is one of the current main barriers for MTCT of syphilis control to be well implemented in many settings.⁵⁹ Moreover, the global and national initiatives may not have been translated into effective, functioning and sustainable interventions because the perspectives of some stakeholders have been neglected during programme planning.⁶¹

Consequently, maternally transmitted syphilis is still a major cause of infant mortality, causing an unacceptably large number of fetal and neonatal deaths,⁶² particularly in some low-income countries.^{13,20}

1.4 Why prioritise control of MTCT of syphilis in China?

1.4.1 Re-emergence of the syphilis epidemic

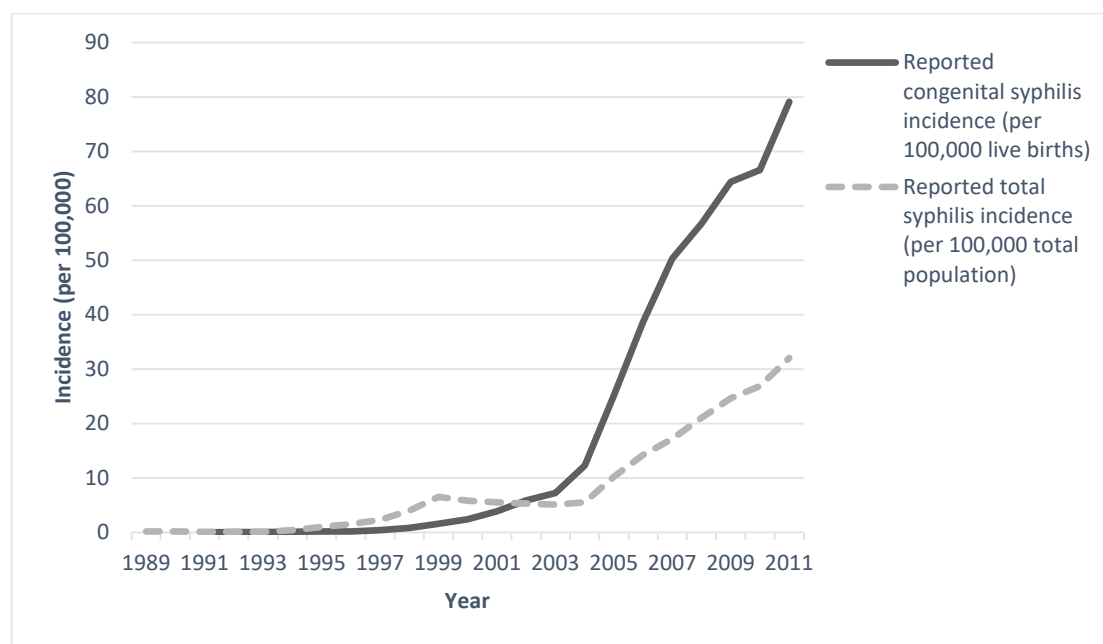
Syphilis was once officially announced eliminated in China in 1964.⁶³ The first resurgent case was reported in 1979.¹ The economic and social reforms started in 1979 have not only opened China to the western world, but laid foundation for the re-emergence of sexually transmitted diseases (STDs), including HIV, as well.^{1,64–66} The transition to a market economy has resulted in big income gaps and a climate for extramarital relationship such as commercial sex.^{2,65,67,68} Condom use rate, however, is low particularly among middle- and low-tier female sex workers (FSWs)^b who are poorly covered by current syphilis surveillance and interventions in China.⁶⁹ In addition, higher risk sexual behaviour is also observed among the enormous population of rural-to-urban migrants.⁷⁰ This world's biggest mobile population, which exceeds 200 million individuals, has provided a basis for expansion of localised syphilis outbreaks to the whole country.^{65,71} Migrant workers, who are mainly sexually active men, make up much of the clients of low-tier FSWs,⁷² and may transmit the

^b Middle-tier FSWs included those who solicited in hair salons or barber shops, massage parlors, foot bathing shops, roadside shops, guesthouses, or roadside restaurants; and low-tier FSWs included those who solicited on the street or public outdoor places.

infection to their wives when they return home.⁷³ Another sizable high risk group is men who have sex with men (MSM). In the 2000s, syphilis infection rates has increased most among MSM (4.5% per year) in China, followed by FSWs (1.4% per year) and drug users (1.0% per year).⁷⁴ According to surveillance data, in 2010, 2.9% of sex workers, and 8.4% of MSM were syphilis positive in China. The infection rates in the same groups in Vietnam were only 1.6% and 1.1%, respectively, in 2009.⁶⁵

From 1989 to 1998, a massive 20-fold increase in syphilis incidence was reported by a national surveillance programme. As shown in Figure 1-1, the incidence rose from 0.2 per 100,000 in 1989 to a peak of 6.5 per 100,000 in 1999. After floating between 5.1 and 5.8 per 100,000 per year from 2000 to 2005, the reported data started to grow sharply again and reached 32.04 per 100,000 in 2011.⁷⁵

Figure 1-1: Reported total syphilis incidence (per 100,000 total people) and congenital syphilis incidence (per 100,000 live births) in China, 1989 - 2011. Source: surveillance and case report data from the National Center for STD Control (NCSTD), Chinese Center for Disease Control and Prevention (China CDC)



At local level, syphilis is disproportionately prevalent in areas possessing higher gross domestic product (GDP) - usually the Southeast coastal provinces and cities with large migrant populations (e.g., Guangdong Province, Zhejiang Province, Shanghai etc.).^{1,65,75} In Guangdong Province, the pioneer of China's economic reform located on the Southern coast, syphilis is currently the second most commonly reported

communicable disease,⁷⁶ with the number of newly reported cases each year bigger than that of the entire European Union.⁶⁵

1.4.2 Prevalence of syphilis among pregnant women

Literature has shown that the prevalence of syphilis among pregnant women is relatively stable across China. Lin et al. reviewed 19 serologic prevalence studies published from 2000 to 2005 and reported a median maternal syphilis prevalence of 0.45% with an interquartile range from 0.29% to 0.6%.⁷⁴ According to a case-control study on the risk factors for maternal syphilis, pregnant women infected with syphilis were more likely to be unmarried and less educated, have multiple sex partners, change sex partner in the past 12 months, previously undergo induced abortion, and have a history of STDs.⁷⁷ In a study of 27,150 rural pregnant women screened for syphilis, Yang et al. also suggested that older pregnant women (age ≥ 31) and those with a history of adverse pregnancy outcomes were at higher risk of syphilis infection.⁷⁸ Rural pregnant women in China are at increasing risk of getting STIs either because they migrate to cities themselves or their migrant husbands come back home and transmit the infections to them through unprotected sex.^{73,79}

Limited studies can be found regarding the rates of syphilis-related adverse pregnancy outcomes in China. In a recent study of 417 pregnant women screened positive for syphilis in Shenzhen, Guangdong Province, 34 (8.2%) infants with maternally transmitted syphilis and 103 (24.7%) cases of other adverse pregnancy outcomes (including preterm birth, low birth weight, huge baby, fatal loss, and early neonatal deaths) were observed.⁸⁰ In this particular study, the possibility of maternal syphilis resulting in the adverse pregnancy outcomes (including giving birth to an infected infant) is positively associated with maternal baseline titres of non-treponemal antibodies, stage of maternal syphilis infection, length of time between the end of the first treatment and childbirth, gestational week at treatment, and fathers' cocaine use and syphilis infection status. Zhu et al. have conducted a prospective cohort study of 535,537 pregnant women in Shanghai from 2002 to 2006 and reported 1,471 maternal syphilis cases and 334 MTCT of syphilis cases during the period. Among the infected pregnant women who were inadequately treated, rates of MTCT of syphilis, fetal death, neonatal death, and major birth defects were 50.8%, 30.4%, 11.0%, and 3.8%,

respectively, while the corresponding rates among those adequately treated were much lower as 12.5%, 5.5%, 0.56%, and 0.46%, respectively.⁸¹

1.4.3 The alarming MTCT of syphilis burden since the early 1990s

Large and rapid growth in the reported incidence

Along with the resurgence of syphilis in China, MTCT of syphilis has been a growing public health problem since the early 1990s. Chen et al. first reported from a national surveillance programme that the incidence of congenital syphilis^c in China had increased rapidly from 0.01 cases per 100,000 live births in 1991 to 19.68 cases per 100,000 live births in 2005, with an average yearly rise of 71.9%.¹ Then the incidence continued to rise to nearly 80 cases per 100,000 live births in 2011 (Figure 1-1).²

Debates around the accuracy of case report data

The accuracy of congenital syphilis incidence data has been widely questioned in China. Issued in 1995, the *National Standards for Syphilis Diagnosis and Treatment (GB 15974-1995)* set complex diagnostic criteria for congenital syphilis, including a group of symptoms and signs, detection of *Treponema pallidum* in skin and mucosal lesions, and positive serological test results.⁸² These criteria have proved difficult to operationalise, consequently, diagnosis of congenital syphilis in China have been mainly based on treponemal or non-treponemal serological tests or a mixture of the two methods, both of which, as discussed earlier, may release false-positive results. According to the NCSTD, the lack of an operationalisable national case definition of congenital syphilis has significantly affected the accuracy of case report data.⁷⁵

Despite the doubts about over-reporting of congenital syphilis cases, many scholars and experts insist that there is serious underestimation of the syphilis epidemic that the national surveillance programme only catches 10% of total syphilis infections.⁷⁴ In order to assess the accuracy of case report data, 26 sentinel sites for STDs were established across the country in the 1990s. These sentinel sites have reported a much higher syphilis incidence compared to that reported by the national surveillance

^c The Chinese National Infectious Diseases Reporting System only captures cases diagnosed with congenital syphilis infection. Other adverse outcomes caused by vertically transmitted syphilis infection, such as stillbirths, are not reported.

programme.¹ Under-reporting of syphilis cases may result from the low capacity to provide syphilis testing and lack of formal reporting mechanisms in many private STI clinics, where a large proportion of syphilis patients seeking health care from.⁸³ The China Health and Family Life Survey, a national stratified probability sample of 3,426 individuals, found that among those who had symptoms consistent with an STI, only 23% presented to a formal public clinic, 8% attended a private clinic, 15% directly purchased medicine and 52% did nothing.⁸⁴ These data are consistent with the national Chinese census in the year 2000, which found that many Chinese people with STIs never present to public STI clinics.⁸⁵

For MTCT of syphilis, additionally, lack of standard diagnostics and misdiagnosis on the one hand and the current case definition in China, which does not include syphilis-related outcomes such as stillbirths, on the other hand may have caused substantial underestimation of the epidemic.⁸⁶ Based on data on age-stratified fertility, female adult syphilis cases, and empirical syphilis transmission rates, Tan et al. has estimated a total of 2,079 new MTCT of syphilis new cases in Guangdong Province in 2009. Given the officially released case report data of 1,567 in the same year, the reporting rate of the national case report system was estimated to be 75.5%.⁸⁷

1.5 China's response to the resurgent MTCT of syphilis epidemic

1.5.1 Programmatic efforts

Promising pilot programmes at local level

Initiated by local government and institutions, a few pilot programmes to prevent MTCT of syphilis have been proved to be effective in the 2000s. Shenzhen, a special economic zone located on China's South coast, pioneered a programme to provide free syphilis screening for all pregnant women and treatment for those tested positive and their infants since 2002. Up to 2011, the programme has screened a total of 2,077,362 pregnant women and intervened 7,668 maternal syphilis cases. The incidence of MTCT of syphilis of the city decreased significantly from 115 cases per 100,000 live births in 2002 to 10 cases per 100,000 live births in 2011, with the proportion of those having adverse pregnancy outcomes (including spontaneous abortion, premature delivery, and stillbirth) reduced from 27.3% in 2003 to 8.2% in 2011.⁸⁸ In Shanghai

Municipality, China's biggest city and financial centre, all pregnant women presented at a hospital or antenatal clinic were screened for syphilis since the early 2000s. According to Zhu et al., the rates of syphilis-related pregnancy outcomes (including congenital syphilis infection, fetal death, neonatal death, and major birth defects) were significantly lower among infected pregnant women who received complete treatment compared to those who were incompletely treated.⁸¹

The cost-effectiveness of the Shenzhen PMTCT of syphilis programme has been evaluated on basis of programme data and estimated risks of adverse pregnancy outcomes attributable to untreated maternal syphilis. According to Hong et al., detecting a pregnant woman infected with syphilis and averting a single case of MTCT of syphilis costs US\$ 770 and US\$ 4,391, respectively. When converted into DALY, every DALY could be saved by inputting US\$ 215 at a maternal syphilis prevalence of 0.52%. The benefit to cost ratio was estimated to be 21.76 in 2005, which would not be substantially affected even if there was a marked reduction in the prevalence of maternal syphilis.³

Uneven coverage of antenatal interventions

Despite the rapid increase in MTCT of syphilis incidence and the WHO's recommendation on screening all pregnant women for syphilis and treatment for those tested positive, coverage of antenatal syphilis screening varied across China and is particularly lacking in rural areas. As mentioned earlier, most well-designed pilot programmes were carried out in economically developed areas, such as Shenzhen and Shanghai. The provision of free antenatal syphilis screening in the Shenzhen programmes has resulted in a high screening rate which increased from 89.9% in 2002 to 97.4% in 2011.⁸⁸ It was also estimated that more than 95% of pregnant women in Shanghai had a syphilis screening test during pregnancy.⁸¹ The situation in less developed areas, however, is quite different. In a study of 109 medical facilities (76/109 were hygiene stations at township level) in 14 less developed cities in Guangdong Province, only 56.9% of the pregnant women were screened for syphilis in 2008. And among those who were not screened, 39.4% attended clinics with syphilis screening capacity but were not tested. If looking at the 76 hygiene stations only, where most neonates in China are delivered, the antenatal syphilis screening rate further dropped to only 11.8%.⁸⁹

Chen and Cohen argued, in their reply to Senanayake's question regarding China's increased MTCT of syphilis incidence, that even in places where the service is available, the screening coverage cannot be guaranteed due to reasons such as failure to attend antenatal care, cost, inconvenience, beliefs about testing being unnecessary, and fear of being diagnosed.⁹⁰ In addition, the stigma associated with high-risk behaviours has severe impact on the effectiveness of syphilis prevention programmes in China.⁹¹ As Tucker et al. have stated, in a social structure such as China, which culturally values dignity and social relationship, stigma and the isolation it leads can largely discourage the wide-spread of syphilis-screening efforts.² Even when diagnosed with syphilis, some pregnant women do not accept the diagnosis and refuse treatment.⁹⁰ Cheng et al. reported a treatment rejection rate of 2.7% among 2,019 pregnant women with syphilis infection. These mothers declined treatment either because they did not believe that they had syphilis or they worry about the side effects of treatment.⁹²

As mentioned earlier, effectiveness of antenatal interventions can be ensured by treating maternal syphilis adequately and early enough during the pregnancy, ideally during the first trimester.²⁶ Among the 92 MTCT of syphilis cases detected during the Shenzhen programme from 2003 to 2005, 58 (63.0%) were born to women who never attended antenatal care and presented at health facilities directly for delivery.⁹² However, the rate of pregnant women screened for syphilis in their first semester was low in China, especially in rural areas. In a screening programme among 27,150 pregnant women in rural areas of Guangdong Province, more than half of the pregnant women had their first syphilis screening in the third trimester or closely to their due dates, some even after delivery.⁷⁸

Point-of-care rapid syphilis testing for pregnant women

The relative lack of antenatal syphilis screening coverage in low-resource areas, especially in rural areas of China, can be strengthened by introduction of point-of-care rapid syphilis testing methods.²⁹ This new testing method, which provide results within 30 minutes, has demonstrated excellent specificity and sensitivity during comparison of local rapid test results and national reference laboratory results in China.⁹³ Using point-of-care rapid syphilis testing methods, Yang et al. have conducted an antenatal syphilis screening programme in 74 health facilities in rural areas of Guangdong

Province. According to the authors, point-of-care rapid testing enables expansion of antenatal syphilis screening to rural health facilities that serve large numbers of pregnant women of China.⁸⁹ As Tucker has argued, point-of-care rapid syphilis testing can help move beyond the traditional behaviour-based framework to focus on settings and time, allowing interventions specific to epidemic phases and promoting integrated systems of testing, treatment and referral.⁹⁴

Partner notification

Tucker and Cohen further suggested that partner notification and partner services may facilitate syphilis control by decreasing reinfection rate among couples in China. However, an effective partner service system including notification, testing, and follow-up is lacking in current China as a result of serious social stigma associated with syphilis infection.⁶⁶

1.5.2 National policy response

Policies related to PMTCT of syphilis prior to 2010

A timeline of China's national policies and major political events related to control of the resurgent MTCT of syphilis epidemic is presented in Table 1-2. It is shown that, prior to 2010, most national syphilis-related policies were focused on the contents of guidelines for standardisation of clinical services, particularly for high-risk populations.⁸² Although syphilis was included in Class B of infectious disease by the *Law of the People's Republic of China on Prevention and Treatment of Infectious Diseases* adopted on February 21, 1989,⁹⁵ syphilis screening was only recommended for individuals who have multiple sex partners, unprotected sex or partners with a history of STDs,⁸² as well as premarital couples (before 2003 when the compulsory premarital check-ups was abolished).²⁷ Pregnant women, however, were not a priority for screening.⁸² In an evaluation of the syphilis policies before and during the 2000s, Tucker et al. have argued that China's syphilis control policies should extend beyond the clinical setting because many high-risk patients were still not screened for syphilis as a result of disconnection between policy and practice. Based on the evaluation, a spatiotemporal framework (targeting high-risk times and places) was suggested for China to scale up syphilis screening nationally, with particular emphasis on serologic testing for pregnant women in high-burden regions.⁹⁴

Table 1-2: China's major policies and key events related to control of the resurgent MTCT of syphilis epidemic

Year	Department	Policy & Event	Content regarding PMTCT of Syphilis
1989/02	National People's Congress	Law of the People's Republic of China on Prevention and Treatment of Infectious Diseases. The President of the People's Republic of China Order No. 17 中华人民共和国传染病防治法（中华人民共和国主席令第 17 号）	<ul style="list-style-type: none"> Syphilis was categorised under Class B of infectious diseases governed by this law
1994/10	National People's Congress	Law of the People's Republic of China on Maternal and Infant Health Care. The President of the People's Republic of China Order No. 33 中华人民共和国母婴保健法（中华人民共和国主席令第 33 号）	<ul style="list-style-type: none"> Article 8: Premarital medical examination shall include the examination of "target infectious disease" "Target infectious diseases" refer to AIDS, gonorrhoea, syphilis and leprosy specified in the Law of the People's Republic of China on the Prevention and Treatment of Infectious Diseases, as well as other infectious diseases that are medically considered to have adverse effects on marriage and reproduction
1995	Ministry of Health	National Standards of the People's Republic of China: Diagnostic Criteria and Management of Syphilis (GB 15974-1995) 梅毒诊断标准及处理原则（GB 15974-1995）	<ul style="list-style-type: none"> Prompt and standardised clinical services for maternal syphilis cases Diagnostic criteria and standardised management of MTCT of syphilis
2003/08	State Council	Marriage Registration Regulations. State Council Decree No. 387 婚姻登记条例（国务院令 第 387 号）	<ul style="list-style-type: none"> Abolished compulsory premarital check-ups including syphilis testing
2010/06	Ministry of Health	China 2010-2020 Plan for Syphilis Control and Prevention. Division of Disease Control Document [2010] No. 52 中国预防与控制梅毒规划（2010-2020 年）（卫疾控发〔2010〕52 号）	<ul style="list-style-type: none"> Integration of screening and treatment for maternal syphilis into routine antenatal care and programmes for PMTCT of HIV Early detection and standard treatment for maternal syphilis Management of infants born with MTCT of syphilis

2010/09	Ministry of Health	<p>2010 Guidelines for Management of HIV Control Programmes. Division of Disease Control Document [2010] No. 149</p> <p>2010 年艾滋病防止项目管理方案（卫办疾控发〔2010〕149 号）</p>	<ul style="list-style-type: none"> • To jointly control MTCT of HIV, syphilis, and hepatitis B • To provide integrated HIV, syphilis and hepatitis B testing for at least 80% of pregnant women in programme counties, and free interventions for at least 90% of the infected pregnant women and their infants • The central government to finance the joint prevention programme in 1,156 counties, and interventions for pregnant women infected with HIV, syphilis, and hepatitis B, and their infants in all the counties across the country
2010/11	State Council	<p>An executive meeting chaired by Premier Wen Jiabao⁹⁶</p>	<ul style="list-style-type: none"> • To expand PMTCT of HIV and syphilis to the whole country • PMTCT of syphilis was first discussed and prevention tasks assigned at State Council level
2011/02	Ministry of Health	<p>Implementation Guidelines for Prevention of Mother-to-Child Transmissions of HIV, Syphilis and Hepatitis B</p> <p>预防艾滋病、梅毒和乙肝母婴传播工作实施方案</p>	<ul style="list-style-type: none"> • First national guidelines for PMTCT of syphilis • First special fund from the central government finance for PMTCT of syphilis
2011/06	Ministry of Health	<p>Working Guidelines for Antenatal Care. Division of Women and Children's Health Document [2011] No. 56</p> <p>孕产期保健工作规范（卫妇社发〔2011〕56 号）</p>	<ul style="list-style-type: none"> • To provide serologic syphilis testing as routine test for pregnant women present at an antenatal clinic for the first time and during childbirth • To set antenatal syphilis testing rate and treatment acceptance of infected pregnant women as indicators to evaluate antenatal care • To set infection rate of maternal syphilis as indicator to measure health status of pregnant women
2011/07	State Council	<p>Outline for the Development of Chinese Women & Outline for the Development of Chinese Children. State Council Document [2011] No. 24</p>	<ul style="list-style-type: none"> • To include PMTCT of syphilis into routine women and children's health services, with same emphasis as PMTCT of HIV

		中国妇女发展纲要和中国儿童发展纲要（国发〔2011〕24号）	
2011/08	Ministry of Health	Report on Women and Children's Health Development in China (2011) 中国妇幼卫生事业发展报告（2011）	<ul style="list-style-type: none"> Defined HIV/AIDS and syphilis as "major diseases threatening the physical and mental health of women in China"
2011	State Council	China the 12 th Five-Year Action Plan for HIV/AIDS Containment and Prevention. State Council Document [2012] No. 4 中国遏制与防治艾滋病“十二五”行动计划（国办发〔2012〕4号）	<ul style="list-style-type: none"> Defined HIV/AIDS and syphilis as major public health problems that should be given equal attention To include PMTCT of syphilis into routine women and children's health and reproductive health services To include syphilis testing into voluntary premarital medical check-ups
2012/11	Ministry of Health	Regulations on STD Control and Management. Ministry of Health Decree No. 89 性病防治管理办法（卫生部令第89号）	<ul style="list-style-type: none"> First legislation for PMTCT of syphilis Article 22: All health facilities providing antenatal care and childbirth services should provide pregnant women with syphilis screening test, consultation, necessary diagnosis, treatment and referral services, in order to prevent MTCT of syphilis Article 32: All health facilities providing STDs diagnosis and treatment, antenatal care and childbirth services should treat syphilis infected pregnant women promptly, and provide their infants with necessary preventive treatment, follow-up, and syphilis-related testing services, and treat and refer those diagnosed with MTCT of syphilis according to the national guidelines

The 2010–2020 syphilis control plan

It was not until 2010, twenty years after the first resurgent MTCT of syphilis case was reported.¹ In June 2010, the MOH issued the *China 2010-2020 Plan for Syphilis Control and Prevention* and indicated the national government's commitment to control of MTCT of syphilis for the first time,⁷ including:

- Integration of screening and treatment for maternal syphilis into routine antenatal care and existing PMTCT of HIV programmes;
- Early detection and standard treatment for maternal syphilis; and
- Management of infants born with MTCT of syphilis.

The ten-year syphilis control plan set an overall target for the virtual elimination of MTCT of syphilis in China, i.e. to reduce the reported congenital syphilis incidence to below 15 per 100,000 live births by 2020. This target is more strict compared to the global elimination target (≤ 50 cases of congenital syphilis per 100,000 live births) set by the WHO.⁴⁷ It also set several stepwise but ambitious benchmarks for antenatal syphilis screening coverage and intervention uptake among infected mothers and their infants, which are shown in Table 1-3.

Table 1-3: Stepwise benchmarks for PMTCT of syphilis set by the *China 2010-2020 Plan for Syphilis Control and Prevention*

Variable	By 2015		By 2020	
	Urban	Rural	Urban	Rural
Antenatal syphilis screening coverage	80%	60%	90%	70%
Syphilis-positive mother treatment uptake	90%	70%	95%	80%
Infant entry into care	90%	80%	95%	85%
Infant one-year follow-up	80%		85%	
Yearly reported congenital syphilis incidence	Less than 30 cases per 100,000 live births		Less than 15 cases per 100,000 live births	

The integrated PMTCT of syphilis and HIV programme

Since the launch of the ten-year syphilis control plan in 2010, China's research and policy making for PMTCT of syphilis has become more aggressive than ever before. A number of strategies have been recommended by scholars in order to scale up the interventions particularly in rural areas, such as improving antenatal care services and integrating syphilis screening with other routine health services.⁷⁸ According to Owusu-Edusei et al., adding syphilis screening to an existing antenatal HIV screening programme can be substantially more cost-effective than HIV screening alone in

China.⁹⁷ The country has made great achievements in HIV control and prevention among pregnant women since the early 2000s,^{98,99} representing important opportunities to scale up antenatal screenings for other infections such as syphilis.

In September 2010, the MOH issued the *2010 National Guidelines for Management of HIV Control Programmes*,¹⁰⁰ which announced the provision of free integrated PMTCT of HIV, syphilis, and hepatitis B services in 1,156 counties (out of 2,853 counties in total) across China, based on a special fund of more than 800 million yuan (approximately US\$ 120 million) annually has been allocated by central government to support the integrated programme – a figure 10 times larger than the 2009 budget allocation for PMTCT of HIV alone.¹⁰¹ In November 2010, Premier Wen Jiabao chaired a State Council executive meeting, deploying tasks to expand integrated PMTCT of HIV and syphilis services to the whole country.⁹⁶ In response to the State Council tasks, in February 2011, the MOH issued the *Implementation Guidelines for Prevention of Mother-to-Child Transmissions of HIV, Syphilis and Hepatitis B*,¹⁰² which was China's first guidelines for PMTCT of syphilis in history. The guidelines recommend that all pregnant women should be tested for HIV and syphilis at their first visit to antenatal care and those tested positive should receive adequate treatment to prevent vertical transmission. Later, in November 2012, the provision of PMTCT of syphilis services (including antenatal syphilis screening, consultation, diagnosis, treatment and referral services) by all health facilities providing antenatal care and childbirth services was further legislated by the *Regulations on STD Control and Management (Ministry of Health Decree No. 89)*.¹⁰³

The integration of PMTCT of syphilis and HIV interventions has proved feasible and effective in China, facilitating achievement of the goal of eliminating MTCT of syphilis by 2020. As reported by Wang and colleagues, sufficient government funding has ensured a rapid increase in coverage of antenatal syphilis screening, that the annual number of pregnant women tested for syphilis doubled from 7.3 million in 2011 to 12.6 million in 2013.⁵⁵

1.5.3 Challenges ahead

Despite the ambitious policy goals set and innovative control plans launched for PMTCT of syphilis, and some improvement in the coverage of antenatal syphilis screening, syphilis is still affecting a great number of pregnant women in China. As Dou and colleagues have reported, more than half of the pregnant women with syphilis who delivered in China in 2013 (n=15,884) received no treatment or were treated close to their due dates.¹⁰⁴ In addition, implementation of the dual elimination goal was hindered by a range of factors, including insufficient integration of service resources, unclear roles of participating sectors and the lack of a formal mechanism to coordinate between these sectors, as well as the absence of agreed guidelines for both service delivery and programme evaluation.¹⁰⁵

The effective control of MTCT of syphilis in China relies not only upon the availability of effective and affordable interventions which are effective in controlling this preventable condition, but also on the “political will” to ensure that these interventions are incorporated into policies and that programme coverage is equitable and universal. This requires the ten-year syphilis control plan to be followed by a series of ongoing, transparent, and operable policy initiatives and combine with institutional and investment actions in order to achieve the policy targets over the long term. In addition, although the ten-year syphilis control plan has set more strict targets for reducing MTCT of syphilis incidence compared to the WHO criteria,⁴⁷ some of its service delivery benchmarks (i.e., coverage of syphilis testing and treatment uptake) are lower than the WHO standards (Table 1-4). Based on a decision analytical model established on the basis of published literature and surveillance data, Tan et al. suggested that the antenatal screening benchmark set by the ten-year syphilis control plan is too low to meet the overall target for congenital syphilis elimination by 2020, and, the effective control of MTCT of syphilis in China can only be achieved by increasing antenatal syphilis screening rate (e.g., to increase antenatal syphilis testing rate from the baseline of 57% to 95% can result in 106 more congenital cases averted per 100,000 live births). Several other strategies, including earlier antenatal screening, increased treatment completion, and improved test sensitivity and specificity, are also necessary for China to achieve the global and national goals.⁸⁷

Table 1-4: Comparison of the PMTCT of syphilis targets set by the *China 2010-2020 Plan for Syphilis Control and Prevention (2010)* and the *Global Guidance on Criteria and processes for Validation: Elimination of Mother-to-Child Transmission of HIV and Syphilis (2014)*

	China by 2015	China by 2020	Global by 2015
Targets for elimination of MTCT of syphilis	≤ 30 congenital syphilis cases per 100,000 live births	≤ 15 congenital syphilis cases per 100,000 live births	≤ 50 congenital syphilis cases per 100,000 live births
Coverage of syphilis testing of pregnant women	80% in urban area 60% in rural area	90% in urban area 70% in rural area	≥ 95%
Treatment of syphilis-seropositive pregnant women	90% in urban area 70% in rural area	95% in urban area 80% in rural area	≥ 95%

Researchers have also suggested other barriers for scaling up control of MTCT of syphilis in China, such as the serious social stigmatisation towards syphilis patients which prevent them from seeking health care,¹⁰⁶ a lack of trained health workers, inadequate clinical infrastructures, and limitations within the health system especially in rural areas.⁹¹ In addition, the testing and treatment rates are negatively affected by patients' mistrust of test results, physicians, and hospitals - a historical problem in China due to people's belief that doctors sell more diagnostics and treatments than necessary to make money for their own.^{107,108}

1.6 How is MTCT of syphilis compared to MTCT of HIV in China?

1.6.1 Similarities and differences of the issue characteristics

Given that PMTCT of syphilis has received significantly increased attention from the Chinese Government through being integrated with PMTCT of HIV, and global and national goals for the dual elimination have been set, this section sets out to compare the two issues, in terms of their characteristics and policy actions taken to deal with the problems. It is believed that the comparison results can help improve understanding of the background and generate the basic assumption of this PhD study.

As presented earlier, China's resurgent syphilis and HIV epidemics have been driven by a number of social and behaviour changes caused by the profound economic and

social changes over the past a few decades, including changes in sexual attitudes and behaviours, increased mobility of the population, as well as increased privatisation in the health care system with underdevelopment in the public health infrastructure. Maternal syphilis and HIV infections, according to scholars, are collectively associated with a number of risk factors, including the infected pregnant women being unmarried, unemployed and migrating during the index pregnancy, having multiple sex partners, as well as with a history of diagnosed STDs.^{77,104,109} The result has been that MTCT of syphilis and MTCT of HIV can be avoided by similar strategies, including prevention of adult infection through combined interventions to reduce transmission, for example, condom promotion and counselling for safer sexual practices, as well as promotion of early antenatal screening and treatment. Being mainly financed by the national and/or local government, the above interventions are distributed through the country's hierarchy of centers for disease control and hierarchy of MCH – in programme areas, pregnant women are offered single or both tests at their first visit to antenatal care and treatments are provided to syphilis- and HIV-positive mothers and their infants.^{55,81,88} This suggests that PMTCT of syphilis and PMTCT of HIV in China are more likely to share rather than compete for same health care distribution channels and resources.

On the other hand, the disease burden associated with MTCT of HIV is far lower compared to MTCT of syphilis. For instance, in 2009, only 57 MTCT of HIV cases were reported in China⁴ while the reported number of MTCT of syphilis cases was an order of magnitude larger as 10,757.¹¹⁰ A direct result of this has been that PMTCT of HIV is less cost-effective than PMTCT of syphilis. According to national and international health economists, averting a single case of MTCT of HIV costs approximately US\$ 7,420 in China,⁵ compared with US\$ 4,391 to avert an MTCT of syphilis case.³ In addition, the cost per DALY saved by integrated HIV and syphilis screening in antenatal care (US\$ 359) is more than 15 times lower than that by HIV screening only (US\$ 5,636).⁹⁷

In summary, the strong social and epidemiological connections between MTCT of syphilis and MTCT of HIV, their similar interventions and integration of the interventions being highly cost-effective, shared health care distribution channels, along with the recently established global and national goals for the dual elimination,

not only suggest the necessity and feasibility of an integrated approach to control both infections simultaneously in China, but also made the two policy cases highly correlated and suitable for a comparative study. The following section provides a comparison of the political attention paid and resources allocated to PMTCT of syphilis and PMTCT of HIV. Other issue cases, for example, hepatitis B, are not considered for the comparison because the epidemiological and social characteristics as well as feasibility of interventions are too different.

1.6.2 The contrasting policy responses

As presented earlier, MTCT of syphilis, despite an alarmingly high incidence, was not targeted by the Chinese Government for elimination until 2010. As shown in Table 1-5 which presents a comparison of the national policy actions and resources allocated for PMTCT of syphilis and PMTCT of HIV, special funding was not allocated and technical guidelines were not developed for PMTCT of syphilis prior to 2010. Of note, the first sentinel site for MTCT of syphilis was established in 1991,¹ which was six years earlier than that for MTCT of HIV.¹¹¹ Moreover, as mentioned, a few programmes which effectively prevented MTCT of syphilis by screening all pregnant women for syphilis and treating syphilis-positive mothers and their infants were initiated in the early 2000s by local health departments.^{81,88} However, despite these early efforts, and in the face of published evidence, no policy-level action was taken to tackle MTCT of syphilis prior to 2010. The national government was committed to controlling MTCT of syphilis 10 years later than MTCT of HIV. The result has been a lack of mechanisms and processes to ensure high coverage of screening and treatment for maternal syphilis. Intervention coverage data were not available during this period, but the rapid rise in incidence¹ suggests coverage was probably low.

In contrast, MTCT of HIV was high on China's policy agenda since the early 2000s despite the relatively smaller number of cases reported annually and less cost-effective interventions. The national government was first committed to control of MTCT of HIV in 2001 by issuing the *Action Plan on HIV/AIDS Prevention and Containment (2001-2005)* in 2001.¹¹² One year later, a pilot programme was successfully implemented in Henan Province by the MOH with external support,⁹⁹ based on which the *Working Guidelines for Prevention of Mother-to-Child Transmission of HIV* was

generated in 2004. The working guidelines set targets to screen 85% of pregnant women for HIV and provide comprehensive care for 90% of infected mothers and their infants.⁹⁸ Government leadership at all levels, as a key component part of China's response to HIV/AIDS, was significantly strengthened in 2004 by establishment of the State Council Working Group on AIDS (SCWGA).¹¹³ In 2006, PMTCT of HIV became one of the country's foremost priorities when provision of the services was ratified by the *Regulations on Prevention and Treatment of HIV/AIDS*¹¹⁴ - the first State Council decree directly aimed at controlling HIV/AIDS - which set clear accountabilities for provision of the services for multiple-level government as well as related health institutions. In 2009, it was further included in the Major Program of Public Health Services of the new health system reform aiming at promotion of equal access to basic public health services.^{6,115}

In addition, PMTCT of HIV started to received sustainable funding through being included in government annual budget planning in 2003.⁴ Financial inputs from the central government gradually increased from 6.43 million yuan in 2003 to 82.66 million yuan in 2009, facilitating expansion of the national PMTCT of HIV programme from one pilot in 2002 to 453 county-level divisions in 2009.^{4,99} It has been estimated that, in areas covered by the national PMTCT of HIV programme, 77% of MTCT of HIV cases have been avoided.⁶ The rate of MTCT of HIV fell significantly from 33% in the early 2000s to 9.1% in 2009.⁴ By the end of 2010, more than 13.9 million pregnant women have received HIV counselling and testing services in the programme areas,¹¹⁶ with an overall antenatal HIV testing rate exceeded 85%.⁶

Table 1-5: Comparison of political attention and resources allocated for PMTCT of syphilis and PMTCT of HIV in China, 1991-2010

	PMTCT of syphilis	PMTCT of HIV
1991-2000	<p>First sentinel site established in 1991¹</p> <p>National Standards of the People's Republic of China: Diagnostic Criteria and Management of Syphilis (GB 15974-1995) issued by the MOH in 1996, recommended syphilis screening for high risk groups⁸²</p>	<p>First sentinel site established in Yining, Xinjiang Province, in 1997¹¹¹</p>
2001-2009	<p>Effective PMTCT of syphilis programmes initiated by the health departments of Shenzhen and Shanghai in the early 2000s^{81,88}</p>	<p>Commitment to provision of PMTCT of HIV services first indicated in China Action Plan on HIV/AIDS Containment and Prevention (2001-2005) issued by the State Council in 2001¹¹²</p> <p>First pilot programme initiated in Shangcai, Henan Province, by the MOH in 2002⁹⁹</p> <p>Premier Wen Jiabao visited AIDS patients at Ditan Hospital, Beijing, on World AIDS Day in December 2003¹¹³</p> <p>The "Four Frees and One Care" policy initiated in 2003, indicating provision of free counselling, testing, and treatment to HIV-positive pregnant women and their infants¹¹³</p> <p>PMTCT of HIV included in government annual budget planning and 6.43 million yuan allocated from the central government finance in 2003⁴</p> <p>The SCWGA established in 2004¹¹³</p> <p>PMTCT of HIV integrated into China Comprehensive AIDS Response (China CARES), Working Guidelines for Prevention of Mother-to-Child Transmission of HIV issued by the MOH, and national working group for PMTCT of HIV established in 2004¹¹⁷</p> <p>Provision of PMTCT of HIV services ratified by Regulations on Prevention and Treatment of HIV/AIDS (the State Council Decree No. 457) in 2006,¹¹⁴ including:</p> <ul style="list-style-type: none"> • Integration of HIV/AIDS prevention into work of women and children's health to increase women's awareness • Provision of HIV testing and counselling for pregnant women in all health facilities • Provision of comprehensive PMTCT interventions for HIV infected pregnant women in all health facilities <p>China's Action Plan for Reducing and Preventing the Spread of HIV/AIDS (2006-2010) issued in 2006⁹⁸</p>

		<p>PMTCT of HIV Monitoring and Evaluating Guidelines issued by the MOH in 2006</p> <p>The “Prevention of Mother-to-Child Transmission Management Online Information Direct Reporting System” was activated in 2008⁴</p> <p>PMTCT of HIV was included in the Major Programme of Public Health Services by the MOH in 2009⁶</p> <p>The central government fund gradually increased to 82.66 million yuan and PMTCT of HIV programme expanded to 453 counties in 2009⁴</p>
2010	China 2010-2020 Plan for Syphilis Control and Prevention issued by the MOH in June 2010 ⁷	<p>National Guidelines for the Management of HIV Control Programmes issued by the MOH in September 2010,¹⁰⁰ indicating:</p> <ul style="list-style-type: none"> • the coverage of 1,156 counties-level divisions in all provinces • the provision of integrated HIV, syphilis and hepatitis B testing for over 80% of all pregnant women before 2015 • the provision of free treatment for at least 90% of the infected mothers and their infants before 2015 <p>Premier Wen Jiabao chaired a State Council executive meeting, deployed tasks for expansion of PMTCT of HIV and syphilis to the whole country in November 2010⁹⁶</p>

1.7 Chapter summary and discussion

This chapter first presented the epidemiological and technical evidence on the burden of MTCT of syphilis and effectiveness of existing interventions. Syphilis infection in the mother, when untreated, can result in a range of adverse outcomes of pregnancy in up to 80% of cases. However, these adverse outcomes can be avoided at a relatively low cost by screening all pregnant women with a blood test and treating those found to be infected. In recent years, there has been an upsurge in global and national interests in controlling MTCT of syphilis, closely aligned with the goal of eliminating MTCT of HIV.

This chapter then reviewed China’s resurgent MTCT of syphilis epidemic and tracked the national programmatic and policy responses to it. It revealed that, disappointingly, the epidemiological and technical evidence has not been translated into political priority prior to 2010. MTCT of syphilis was not a health policy priority despite a huge and growing burden over the past more than 20 years as well as existence of promising

pilot programmes at local levels. In contrast, MTCT of HIV rose more swiftly, higher and resolutely on the national policy agenda given its comparatively far lower reported burden and less cost-effective interventions. It was not until 2010 that the ten-year syphilis control plan was issued, indicating for the first time the national government's commitment to eliminating MTCT of syphilis, particularly through the dual elimination with MTCT of HIV. Although data on reduction in the congenital syphilis incidence is currently not available, the significantly improved coverage of antenatal syphilis screening underscores the importance of establishing and maintaining political commitment to scaling up the control nationally.

This chapter then identified a number of important characteristics shared by the issues of MTCT of syphilis and MTCT of HIV in China, including underlying risks and vulnerability, ease and feasibility of available solutions, and distribution pattern of the PMTCT interventions etc. Nonetheless, the national policy response to MTCT of syphilis was far more delayed than the response to MTCT of HIV, resulting in the huge difference in the programme coverage especially prior to 2010. Why is this? The likelihood that policymakers consider an issue to be worthy of sustained attention can be influenced by a range of features.^{118–121} For instance, some scholars interpreted the difficulty in controlling MTCT of syphilis as a consequence of a lack of “champions” – persons either from the political field or civil society who are explicitly responsible for achieving the goals of universal coverage of screening and treatment for maternal syphilis.^{59,62} Others attributed the inefficient responses to a popular perception among policymakers and public health experts that syphilis has been eliminated already, as well as a lack of “good evidence” showing the benefits of antenatal syphilis interventions in improving pregnancy outcomes, such as randomised control trials, to successfully attract political attention.¹²² However, there is an overall lack of evidence on how and why some health issues are prioritised higher than others by the decision-makers in China.¹²³

Herein, this PhD study is conducted to explore reasons for the contrast in China's policy responses to the two very similar health issues – i.e. how and why MTCT of syphilis languished on the national policy agenda whilst MTCT of HIV received intense policy and resource attention? According to health policy scholars, comparative analysis, especially of similar issues, can yield stronger study results

regarding the policy processes.^{124,125} In addition, despite the elimination goal set, implementation of the control of MTCT of syphilis is patchy in China and there is still a significant proportion of syphilis-positive mothers who are not adequately intervened at an early stage of pregnancy. It is hoped that the comparative analysis can also help identify the key areas of the policy cycle (at both national and subnational levels) which should be targeted in order for China to scale up PMTCT of syphilis interventions and operationalise the elimination goal set by the ten-year syphilis control plan.

1.8 Overview of the following chapters

In order to achieve a comprehensive understanding of the dynamics of prioritisation within the Chinese health policy arena, a comparative policy analysis of controlling MTCT of syphilis and MTCT of HIV in China is conducted. The succeeding Chapter 2 describes the main characteristics of China's health policy environment within which investigation of the contrasting cases is contextualised. Following that, Chapter 3 and 4 are mainly focused on the study itself, setting down the study aim and objectives, reviewing published literature to identify study challenges, selecting a conceptual framework to inform data analysis, and elucidating and justifying the research design and strategy adopted.

Given that MTCT of syphilis has received policy and resource attention at a couple of local levels many years before the national government first committed to controlling the infection, in addition to the national level investigation, the study also looks at the provincial and municipal levels in order to identify a full set of aspects of the Chinese health policy process. Applying the conceptual framework, Chapter 5 and 6 explore the most important factors driving political prioritisation of MTCT of syphilis and MTCT of HIV at national and subnational levels, respectively, with special attention given to the similarities and differences between different levels of findings. An additional factor beyond the original framework (i.e., issue framing), which is identified as key to political prioritisation in both cases, is further explored in Chapter 7. Drawing on a summary of the study findings, Chapter 8 concludes with a set of highly interrelated factors which functioned at both national and subnational levels of China to shape the level of political priority set for control of MTCT of syphilis and

assesses the prospects for improved practice. Finally, the thesis ends with a series of recommendations for enhancing political prioritisation for congenital syphilis elimination, as well as for control of other neglected health issues in China.

Chapter 2 The health policy environment in China

“All policies are shaped by historical, social, political, cultural and environmental influences. Understanding these influences enables greater understanding of the corresponding reform and policy environment...Health policy changes in China since 1949 can be seen to continue to reflect broader policy shifts or reform agendas.”^d

2.1 Introduction

The objectives of this chapter include: (1) to describe China’s health policy environment within which this PhD study is situated; and, more specifically, (2) to draw attention to those contextual factors that are likely to have had some influence on health policy making. This chapter first presents a brief description of China’s governing structure as well as functions of each state governing organ, followed by a historical overview of the main characteristics of the health policy environment in the three major political eras since the establishment of New China in 1949. It particularly focuses on those features which may have facilitated or hampered national attention on MTCT of syphilis. As such, it explores the dominant ideology, reform priorities, governmental accountabilities, and focusing events through their impacts on the policy process. Finally, the most outstanding issues within China’s health policy system, which may have had the largest impact on generation of policy and resource priorities for MTCT of syphilis, are identified.

2.2 The governing organs and system in China

China, officially the People’s Republic of China (PRC), is a sovereign state located in East Asia and exercises jurisdiction over 34 provincial level divisions (including 23 provinces, 5 autonomous regions, 4 centrally administered municipalities, and 2 special administrative regions).¹²⁶ Established on October 1st, 1949, it is a single-party state governed by the Communist Party of China (CPC), with its seat of government

^d Lin, V., Zhao, H., Yang, H. & Canaway, R. in *Health Policy in and for China* (eds. Lin, V., Guo, Y., Legge, D. & Wu, Q.) 294–317 (Peking University Medical Press, 2010).

in the capital city of Beijing.¹²⁷ China is the world's most populous country, with a population of 1.37 billion by the end of 2015,^e of whom approximately 50% live in rural areas.⁷¹

The state power of China is divided among several governing organs – the CPC, the National People's Congress (NPC), the State Council (synonymous with the Central People's Government), the national judicial organs (including the Supreme People's Court and the Supreme People's Procuratorate), the Chinese People's Political Consultative Conference (CPPCC), as well as the Central Military Commission.¹²⁸ As shown in Table 2-1, these governing organs are functioning jointly and on the basis of a vertical five-level structure: national, provincial, prefecture, county/district, and township.

Table 2-1: The five-level governing structure in China. Source: Zhao & Fang, 2010

Administrative Level	Communist Party	People's Congress	People's Government	People's Political Consultative Conference	Judicial System
National level	Central committee	National People's Congress	State Council	Central committee	Supreme People's Court and Supreme People's Procuratorate
Province/municipality /autonomous region	Provincial committee	Provincial People's Congress	Provincial people's government	Provincial committee	Provincial court and procuratorate
Prefecture	Prefecture committee	Prefectural People's Congress	Prefectural people's government	Prefecture committee	Prefectural court and procuratorate
County/district	County/district committee	County/district level People's Congress	County/district people's government	County/district committee	County/district court and procuratorate
Township	Township committee	Township People's Congress	Township people's government	Township deputies	Township judicial authorities

The CPC plays a leading role in establishing the foundations and principles of Chinese communism, mapping strategies for economic development, setting growth targets,

^e Source: Data from the National Bureau of Statistics of China.

and launching reforms. The CPC shapes China's politics and economy through the National Congresses (held every five years) and Plenary Sessions of the Central Committee (held every year), and through planning (i.e., the Five-Year Plans). In addition, the position of chairman of the Central Military Commission is usually held by the General Secretary of the CPC.¹²⁹

The NPC, held in Beijing every year, is the highest organ of state power.¹²⁸ Under China's current Constitution, the NPC is structured as a unicameral legislature, with the power to legislate, the power to oversee the operations of the government, and the power to elect the major officers of state.¹³⁰ With 2,987 members elected from local levels, the NPC is the world's largest parliamentary body.

The State Council is the highest executive organ of state power and state administration. It is chaired by the Premier and currently has 35 members, including 25 ministers and chairs of major governmental agencies.^{131,132} The State Council is responsible for carrying out the principles, laws and decisions adopted and enacted by the CPC and NPC. It also has the authority to issue ordinances and decrees to the ministries and local governing bodies (i.e., provincial, municipal, and prefectural governments, etc.).¹²⁸ Each year, the State Council reports the *Report on the Work of the Government* and annual government budget on the plenary sessions of the NPC and the CPPCC, which are then reviewed by all the NPC members and CPPCC delegates.¹²⁸

The CPPCC is an important organ of multi-party cooperation and political consultation (under the leadership of the CPC). Being outside the government framework, it consists of delegates from a range of political parties and organisations as well as independent members,¹³⁰ and provides a platform for broader political consultation and accountability.¹²⁸

China's development since 1949 can be viewed as going through three stages.^{128,133} The first stage (from 1949 to 1979) was industrialisation and characterised by planned economy to address the country's basic supply problems; the second stage (the 1980s and 1990s) was market cultivation (i.e., the economic reform) when decentralisation created autonomous entities and market incentives. The third stage (from 2001 to 2050)

aims at establishing a “people-centred” and “harmonious” society by deepening the social and economic reforms. The main characteristics of each political eras and their impact on health policy making are described in the following sections.

2.3 1949 - 1979: era of planned economy

2.3.1 Guiding policies for health improvement

At the foundation of the PRC in 1949, after nearly half-century’s civil war and war against Japan, the depleted country was in urgent need of reconstruction and there was a serious lack of resources.¹³³ The population of half a billion were mostly rural (80%) and in absolute poverty¹³⁴. The life expectancy of Chinese people in 1949 only stood at 35,¹³⁵ and infant mortality rate was shockingly high as 200 per 1,000 live births.¹³⁶ Therefore, a strong political system for social and economic development, as well as health improvement was integral to the new socialist regime.¹³³

From the early 1950s, the Central People’s Government (established in 1949 and synonymous with the State Council since 1954)¹³¹ worked jointly with the CPC to develop and adopt a series of fundamental initiatives for social and economic development – i.e. the Five-Year Plans¹²⁹. The First Five-Year Plan (1953 - 1957) signalled the adoption of socialist planned economy (a Soviet economic model) based on state ownership in the modern sector, large collective units in agriculture (people’s communes), and centralised economic planning.¹³³

On September 29th, 1949 (a couple of days before the formal establishment of the PRC), the CPPCC adopted the *Common Program*, in which Article 48 had stated to “promote national physical culture, develop medical and health care, as well as to protect the health of mothers, infants and children”.¹³⁶ In September 20th, 1954, the first Constitution¹³⁷ (adopted and enacted through the first session of the first NPC in Beijing) further declared the national government’s commitment to protect population health by stating:

“Working people in the PRC have the right to material assistance in old age, and in case of illness or disability. To ensure that working people can enjoy this right, the state provides social insurance, social

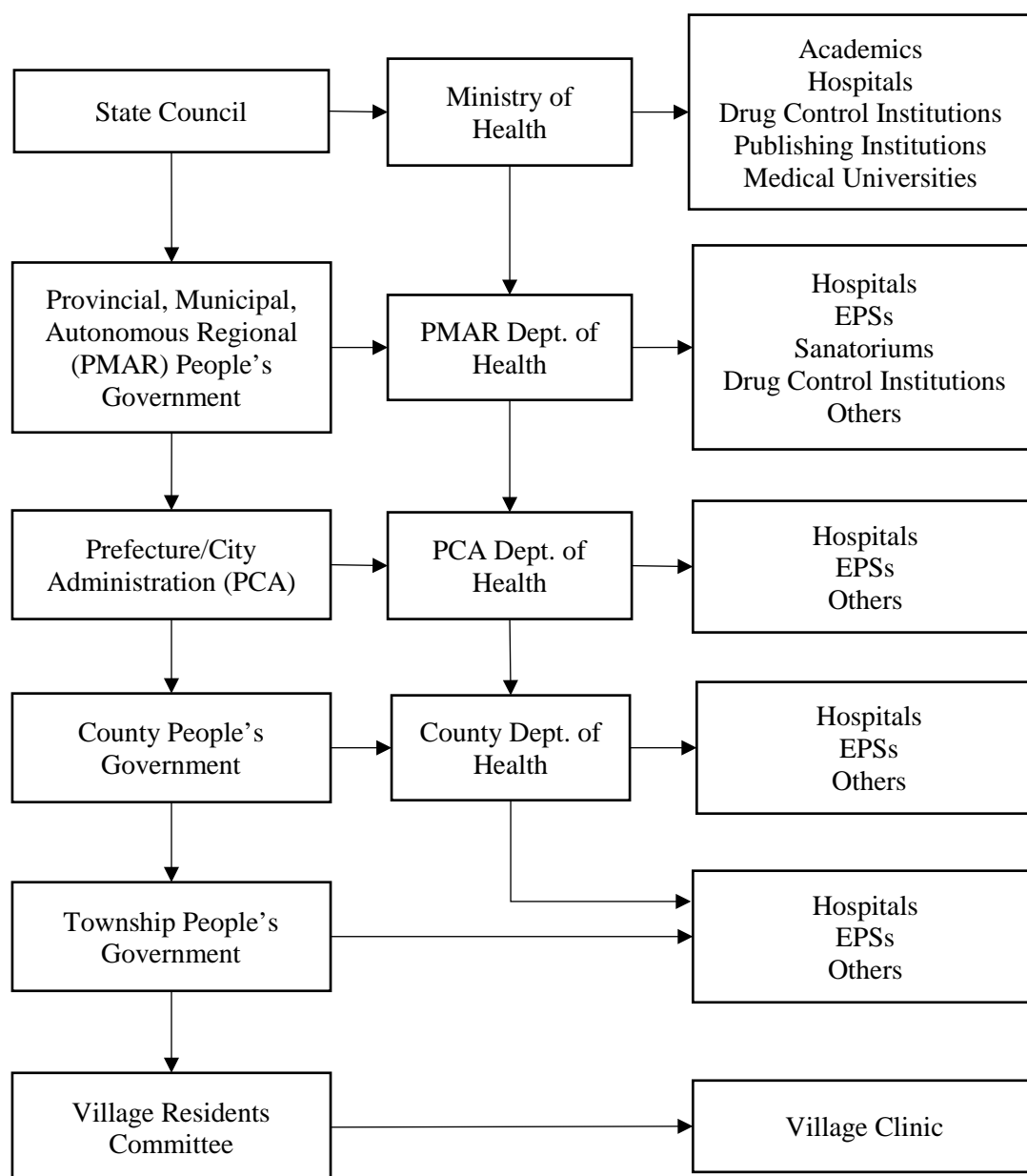
assistance and public health services and gradually expands these facilities.” (Article 93, Constitution of the People’s Republic of China, 1954)

2.3.2 Development of the health system

In the 1950s, a new Ministry of Health (MOH) was established along a health system modelled from the Soviet Union (Figure 2-1).¹³⁸ On the First National Health Conference convened in August 1950, an institutional framework of the health system was officially determined which comprised people’s governments, health departments, and a set of health care delivery institutions from national to village levels.¹³⁹ Despite that this system later experienced transformations such as decentralisation of township hospitals from county to township government and some institutions were reorganised (as presented later in this chapter), it has provided a relatively consistent basis for health governance and policy implementation over the ensuing decades.^{138,140} In 1958, a three-tier (central, provincial, and county-level) finance and taxation system was adopted, assigning shared responsibility for health planning between national and subnational governments.¹³³

In the 1950s, a new public health infrastructure was also established, comprising Epidemic Prevention Stations (EPSs) at provincial, city, and county levels. Fully funded by the government, the EPSs were responsible for preventing and controlling infectious diseases, monitoring implementation of infectious disease control policies, as well as reporting to and receiving guidance from the corresponding upper-level EPSs.^{140,141} By the end of 1965, EPSs had been established in all the 29 provinces, autonomous regions and municipalities, and parallel EPSs were run by the railway, state-owned enterprises, and mining industry. In addition, several special disease control institutions were established at national level to guide the control of plague, malaria, tuberculosis, leprosy, and sexually transmitted diseases (STDs) etc.¹⁴² From 2002 to 2003, these national health institutions and EPSs at all levels were gradually reorganised into a new vertical hierarchy of centers for disease control and prevention (CDCs).¹⁴⁰

Figure 2-1: China's health system structure, 1950 - 1979. Source: Liu & Wang, 1991



2.3.3 The Four Guiding Principles

The Four Guiding Principles for health care, articulated by Mao Zedong on the first National Health Conference in 1950 and formally adopted in 1952, had guided health policy making in China for decades.^{133,143} These principles are:

1. Serve the workers, peasants and soldiers (masses of labouring people);
2. Put prevention first;
3. Ensure equal importance to traditional Chinese medicine and Western medicine; and
4. Mobilise all sectors of people for health work.

The Four Guiding Principles have targeted the whole labouring population, therefore health care for workers and the vast rural population became China's top health policy priority.¹³³ Although health services in rural areas were basic, the population coverage was high (90% in 1976) and accessibility was significantly enhanced (approximately 85% of villages had a health clinic).¹⁴⁴ The famous "barefoot doctors", introduced in the late 1960s and 1970s, had made massive contribution to population health improvement through providing basic curative and preventive services such as use of basic medicines (including traditional Chinese medicines), immunisations, health education, and referral of patients to hospitals at township level or above.^{134,144,145}

2.3.4 The Mass Health Campaign and population policies

According to Mao, diseases were produced by an unhealthy society, and, therefore mass campaigns should be used to achieve the population health goals.¹⁴³ In the early 1950s, the new government started a national wide social movement - the Mass Health Campaign (still operating today) – which is headed by the Patriotic Health Campaign Committee (PHCC) at both national and subnational levels to operationalise the Four Guiding Principles.¹⁴⁶ The Mass Health Campaign aims to improve population health by enhancing water safety, environmental sanitation, personal hygiene, and maternal and child health.¹⁴⁷ A series of campaigns were launched,^{143,145,146} including the public campaign against the "four pests" (flies, mosquitoes, mice, and sparrows), the sanitation campaign, the mass health education programme, and the campaign against

sexually transmitted infections (STIs) etc. Effective implementation of the campaigns was facilitated by the popular ethic of “Serve the People”.¹³³

The mass STI campaign was launched by the communist government in response to the shockingly high burden of STIs in the newly established country (about 1.8% of the total population by 1950).^{64,143} The campaign included mass screening for STIs among high risk groups, provision of free antibiotics for STI patients, closure of brothels, re-education and re-employment of prostitutes, and mass propaganda.^{91,143} It is deemed as a great success in public health history, given the prevalence of STIs in China dropped rapidly within one decade.¹⁴³ In 1964, China officially announced the virtual elimination of STIs including syphilis.⁶³

In addition, Mao believed that a fast-growing population was the necessary productive force for China to become a great power¹⁴⁸ - “the more people, the stronger we are”.¹⁴⁹ In 1949, the PRC was established with a population of half a billion,¹³⁴ less than half of its current size. In order to achieve rapid population growth, Soviet Union’s experiences were applied and women were encouraged to have more babies, especially those who had given birth to 8 – 10 children were honoured as “hero mothers”.¹⁵⁰ Consequently, China’s population grew by 2% each year between 1960 and 1973.¹⁴⁹

2.3.5 Health improvement and demographic transition

Demographic transition refers to the transition from high birth and death rates to low birth and death rates as a country develops from a pre-industrial to an industrialised economic system.¹⁵¹ During the period of planned economy, China’s demographic transition has been more dramatic compared to other countries of similar per capita income. The increase of life expectancy from 35 in 1949 to 65.6 in 1980 represents the most rapid sustained increase in documented global history.¹³⁴ In addition, infant mortality rate has also declined significantly from 200 per 1,000 live birth in 1949 to 47 per 1,000 live births in 1980.¹⁴² The result has been a rapidly growing working-age population which contributed to China’s unprecedented economic growth over the past three to four decades.¹⁵²

China’s health improvement was also recognised by the international society and therefore shaped the global health agenda especially for the developing world. For

instance, the barefoot doctors scheme had a profound influence on the World Health Organization (WHO) Declaration of Alma-Ata in 1978, and China's experience in improving access to basic health care had inspired the WHO to launch the "Health For All by 2000" programme.¹⁵³

2.3.6 Characteristics of the health policy process from 1949 to 1979

According to Chinese health system scholars, during the era of planned economy, the national mood of China was revolutionary, and just as land reform and literacy were to be accomplished, preventable diseases were obstacles to be removed.¹⁴⁵ A main consequence is that health policy making being mostly non evidence-based and dominated by administrative practice and mass campaigns. The political leadership established health sector targets, health bureaucrats developed technical guidelines and monitored their practice, and local political leaders approved plans of the lower levels to ensure that the policy targets were met. As Meng and colleagues have suggested, the empirical decision-making can be explained by three main reasons, including policymakers' reluctance to use research evidence, critique of official policies being not welcomed, and lack of capability of health departments and institutions to conduct research and transfer the research results into policies.¹²³ In addition, during this period, China's media industry was under the authority of the CPC propaganda department, serving the mass campaigns only, with its freedom strictly limited.¹²³

2.4 The 1980s and 1990s: era of economic reform

2.4.1 The "reform and opening-up"

After Mao's death in 1976 and the ending of the Cultural Revolution, an interim government ruled for a short time. In 1978, Deng Xiaoping, canonised as the "general designer of China's reform and opening-up", came to power. Deng reemphasised the importance of practice (over pure theory), redefined the meaning of socialism in terms of "socialism with Chinese characteristics", and set the goal of modernisation (i.e. to achieve a moderately prosperous society) as the highest priority of the CPC and Chinese Government.^{144,154} Started in December 1978, the economic reform (literally "reform and opening-up") signalled China's transition from socialist planned economy

toward socialist market economy.^{134,144} The slogan “to get rich is glorious” became popular, while the previously ubiquitous “Serve the People” all but disappeared.¹⁴⁵

The aim of socialist market economy was to enable market forces to drive resource allocation.¹⁵⁴ The reform involved a shift from collective to household agricultural production (dismantlement of communes), the phasing out of price controls, the reform of state-owned enterprises, the creation of a labour market, the development of new forms of ownership of enterprises, the devolution of tax authority and public sector financial management.^{144,155} The economic transition have taken place against a background of rapid economic growth, in which the gross domestic product (GDP) sustained an average growth rate of 8.3% between 1980 and 2000, and the per capita GDP reached US\$ 1,090 in 2003.¹²³ The overall living standards of population have been significantly improved. Monthly disposable income of urban and rural residents increased from 478 and 191 yuan, respectively, in 1980 to 1,049 and 337 yuan, respectively, in 2002 (inflation adjusted).¹⁵⁶

In addition, Deng oppositely (to Mao) viewed population growth as a block to economic recovery after years of political turmoil.¹⁴⁸ He said that unless the birth rate fell rapidly, “we will not be able to develop our economy, and raise the living standards of our people.”¹⁴⁹ In 1979, the Chinese State Council launched the *One Child Policy*. Population and Family Planning Commissions were established at every level of government to raise awareness and carry out registration and inspection work.¹⁵⁷ Although the *One Child Policy* caused great individual pain and has been heavily criticised,¹⁴⁹ the government claimed that it has helped China achieve 400 million fewer births during the past three decades.¹⁴⁸

2.4.2 Health system reform towards market-oriented health care financing

Concurrent with the economic reform, China’s health system reform started in the early 1980s. During this period, the top health policy priority was to introduce market mechanisms in health care financing in order to reduce government funding for hospitals.¹³³ A series of fundamental plans and policies were issued, using economic incentives to boost hospitals’ economic efficiency. These policies re-legalised private medical practice and promote joint public/private ventures in hospital ownership (1980), introduced pricing of services based on the real costs (1985), adopted a service

contract system (1989) and allowed sideline commercial activities to compensate for inadequate budgetary financing.¹⁵⁸ According to Meng and colleagues in their report on China's health policy and system researches to the WHO, the direct and indirect influences of the social and economic reforms on the country's health system can be categorised into four perspectives:¹²³

- Rearranged responsibilities between the five levels of government - the reduced role of government has led to decreased government spending on health and increased out-of-pocket payment by users of health services;
- A greater role of individuals in providing health services rather than collective arrangement;
- Market mechanisms and forces applied to a wide range of services and exchanges, resulting in hospitals and practitioners focused more on revenue generation rather than health care provision;
- Partial privatisation of the public and collective sectors, e.g., converting village clinics from collective to private ownership.

2.4.3 Decentralisation of the health system

Apart from the adoption of socialist market economy, China's economic reform has also empowered the local government to decide on financial and sectoral allocations to achieve decentralisation.^{134,159} As a result, provincial and county-level health departments enjoyed a greater deal of autonomy within the health sector structure and they come directly under the authority of their local governments. Townships have been re-established to perform the administrative tasks previously undertaken by communes.¹⁶⁰

Although the original intension of decentralisation was to boost responsibility for and involvement in providing health care from all-level government, it created a difficult task to unify the administrative and financial systems centrally. According to Zhao, the problem has been that while the traditional governance system dissolved, a new one did not emerge.¹⁵⁸ The most serious consequence of decentralisation of the health system has been great inequalities of access to health care. With resources increased more rapidly in the cities but remained insufficient in the countryside¹³³, the gap of

health care financing between rural and urban areas has been enlarged. It has been estimated that, around 2000, nearly 80% of the rural population in China, around 640 million people, had no access to any health insurance.^{134,161} Such shocking inequalities have been noted in the *World Health Report 2000*.¹⁶²

2.4.4 Decreased political mobilisation

Prior to the economic reforms, health had a high political profile. The entire society was mobilised to participate in the Mass Health Campaign, and provision of health care was enhanced by the ethic of “Serve the People”.¹³³ As the reforms deepened, however, political factors became less influential to the health system when economic growth and generation of government revenue became priorities of the local government.¹⁴⁴ Rural people were no longer forced to participate in health campaigns because of the dissolution of communes and shift to household agricultural production. Health workers and institutions were given more freedom from interference, either in practice or in revenue generation, therefore were less willing to provide preventive services without reimbursement.^{144,163}

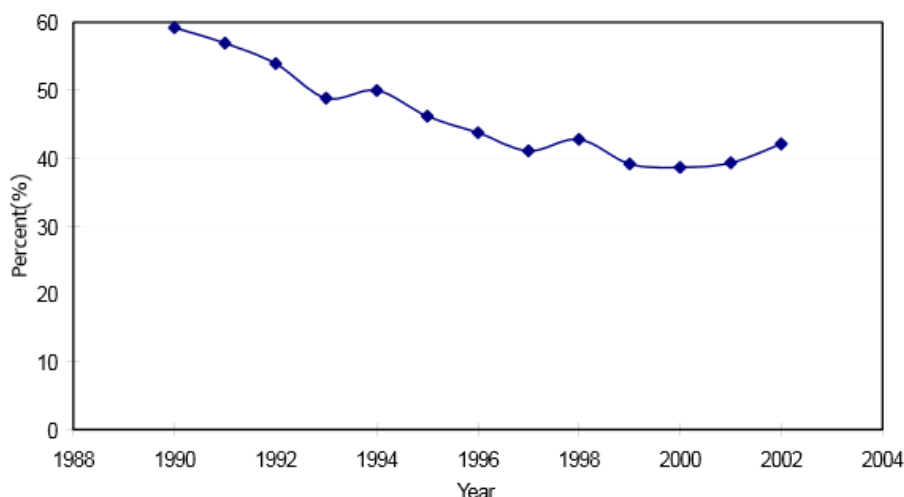
2.4.5 The shortage in government spending on public health

In the early 1980s, market mechanisms were also introduced in financing of the EPSs – from fully to partially budgeted by the government. The EPSs were encouraged to apply user charges in certain services, such as supervision and laboratory examinations, to compensate for the shortage of government funding.¹⁴² Consequently, service charges have gradually become the main revenue of the public health institutions.¹⁶⁴ Although the government investment in public health has increased in absolute term, from 458 million yuan in 1980 to 540.8 million yuan in 2002,^{134,142} the share of budgetary financing in total funds for public health institutions has gradually declined over this period (to the lowest of 38.66% by 2000) (

Figure 2-2).¹⁴⁶ With most of the revenue coming from other than government sources, the public health system pays less attention to its core functions, including routine immunisation, surveillance, health promotion etc.¹⁴² As Meng and colleagues have argued, health financing in China, both public and private, was biased towards treatment rather than the more cost-effective approach of prevention.¹²³ In an

estimation of China's total health expenditure in 2001, Zhao and colleagues have stated that curative care accounted for 81.8% of total government spending on health, while public health programmes accounted for only 10.9%.¹⁶⁵

Figure 2-2: The share of government budgetary financing in the total funds for Epidemic Prevention Stations. Source: Claeson, 2004



Apart from the decline in government spending on public health, there are also significant geographical differences in public health financing as a result of decentralisation.¹⁴² Each level of government is mainly or partly responsible for financing its own health services and subsidising health insurance programmes.^{166,167} Therefore, richer areas are more likely to provide high quality public health services. It has been estimated that, in 2001, Shanghai's budget for public health was 6.7 times higher than Chongqing.¹⁶⁸

2.4.6 Characteristics of the health policy process in the 1980s and 1990s

In the era of economic reform, China's health system reform was more likely to be responding to the market-oriented innovations ad hoc, encouraging hospitals and practitioners to generate more revenue but neglecting health care provision. In addition, decentralisation of the health system enlarged the gap between health care financing between urban and rural areas, resulting in huge inequalities of access to basic health care. Nonetheless, during this period, a systematic approach to policy formulation and implementation for the health system reform was absent.^{133,144} The health policy process was characterised by instability and temporariness caused by the wilfulness of

people in charge,¹⁶⁹ resulting in policies and personnel changing frequently without continuity. Besides the poor quality of some policy decisions, lack of solid institutional foundations and bridging between decision-makers and researchers, including policy making consulting, hearings, assessments and a system of responsibility is mainly accountable for the flaws.^{123,169}

2.5 The late 1990s to present: era of socio-economic equality

2.5.1 The first national health work meeting

In December 1996, the Central Committee of the CPC and State Council convened the 1st National Health Work Meeting, which was the first of its kind since the foundation of the PRC.¹⁷⁰ This meeting has represented a watershed in China's health policy history. The meeting decisions, as well as subsequent State Council policies and guidelines, indicated strong national commitment to address the emerging problems of the health system arisen from the economic reform. The meeting emphasised on improving accessibility to health care in rural areas, and urged all-level government to increase investment in health at a rate coincident with the rate of economic growth.¹³³ Based on the meeting content, the CPC and State Council jointly issued the *Decision on Health Reform and Development* in January 1997,¹⁷¹ stating that:

"Health care is a public benefit in the context of the government's welfare policies... health development must be coordinated with the national economy and social development."

According to scholars, the Decision opened a window for China's health system reform to enter a new phase.^{133,158} It set a series of health policy priorities (Box 2-1),¹⁷¹ which has been directing health policy making and implementation over the following decades.

Box 2-1: Priorities for health policy making as set by the *Decision on Health Reform and Development* (1997)

- Address problems in rural areas;
- Address both supply and demand-side efficiency;
- Improve service effectiveness and efficiency;
- Encourage re-establishment of health insurance scheme in rural areas (based on voluntary contributions by households with additional financial assistance from the local government and village collective funds);
- Call on the local governments to incorporate health into anti-poverty programmes;
- Call on governments at higher levels to provide financial support for health services in poor areas;
- Address the emerging problems resulting from unbalanced resource allocation in urban areas;
- Strengthen community health services as a form of comprehensive primary health care (and limit the role of hospitals to the diagnosis and treatment of acute, serious and difficult diseases);
- Strengthen health facility management;
- Establish new mechanisms of health financing (combining individual accounts with risk-pooling) by the local government;
- Call on provincial governments to develop regional health plans, strengthen supervision and regulation for health services providers, modify prices to reduce existing incentives towards costly forms of care, and improve effectiveness of health measures and preventive.

2.5.2 The Hu-Wen administration and goal of “Xiaokang”

In 2003, a new government led by Hu Jintao (then General Secretary of the Central Committee of the CPC, then President) and Wen Jiabao (then Premier) took office. The new generation of leadership (normally regarded as the “fourth generation”) introduced an expansive and ambitious social and political agenda into the idea of “building an all-round moderately prosperous (“Xiaokang”) society and speeding up modernisation”.^{172,173} The “Xiaokang” society is expected to have China’s GDP of the

year 2000 quadrupled, i.e. to feature a per-capita GDP of more than US\$ 2,000, by 2020.¹⁷⁴

In addition to economic growth, Hu Jintao also sought to improve socio-economic equality domestically through the Scientific Development Concept, which aims to build a “Harmonious Socialist Society”^f that was prosperous and free of social conflict.¹⁷⁵ This ideology has embarked the Chinese Government on a new paradigm of development, putting people in the centre, engaging the whole society, and aiming at coordinated and sustainable development. The idea of “Five Balances”¹²³ was raised as fundamental strategies for China to achieve a “Harmonious Socialist Society” by 2020. These balances are:

- Balance between rural and urban areas;
- Balance between regions;
- Balance between economic and social sectors;
- Balance between economic development and the natural environment;
- Balance between domestic and international markets.

According to Meng and colleagues, the “Five Balances” emphasised improvement in quality of life rather than mere economic growth, therefore had direct impact on China’s health policy making thereafter.^{AIDS¹²³} The aims of closing the gaps between rural and urban areas and between regions have guided the formulation and implementation of China’s 11th Five-Year Plan (2006 - 2010), within which a lot of new strategies were adopted, including improving access to health care to protect vulnerable populations, and increasing investment in the public health system, which are presented in the following sections.

2.5.3 Improved access to health care towards universal coverage

Amended in 2004, the Constitution mandated that the government respects and protects human rights (Article 33) and that it develops the required social insurance, social relief and medical and health services for citizens to enjoy this right (Article

^f A Harmonious Socialist Society has six main characteristics: democracy and the rule of law, fairness and justice, integrity and fraternity, vitality, stability and order, and harmony between man and nature.

45).¹⁷⁶ Basic health rights are part of human rights, therefore everyone should have an equal right to health.¹⁶⁴

In order to protect people's constitutional right and implement the "Five Balances", after a few pilots since the late 1990s,¹³³ the Chinese Government adopted a number of programmes to improve access to health care, including the New Cooperative Medical Scheme (NCMS), the Urban Employees' Basic Medical Insurance (UEBMI), and the Urban Residents' Basic Medical Insurance (URBMI).¹⁷⁷ All of these programmes are implemented at county/district level, and for the most part focus on the costs of inpatient care and exclude outpatient care. Although the multiple health insurance schemes have not been integrated and basic benefit packages vary between different schemes¹⁶⁴ (e.g., the NCMS and the URBMI have lower premiums and generous benefit packages compared to the mandatory and long-standing insurance programmes for urban employees and government officials)¹³⁴ and areas, they still have significantly improved accessibility to health care.¹⁷⁸ As Yip and colleagues suggested, China has expanded its risk pooling through "wide but shallow coverage" that is gradually deepened over time to achieve universal coverage with a robust benefit package. This approach is, in some cases, called "equal access by 2012" and/or "universal coverage by 2020".¹⁷⁹ In August 2011, on the Second China Health Forum, then Minister of Health Chen Zhu announced that 1.27 billion (95% of the entire population) Chinese residences have been covered by basic health insurance schemes, including 0.833 billion covered by the NCMS.^{180,181}

2.5.4 Increased government spending on health

China's booming economy since the early 2000s has provided material base for the government to increase its spending on health. In 2007, the national GDP accounted for 5% of total global GDP,¹⁶⁴ and the central government committed to increasing funding for health care by as much as 1 – 1.5% of the GDP over the next several years.¹⁸² Between 2006 and 2007 alone, the central government increased its health budget by 65.4%.¹⁸³ Government spending on health continued to increase, accounting for 33.88% of China's total health expenditure in 2015.¹⁸⁴ This rate was much higher than many low- and middle-income countries, but still significantly lower than the average of 72% for OECD member countries.¹³⁴ In addition, Yip and Hsiao have

argued that China needs to decide how to transform its new money into efficient and effective health care.¹⁸²

2.5.5 The SARS crisis and establishment of the CDC hierarchy

In the winter/spring of 2002-2003, China faced a massive outbreak of severe acute respiratory syndrome (SARS), which was viewed as probably the biggest social-political crisis since the 1989 Tiananmen crackdown.¹⁸⁵ Starting in Guangdong Province in November 2002, SARS spread to Hong Kong, other provinces in China, and around the world. More than 5,000 people were infected across the country by the end of 2003 and 349 people died from the disease. Although the government initially denied the problem, its magnitude made it impossible for the government to ignore.¹⁸⁶ In April 2003, the Health Minister and mayor of Beijing were dismissed¹⁸⁷ and a national command and control center was established under the direct leadership of then Vice Premier Wu Yi.¹⁴⁰ As then Premier Wen Jiabao pointed out in a cabinet meeting on the epidemic that:¹⁸⁸

“The health and security of the people, overall state of reform, development, and stability, and China’s national interest and international image are at stake.”

The newly installed government recognised that the SARS crisis had underscored the need to adopt a new development strategy - the Scientific Development Concept¹⁷⁵ – in order for China to balance between economic development and social progress, and to achieve the goal of “Xiaokang”. When interviewed by the executive editor of the *Washington Post*, Wen Jiabao said that:¹⁸⁵

“One important inspirational lesson that the new Chinese leadership learned from the SARS crisis was that uneven development between urban and rural areas, and imbalance between economic development and social progress were bound to stumble and fall.”

According to international and national scholars,^{140,189,190} the SARS crisis exposed not only the serious deficiencies in the health system caused by decentralisation, but also the dangers of life-, economy- and social stability threatening-infectious disease, as

well as the importance of political will and resources for mobilising public health action.¹⁹¹ Consequently, the national government's focus was shaped from pure economic goals to population health and social wellbeing.⁶ On various occasions after the SARS crisis, China's national leaders have emphasised on the importance of public health, including rural health care.¹⁸⁵

Strengthening the public health system was put on top of China's public policy agenda, with government subsidies for public health institutions increased significantly from 38.66% in 2000 to 57.8% in 2010.^{134,191} From 2002 onwards, a vertically integrated hierarchy of CDCs was established from national to county levels. The original EPSs (or parts of the EPSs) was gradually reorganised into CDCs at the same administrative levels, while China CDC – the national leading public health agency - was given significant financial and organisational levers.¹⁴⁰

Consisting of more than 30 dependent, independent (e.g., the National Center for Women and Children's Health), and affiliated units (e.g., the National Center for STD Control), China CDC is responsible for development of disease control strategies and regulations, as well as supervision and guidance for regional and local public health institutions.¹⁴¹ According to Liu,¹⁴⁰ supervision and guidance for lower levels has not only strengthened the technical capability of China CDC but also provided strong incentives for local health officials and professionals to implement the programmes and report to upper levels as well.

In addition, the SARS outbreak has revealed the important role of surveillance as well as health information for decision-making.¹⁴² From 2003 onwards, the MOH learnt lessons from the successful use of modern information technology during the epidemic, and built the world's largest Web-based, real-time, and case-based infectious disease reporting system – the China Information System for Disease Control and Prevention (CISDCP).¹⁹¹

2.5.6 The new health system reform from 2009

The alarm of SARS outbreak has focused government and public attention to the need, not only for greater investment in the public health infrastructure, but also in basic health care and prevention at community level.¹⁹² As Eggleston has argued, it was not

until the 2000s, nearly 30 years into China's social and economic reforms, did the national policymakers reassess the problematic health system as a whole, and indicate commitment to tackle the root cause of inaccessible and unaffordable health care. Such commitment has been proven credible as it moves past the initial stage of insurance expansion and deals with how to deliver high quality health care at reasonable cost to the 1.3 billion people.¹⁹³

Since 2009, the process of health system reform has been led not by the MOH only, but rather by a special unit directly under the State Council – the Health Reform Office of the State Council – to coordinate between multiple government ministries and agencies of which the jurisdictions and interests are influenced by the reform.¹³⁴ In April 2009, the Central Committee of the CPC along with the State Council announced a comprehensive health system reform initiative¹⁹⁴ and issued a new health system reform plan, i.e. the *Implementation Plan for Deepening Pharmaceutical and Health System Reform 2009 – 2011*,¹¹⁵ signalling the health system reform in China entering a new phase. Five key reform priorities were adopted for the first three-year period, as listed in Box 2-2.

Box 2-2: The six strategic priorities of China's health system reform since 2009

1. Accelerate the expansion of basic health insurance system;
2. Establish a National Essential Drug List;
3. Improve delivery of primary health care services - through a renewed system of grassroots providers;
4. Promote equal access to basic public health services;
5. Facilitate pilot programs of public hospital reform; and
6. Strengthen governance, financing, monitoring, training and guide of public opinion.

The *WHO Resolution on sustainable health financing, universal coverage and social health insurance* (WHA 58.33, endorsed in the 58th World Health Assembly, May 2005) defined universal coverage as “access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access”.¹⁹⁵ In 2009, by announcing a number of Major Program of Public

Health Services, the Chinese Government adopted the WHO Resolution and reasserted its role in the new health system reform, baking with funding estimated at 850 billion yuan (\approx US\$ 125 billion).^{193,196,197} According Meng and Tang's report on universal coverage of health care in China in 2010, the population coverage of major public health programmes has increased and some of the programmes have reached the level of universal coverage.¹⁹⁸

As 2011 is the first year of the 12th Five-Year Plan, the MOH further announced the overall goals for health development from 2011 to 2015,¹⁸⁰ including:

- Strengthen capacity building of health care delivery institutions, improve quality of health services;
- Enhance health insurance system and risk protection;
- Prevent major diseases (including HIV/AIDS, STDs, Hepatitis B, etc.); control risk factors, promote equal access to basic public health services; and
- Strengthen all-level governments' accountability for public health, ensure people's health and safety.

2.5.7 Characteristics of the health policy process in the 21st century

Increasing roles of the NPC, CPPCC, think-tanks, and media

In recent year, the NPC and the CPPCC have played important roles in health policy making. The NPC members and CPPCC delegates maintain close contact with the public and submit policy proposals at the annual plenary session of the NPC and CPPCC. Such political consultative approach has been highly valued. For instance, in response to complaints regarding inequalities of access to health care in the early 2000s, both organs have conducted investigations and research projects on health system reform and organised colloquia to disseminate their findings to the decision-makers.¹²⁸

A number of think-tank institutions, such as the Development and Research Center (DRC) of the State Council, have been established to support decision-making.¹²⁸ At the same time, some commercial think-tanks also emerged. These institutions work closely with international agencies such as the World Bank and WHO, bilateral donors, as well as national and international academics. Through regular communication with

the government, the think-tanks feed new ideas, global norms, and research evidence to policymakers. For instance, the DRC and WHO conducted a research project on China's health system reform in 2003, which presented to the Chinese Government that the market-oriented health system reform before 2003 was "basically unsuccessful" because of the sharpened inequality of access to health care and serious deficiencies in the health system. This was the first official negative statement in China regarding its health system reform.¹⁹⁹

In addition, the media plays an increasing role in shaping both political and public attention to key policy issues. Since the economic reform, many media organisations have shed their government affiliation and there has been a large increase in private and international investment. The media seeks circulation and profit, and therefore focuses more on the hottest social issues and conflicts. Such critical change has taken place not only within the traditional media industry but through the internet as well. The universal access to internet has resulted in an information explosion and laid foundation for public supervision of the government efficiency.¹²⁸

Strengthened evidence-informed policy making

Although still sporadic, evidence-informed policy making has gained increasing awareness in China over the past years.²⁰⁰ This is primarily because, as Meng and colleagues suggested, increasing openness among policymakers to constructive dialogue and critique, and their willingness to learn from successes and failures. The ongoing health system reform is calling for evidence to support decision-making regarding regional health planning, health insurance reform, and health services financing. Therefore, how to translate evidence into decision-making and practice has become a key area in the health policy circle in China.¹²³

The strengthened evidence-informed health policy making have well reflected the principle of "crossing the river by feeling the stones".¹²⁸ Raised first during the 1950s, this famous saying means that even though China was moving forward in new directions, it needs to stay grounded, incremental, feel its way forward even amidst uncertainty.²⁰¹ Typically, the process of health policy making since the late 1990s involves a pilot project, followed by thorough investigations by an ad hoc task force

(usually led by the central government), then further exploration and evaluation, and finally a policy statement from the national level.¹²⁸

In addition, interactions between research and policy making practice have been enhanced gradually. Departments of social medicine and health management have been established in medical schools, conducting related research and teaching activities related to health policy, health system, and health economics. Since the 1990s, a number of international organisations have supported communication between health professionals and policymakers in China through funding research projects, publishing research results, and organising seminars and discussions. For example, the Network of Health Economics involving ten leading medical universities and institutions in China was established with supports from the WHO and MOH.¹²³

However, systematic and individual barriers for evidence-informed policy making in China also exist. According to Jiang and colleagues, the biggest obstacle is the research-policymaker gap which engenders a disconnection between the supply of research findings and demand for scientific evidence. Additionally, high-quality evidence and a regular mechanism to assist translation from research to policy at the system level is absent.²⁰⁰

Conceptual renewal

After adoption of the Scientific Development Concept and the idea of “people-centred” raised by Hu Jintao in 2003, the balance between economic development and population health became one of the top policy debates at that time.¹²⁸ Health development was no longer regarded as an input to economic and social development by China’s decision-makers (according to the *Decision on Health Reform and Development* in January, 1997),¹⁷¹ but rather the utmost goal of development. In 2004, the amended Constitution further emphasised on the government’s responsibilities to ensure people’s access to basic health care as their human rights.¹⁷⁶ Thus, universal access to health care has been set as the overall goal of China’s health development and its on-going health system reform.¹²⁸

Increased participation in global health

Since the SARS outbreak, the Chinese Government began to acknowledge the importance of a strong public health system as well as multilateral cooperation in combating infectious disease epidemics and to social and economic development.²⁰² In the recent years, China has increasingly emerged as an important player in global health, especially after it was reclassified by the World Bank reclassified as an upper-middle-income country in 2011.^{203,204} According to a paper in the *Lancet's* 2014 special issue on China's top health topics, China is reshaping the global health agenda.²⁰⁵ In this paper, Liu and colleagues have highlighted China's distinctive approach to and increasing participation in global health, and suggested that the scope and depth of China's global engagement are likely to grow and reshape the contours of global health. Taking foreign aid as an example, the authors identified that the type of health aid China offers is different from other developed countries, driven by its unique history and competencies, and complex motivational factors - i.e. political, economic, social, and humanitarian. Rather than offering general financial support, China focuses on some important aspects of the health system such as deploying medical teams, constructing hospitals and clinics, donating drugs and medical equipment, training personnel, and supporting malaria control efforts using artemisinin based on traditional Chinese medicine.

2.6 Main issues of China's current health policy system

2.6.1 A matrix accountability system

The Chinese Government has a matrix accountability system, including both vertical and horizontal mechanisms.¹²⁸ The vertical accountability system (usually referred to as “tiao tiao”) refers to accountability within each sector, which is headed by the ministries at national level. A ministry, such as the MOH, has powerful authority over the whole sectoral hierarchy, including its affiliated institutions and local departments. It develops sectoral directives and regulations, issue policies and guidelines, and initiate programmes. In the meantime, the horizontal accountability system (described as “kuai kuai”) is headed by the government at each administrative level. A local government is directly responsible for social and economic development at its locality

and therefore is empowered for policy making, budgeting, and sectoral allocation.^{134,159}

In addition, ministerial authority and local governmental authority may overlap on some local departments, such as the health department.¹⁶⁰ Sometimes the sectoral and local development priorities are different and even colliding,¹²⁸ requiring negotiation to balance the interests of both accountability systems.²⁰⁶ As Zhao and Fang have argued, the weakened vertical authority has reduced the efficiency of sectoral administration, while the enhanced autonomy of the local government has raised the costs of administrative coordination among governmental departments.¹²⁸ Consequently, the matrix accountability system has caused a range of contradictions during health policy making and implementing in China, making health policy analysis difficult and time-consuming.

2.6.2 Increased autonomy of the local government in health policy making

Since the late 1970s, decentralisation and the resultant increase in autonomy of the local government has significantly weakened the vertical authorities whilst strengthened the horizontal accountabilities in China. Governments at the provincial level and below gained more freedom to make their own health policies and adapt the policies from higher levels to certain local circumstances. Consequently, health policy making at local level and implementation of national health policies especially those require match funds can be largely affected by the local government's financial ability.¹²³ For example, a case study on tuberculosis control in four counties in Shandong Province has suggested that poorer counties, compared to richer ones, had worse implementation of the national programmes, which was partly because that the poorer counties were less capable to match the funding provided by the World Bank.²⁰⁷ The result has been incoherent health policy priorities set at national and subnational levels, as well as between different regions (especially between rich and poor areas).¹²³

2.6.3 Fragmented health policy system

In China, political efforts to tackle health issues are made on an enormous political foundation including non-health sectors, such as the departments of development and reform, finance, human resources and social security, food and drug administration,

and civil affairs etc.¹²³ It is difficult to ensure consistency between sectors and regions. As stated in the China-WHO Country Cooperation Strategy 2013–2015, effective promotion of “Health in All Policies” is a major challenge to the MOH.²⁰⁸

The fragmented health policy system has increased the cost of coordination between government departments and prolonged the process of decision-making in China.¹²⁸ Negotiation, as Lieberthal & Oksenberg have argued in their book on policy making in China, is the main strategy for overcoming such fragmentation.²⁰⁶ Negotiation aims to balance interests of different sectors, undergoes rounds of review and modification of the political proposal, and sometimes results in the original policy objectives being lost. The effectiveness of negotiation can influence the scope, content, and potency of the policies. For instance, the MOH is usually less powerful while negotiating health financing policies with the Ministry of Finance (MOF), therefore the final policies issued are sometimes not as optimal as they were proposed.¹²⁸

2.6.4 Lack of incentives for implementers

The health policy process in China is complicated due to the five-level government and increased autonomy of the local government

in financing and delivering health care. Apart from local financial ability (as discussed earlier), the existence of political incentives may also affect the willingness of local decision-makers to implement national priorities and develop their own implementation plans.¹²³ Using a conceptual implementation framework, Spratt has conducted a case study of providing antiretroviral therapy (ART) to injecting drug users in Yunnan Province.²⁰⁹ This study revealed that implementation of national policy at regional level in China is affected by motivation of local governmental agencies to work together; incentives for hospitals to offer services; health workers’ fear of being infected; structural/institutional barriers of the service itself; policymakers’ and implementers’ knowledge of the policy; interaction and power of governments at different levels; local finance and resource status; and stigma and discrimination of the disease.

2.6.5 Disconnection between decision-making and resource allocation

In China, policies and plans for disease control are usually developed by the State Council and MOH. These policies and plans provided directives and guidance for the lower level governments and departments that are responsible for developing their own plans. Although planning procedures are carried out annually by the local governments and health institutions, many plans remain on paper. As Claeson and colleagues have argued in their critical review of China's public health system, there is always a disconnection between policy-planned activities and resource allocation. Monitoring and evaluation of performance and results are not in place that could ensure that plans are being carried out effectively.¹⁴²

2.7 Chapter summary and discussion

This chapter described the contextual background in which this PhD study is located. China's health policy environment has changed significantly since 1949, reflecting domestic political transitions and social and economic reforms over the three major political eras. This chapter highlighted those factors which may have had profound impacts on the country's health policy making style.

During the era of planned economy, China's health system was organised as a centrally planned bureaucracy, following the guidance of Mao's Four Guiding Principles for health care. Health policy making during this period was purely empirical and characterised by powerful hierarchical controls that the decision-makers took instructions from and reported to the national leaders and cascaded authority through successive levels. Health policies at lower administrative levels then followed instructions from the upper level mechanically, with very uncommon modification of the national policies.¹²⁸ Such mechanism can be well illustrated by the Mass Health Campaign began in the 1950s. However, although being mostly non evidence-based, the Mass Health Campaign has proved effective in improving population health in a short time. During this period, China achieved dramatic demographic transition and health improvement, as well as the virtual elimination of syphilis.

From 1979 to the late 1990s, the social and economic reforms brought to China not only rapid economic growth, but also disparities in development between urban and

rural areas, between the eastern and western regions, and between the rich and poor. The huge income gap along with the health system's passive adaption to marketisation resulted in serious inequality of access to basic health care, which was later interpreted as a sign of the health system reform being "basically unsuccessful". In this period, health policy making was instable and temporary, with unclear accountabilities and disconnection between decision-makers and researchers. In addition, increased autonomy of the local government led to significant variance in local policy making and implementation of national policies, particularly between rich and poor areas. Despite the above problems, however, no systematic approach to health policy making emerged in this period, which might be able to explain, to some extent, the neglect of some important health issues, such as the resurgent syphilis epidemic, on the national policy agenda.

From the late 1990s onwards, there has been a shift in the national attention from pure economic growth to socio-economic equality, resonating with the ideologies introduced by the Hu-Wen leadership in 2003 – i.e. to establish a "people-centred" "Harmonious Socialist Society" and achieve "Xiaokang" by 2020. At almost the same time, the SARS crisis exposed serious deficiencies in the country's health system and attracted, for the first time, national attention on control of life- and economy-threatening infectious diseases. Such attention has resulted in significantly increased government spending on public health and establishment of a vertical disease control hierarchy. Health policy making in this period became more open than ever before, characterised by the emergence of a diverse range of policy actors and strengthened role of evidence-informed policy making. In addition, the national health policy process is increasingly populated by complex cross-border, inter-organisational and network relationships, with policies influenced by global decisions and domestic actions at the same time.

Nonetheless, this chapter also identified some problems of China's current health policy system, such as fragmentation, disconnection between decision-making and resource allocation, and lack of incentives for implementers etc., all of which may influence the health policy process negatively. Among these problems, the most outstanding one is a matrix governmental accountability system caused by the local government's continuously increased autonomy, within which hierarchical and local

governmental priorities can either overlap or collide, making health policy making at national and subnational levels inconsistent. Such inconsistency is well exemplified by the fact that, as presented in Chapter 1, MTCT of syphilis became a health priority in a couple of economically developed cities almost one decade before the national government first committed to controlling the infection.

Chapter 3 The objectives and scope of this enquiry

“There are important gaps in research capacity in China, including in priority-setting and skills for translating research findings into health policy and practice. It is necessary for China’s government to demand research to meet their policy needs, and for the research community to push health policy and systems research forwards to meet the future challenges.”^g

3.1 Introduction

Chapter 1 and 2 provided a comprehensive introduction of the similarities between the two issues of mother-to-child transmission (MTCT) of syphilis and MTCT of HIV, the contrasting policy responses to them, as well as the health policy making style in China. Following that, this chapter sets down the aim and objectives of this study. Because the overall aim is to identify the reasons explaining the significant slowness in China’s policy response to MTCT of syphilis, especially compared to the response to MTCT of HIV, political prioritisation is explicitly targeted as the dependent variable. This chapter describes in detail how and why the dependent variable was set as well as its characterisation in the comparative policy cases. It then provides an overview of the terrain of health policy literature related to political prioritisation in low and middle income countries generally and in China particularly, identifying the most outstanding challenges for this research. Lastly, based on a review of the most commonly applied theories and frameworks for assessing health policy process, a specific conceptual framework is chosen to guide explanation of the independent variables – i.e. factors driving or hampering political prioritisation of prevention of mother-to-child transmission (PMTCT) of syphilis and PMTCT of HIV.

^g Meng, Q., Shi, G., Yang, H., Gonzalez-Block, M. A. & Blas, E. *Health Policy and Systems Research in China*. 1–24 (The Special Programme for Research and Training in Tropical Diseases (TDR), WHO, 2004).

3.2 Political prioritisation: the dependent variable

Policy is the broad statement of goals, objectives and means that create the framework for activity, often taking the form of explicit written documents but may also be implicit or unwritten.²¹⁰ Health policy, as defined by the World Health Organization (WHO), refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within a society.²¹¹ It may be made at different levels (i.e., by central or local government), in public sector (by government) as well as in private sector, and is influenced by the intended and unintended actions of policy actors (individuals, organisations or even the state) inside and outside the health system.^{210,212}

The way in which policies are initiated, developed or formulated, negotiated, communicated, implemented and evaluated is referred to as policy process.^{118,212–214} Policy process is not just about a particular decision made at a particular moment, but more often about the ongoing interaction among institutions (the structures and rules which shape how decisions are made), interests (groups and individuals who stand to gain or lose from change) and ideas (including arguments and evidence), that is shaped by pressures from the economy and society.²¹⁴ In addition, it can be affected by various types of lobbying activities (i.e., policy advocacy) initiated intentionally by private individuals and groups (i.e., policy advocates) who seek to advance their own policy preferences.²¹⁵ Health policy analysis is a multi-disciplinary approach that aims to explain the interactions within the policy process.²¹⁶ It explores factors such as the role of the state, the interests of various actors and how they wield power, the nature of political systems and their mechanisms for participation, culture and value systems which shape ideas, as well as influences from the international community which affect national health policy processes.²¹⁰ As Walt and Gilson argued in 1994, health policy analysis deals with who influences policy making, how they exercise that influence, and under what conditions, therefore is central to health reforms.²¹⁷ In other words, it is not only of practical importance in public health, but also a legitimate area of academic inquiry.²¹⁸

The policy cycle or *stages heuristic* is one of the most enduring approaches for exploring the policy process, which divides the policy process into four stages: agenda setting, policy formulation, implementation, and evaluation.²¹⁹ Agenda setting is the

initial stage when certain issues come onto the policy agenda while others do not.^{118,220}
As described by Dearing and Rogers:²²⁰

“The agenda setting process is an ongoing competition among issue proponents to gain the attention of media professionals, the public, and policy elites. Agenda setting offers an explanation of...why certain issues are addressed through policy actions while other issues are not...and the development of an issue agenda results from channels of political communication that influence the establishment of a hierarchy of issue salience at a particular point in time.”

After the decision-makers’ attention is attracted around particular issues, they develop and enact policies at the formulation stage. These policies are then carried out at the implementation stage, and their impacts are assessed at the evaluation stage.²¹⁹ The policy cycle theory has received many criticisms for it presenting a linear progression of public policy, for simply demarcating stages of the policy process that do not exist in reality,¹²⁵ as well as for providing no propositions on causality.²¹³ Nevertheless, these limitations have not led to the abandonment of policy cycle because of its simplicity and usefulness for researchers to clarify the complexity of public policy process and place their own research within a wider framework.²¹⁶ Each of the four stages or combination of stages can act as a dependent variable in health policy analysis, of which the value is directly or indirectly influenced by a number of contextual and situational factors – i.e. independent variables.²²¹ Because this PhD study seeks to explain the contrast in China’s policy responses to MTCT of syphilis and MTCT of HIV at both national and subnational levels, policy cycle is useful as it provides insights into the complex policy processes and helps identify the specific aspects of the processes that should be targeted for study. Table 3-1 presents the timelines of the policy cycles of PMTCT of syphilis and PMTCT of HIV in China, with the key policy actions taken on each issue listed at each of the four stages.

Table 3-1: Timelines of the policy processes of PMTCT of syphilis and PMTCT of HIV in China

Policy stage	MTCT of syphilis	MTCT of HIV
Agenda setting	<p>1991, sentinel surveillance data available¹</p> <p>2007, the alarming incidence published in <i>The Lancet</i>¹</p> <p>2010 May, the alarming incidence published, again, in the <i>New England Journal of Medicine</i>²</p> <p>2009, the MOH's first documented opinion on integration of control of MTCT of syphilis into existing PMTCT of HIV programmes²²²</p>	<p>1997, sentinel surveillance data available¹¹¹</p> <p>2003, the increased proportion of MTCT cases in all HIV cases portrayed as a sign of the epidemic "spreading from high-risk groups into the general population"¹¹¹</p> <p>Around 2000, national leaders' attention focused on women and infant infected with HIV as "victims of the 'blood selling' scandal"^{185,223}</p> <p>2001, China signed on the UNGASS Declaration on HIV/AIDS and committed to submit progress reports including 2 PMTCT of HIV indicators²²⁴</p>
Policy formulation	<p>2010 June, China 2010-2020 Plan for Syphilis Control and Prevention⁷ issued</p> <p>2010 September, integrated PMTCT of HIV and syphilis services included in government annual budget planning¹⁰⁰</p> <p>2012, PMTCT of syphilis ratified by the Regulations on Sexually Transmitted Disease Control and Management (the Ministry of Health Decree No. 89)</p>	<p>2001 May, China Action Plan on HIV/AIDS Containment and Prevention (2001-2005)¹¹² issued</p> <p>2003 December, PMTCT of HIV included in government annual budget planning⁴</p> <p>2006, PMTCT of HIV ratified by the Regulations on Prevention and Treatment of HIV/AIDS (the State Council Decree No. 457)</p>
Implementation	<p>2011 November, a State Council executive meeting chaired by Premier Wen Jiabao on scaling up integrated PMTCT of HIV and syphilis services nationally⁹⁶</p> <p>2011 February, Implementation Guidelines¹⁰² issued</p>	<p>2002, first pilot programme initiated⁹⁹</p> <p>2004, PMTCT of HIV integrated into China Comprehensive AIDS Response (China CARES), Working Guidelines issued, and a national working group established¹¹⁷</p>
Evaluation	<p>2013, the annual number of pregnant women tested for syphilis increased from 7.3 million in 2011 to 12.6 million in 2013⁵⁵</p> <p>2013, over half of syphilis-positive mothers (n=15,884) received no treatment or were treated close to their due dates¹⁰⁴</p> <p>Data on reduction in the congenital syphilis incidence unavailable⁵⁵</p>	<p>2009, the rate of MTCT of HIV fell from 33% (in the early 2000s) to 9.1%⁴</p> <p>2010, over 13.9 million pregnant women received HIV counselling and testing services¹¹⁶ with the overall antenatal testing rate exceeded 85%⁶</p> <p>2011, 77% of MTCT of HIV cases avoided⁶</p>

It is shown that the Chinese Government responded to the emergence of MTCT of HIV more quickly and aggressively than to MTCT of syphilis, especially in recognising and defining the problem during agenda setting as well as in formulating the policies and securing implementation resources. The very delayed policy and resource attention paid to MTCT of HIV may have contributed to the rapid increase in the incidence over the past more than two decades. On the other hand, in both cases, implementation of the PMTCT programme has been effective with intervention coverage increased significantly within a few years after the national control plan was enacted and sufficient and sustainable funding was allocated from the central government.

Public policy scholars have referred to the process during which political attention is stimulated and affects achievement of policy goals as political priority generation or political prioritisation,^{118,121} which is also seen as the dependent variable of this PhD study. According to Table 3-1, agenda setting and policy formulation, though with unclear boundary between the two stages, should be explicitly focused on to explore the dynamics of political prioritisation for PMTCT of syphilis and PMTCT of HIV in China. Implementation is not considered a priority for study due to the very little variation identified at this stage between the two cases. Another reason to look at agenda setting and policy formulation only is that this study began (in September 2011) only one year after the launch of the ten-year syphilis control plan when it was too early to assess its implementation. Policy evaluation, as suggested by Sabatier, may need a longer timeframe as “a decade or more” which is the minimum duration of most policy cycles from emergence of the problem to any noticeable policy impact.²²⁵

In order to provide implications for data collection and analysis, the process of political priority generation should be clearly defined and distinguished from other stages of the policy cycles. In this PhD study, political prioritisation is identified by using three criteria, which have been validated in a few published health policy studies,^{124,226–228} including:

1. National political leaders’ sustained attention to the issue, which can be identified by the national leaders’ presence at related key events, and appearance of the issue on high profile conferences and forums;

2. The emergence of an authoritative government decision enacting policies that offer widely embraced strategies to address the issue, which can be identified by the launch of a key overall planning document (e.g., Action Plan) followed by a series of strategic documents (e.g., Notifications, Opinions etc.) and initiatives (e.g., Guidelines); and
3. Resource allocation, which can be identified by allocation of issue-specific funding or inclusion of the initiatives in government annual budget planning.

As shown in Table 3-1, political prioritisation of PMTCT of syphilis and PMTCT of HIV in China was achieved in September 2010 and December 2003, respectively, both of which are characterised by the issue of an overall disease control plan and working guidelines, inclusion of the programme in government annual budget planning, and legislation. Consequently, only those data related to the priority generating activities taken place before these two dates are collected and analysed to explore the determinants. Of note, due to the different dynamics of setting the national and subnational policy agendas (presented in Chapter 2), the three criteria are adapted during identifying political prioritisation at provincial and municipal levels. This is addressed in more detail in Chapter 4.

3.3 Aim and objectives of this PhD study

This study sets out to explore the reasons for the significant slowness in China's policy response to MTCT of syphilis, particularly compared to the response to MTCT of HIV. At one level, it attempts to describe the various factors shaping the levels of political priority, at the stages of agenda setting and policy formulation, for the two issues at both national and subnational levels. This represents a relatively straight forward task of tracing and recording the history of the policy processes employed, the ideas and perspectives of the actors involved, and the context within which the policy processes occurred. Given the limited academic understanding of how and why China prioritises and responses to different health issues, the study will, therefore, make a contribution to knowledge through synthesis and interpretation of the findings, especially those which has not been recorded in literature.

At another level, the study seeks to make a conceptual contribution to both the study and practice of health priority generation in China. It proposes to do so by testing and refining a pre-existing conceptual framework. In doing so, it forces a rigorous examination of, to what extent, the method will help identify the factors enhancing or hampering prioritisation of PMTCT of syphilis and PMTCT of HIV in China, and how far the original approach may gain from further refinement and adaptation.

The most significant contribution of this PhD study may lie in its potential to generate feasible and practical implications for promoting political prioritisation of control of MTCT of syphilis in China, particularly in relation to achieving the elimination goal set by the *China 2010-2020 Plan for Syphilis Control and Prevention*. Such implications may also inform promotion of other neglected health issues in the country.

To summarise, this PhD study aims to undertake a comparative case study of political priority generation for PMTCT of syphilis and PMTCT of HIV, in order to identify the key areas of the policy cycle which should be targeted in order for China to move towards the elimination of congenital syphilis. It has four subsidiary objectives, including:

1. To determine the reasons for political prioritisation, or neglect, of PMTCT of syphilis, particularly in comparison to PMTCT of HIV;
2. To assess the similarities and differences between the factors shaping political priority generation for PMTCT of syphilis at national and subnational levels;
3. To assess the prospects for improvements in political prioritisation of PMTCT of syphilis as well as other neglected health issues;
4. To contribute to methodology by offering a useful analytical approach for studying the dynamics underlying the Chinese health policy process.

3.4 A review of published literature on health policy making in China

This section presents a review of published literature that addressed health policy making in China, in order to inform decisions on selection of analytical approaches and design of study methodology.

3.4.1 Literature search

The papers were identified through searches of (1) the databases of PubMed, Google Scholar, and University College London (UCL) Library online resources, using a range of key words including China, health policy, policy process, agenda setting, political priority, advocacy, initiative, and health policy analysis, and (2) the reference lists of two important reviews as listed below:

1. Gilson and Raphaely's comprehensive review of published health policy studies undertaken in low and middle income countries during the period from 1994 to 2007, which is the first of its kind;²²⁹
2. Walt and Gilson's review of health policy studies addressing agenda setting in low and middle income countries (from 1994 to 2009), applying a conceptual framework.¹²⁵

Only those papers published in English and with full articles accessible were included for review.

3.4.2 Health policy analysis in low and middle income countries in general

Health policy analysis is a recognised academic field of practical relevance in higher income countries, and scholars have been calling for work that integrates politics, process and power into the study of health policies and the practice of health system reform, particularly in low and middle income settings.²¹⁸ However, research in this field remains underdeveloped.^{218,229} Gilson and Raphaely's review of 164 empirical studies around the health policy processes in low and middle income countries revealed that, despite a number of carefully designed studies providing valuable outcomes, the existing body of literature is surprisingly small and the bulk of it is analytically weak. Most papers are largely descriptive in nature and lack an explicit explanatory focus. According to the authors' original description, the main question is often "what happened", however "what explains what happened" is always neglected.²²⁹ For instance, among the 164 papers and additional literature for the period from 2007 to 2009, only 37 were identified as broadly relevant to agenda setting or political priority generation,¹²⁵ reflecting the problem that only a small number of

studies were conducted as a direct input into health policy making in low and middle income countries.²²⁹

The field of health policy analysis in low and middle income countries has also been criticised for insufficient utilisation of conceptual frameworks and theories.^{216,229} As Walt and colleagues argued, little attention has been paid to “how to do policy analysis, what research designs, theories or methods best inform policy analysis”.²¹⁶ In addition, there is a lack of cross-country and cross-policy research, which are believed to be able to generate stronger propositions or hypotheses regarding the policy process. As Walt and Gilson have argued, it is important for researchers to differentiate between international, national and advocacy approaches because there are unique features to each.¹²⁵

In addition, because much of the evidence on health policy making in low and middle countries originates from outside these countries, researchers rarely have the chances to study the policy processes in specific country contexts, therefore significantly reducing the strength of study findings.²³⁰ Nonetheless, the existing health policy literature seldom explores researchers’ positionality – i.e. how they are viewed and “situated” in the studies, their institutional base, perceived legitimacy, and prior involvement in policy communities – and its potential impact on the research process.²¹⁶

3.4.3 The terrain of health policy studies on health policy making in China

Over the past three decades, China has made significant progress in health policy analysis as a result of greater openness of the society as well as increased awareness of the importance of evidence-informed policy making among decision-makers.¹²³

Given the breadth of the field of health policy analysis, the identification of papers addressing generation of political priority proved difficult because the boundaries of different stages of the policy processes were not always clear and reflected in key words. There may be other articles relevant to the concept that were not captured through titles, abstracts or keywords. However, it is known from Walt and Gilson’s review that the number of published health policy studies focusing on agenda setting in low and middle income countries was overall limited, and the two authors did not

identified any study from China for the period from 1994 to 2009.¹²⁵ Finally, 8 papers published from 2005 to 2015 were selected and reviewed as they present empirical analyses of political priority generation within the Chinese health policy arena.

Policies and issues examined and main findings

As summarised in Table 3-2, the papers selected cover 5 policy areas. The majority examined China's political efforts to provide specific health programmes or interventions (including 4 papers on HIV/AIDS control,^{98,185,231,232} 1 on maternal health,²³³ and 1 on tobacco control);²³⁴ 1 study examined the policy process of China's New Cooperative Medical Scheme (NCMS) in rural areas;²³⁵ and 1 examined how international institutions had contributed to changing the Chinese health policies.²³⁶ Three papers exclusively considered the policy development stage,^{185,231,232} whilst 5 looked at both policy development and implementation.^{98,233–236} There is only 1 cross-country comparative study,²³³ and 2 papers were written by the same author, i.e. Huang on the HIV/AIDS policy process¹⁸⁵ and the role of international agencies in health policy development.²³⁶

Table 3-2: Selected health policy studies on generation of political priority in China

Study focus	Number of papers
1. HIV/AIDS control	4
2. Maternal health	1
3. Tobacco control	1
4. New Cooperative Medical Scheme	1
5. Role of international institutions	1
Total	8

Most articles retrospectively traced the policy processes of the health issues studied and examined the successes and/or failures of attempts to change the national policies. Two reviews of China's policy response to HIV/AIDS^{98,232} revealed that, from the late 1990s to the early 2000s, the shaping of international norms of the seriousness of HIV/AIDS, the establishment of a multi-sectoral network to tackle the epidemic, policymakers' awareness of effective interventions and policy options, as well as

pressure from international and national advocacy groups and the media functioned collectively to place the issue highly onto the national policy agenda. This process may have been accelerated by a few unanticipated events, such as the “blood selling” scandal in Henan Province around 2000 and the outbreak of severe acute respiratory syndrome (SARS) in 2003.^{98,232}

Several studies also explored the roles of political actors during setting the health agenda. According to Xue,²³² a group of social scientists have played more critical roles, compared to health professionals, during promotion for HIV/AIDS control in the early 2000s. They not only contributed to identification of the problem but also to communication of technical evidence to policymakers and the public. In contrast, however, two papers also found that political actors could affect political priority generation for particular issues negatively. Huang’s study on China’s HIV/AIDS policy process revealed that, in the early 2000s, a number of political institutions influenced the generation of HIV/AIDS policies in China through presenting “selected” interests and evidence, and the absence of civil society engagement in the policy process largely reduced the likelihood of HIV/AIDS being identified as a public health problem.¹⁸⁵ In another study of China’s tobacco control policies,²³⁴ Ngok and Li reported that the conflicted interests and lack of consensus among governmental departments hampered the political priority set for tobacco control, resulting in China’s smoking problem being placed not highly enough on the national agenda as it deserved. Based on evidence gained from a comparative case study of the policy processes of maternal health in Vietnam, India and China, Green et al. suggested that establishing accountabilities for advocacy organisations would help manage the increasing range of actors and, subsequently, lead to better policy outcome.²³³

In addition, two papers explored China’s national political environment and identified a number of contextual factors influencing political prioritisation in health. In a case study of the main dynamics within the NCMS policy process,²³⁵ Wang suggested that the economic and social transitions of China (since the late 1970s) shifting national policy emphasis from economic development towards social development at macro level, together with a more open policy environment encouraging all stakeholders to involve in policy development at micro level laid foundation for rural health reform and policy innovation. Applying multiple theories, Knutsen’s analysis of China’s

HIV/AIDS policy process further suggested that policy change was resisted by the country's past experience with similar policy issues (i.e., the elimination of sexually transmitted diseases in the 1960s), the perceived political and moral legitimacy of existing policies, as well as existing political structure (i.e., power reproduction mechanism).²³¹

Only one study explicitly considered a specific aspect of the policy process – i.e. international influence. In this paper, Huang revealed that international organisations, especially the World Bank, WHO, and Global Fund to Fight AIDS, Tuberculosis and Malaria, significantly shaped the Chinese health policy process by providing financial support conditionally, helping identifying new health problems, fostering transnational advocacy networks, promoting policy innovations, and facilitating learning and norm internalisation.²³⁶ All the factors identified by the above papers as influencing the policy processes of particular health issues in China are summarised in Table 3-3.

Table 3-3: A summary of the factors identified by selected papers as affecting the policy processes of particular health issues in China

Health issues	Factors identified as affecting the policy processes		Source
HIV/AIDS control	Establishment of new norms at global level		Xue, 2005; Wu et al., 2007
HIV/AIDS control	Assistance and pressure from international agencies		Xue, 2005; Wu et al., 2007; Huang, 2015
HIV/AIDS control	Behaviours of domestic policy networks	Network structure	Huang, 2006
HIV/AIDS control		Capacity of evidence generation and communication with policymakers	Xue, 2005; Huang 2006
Tobacco control		Consensus or conflicts between network members	Ngok & Li, 2010
Maternal health		Accountability	Green et al., 2011
NCMS	National policy environment	Economic and social transitions	Wang, 2008
HIV/AIDS control		Emergence of focusing events	Xue, 2005; Wu et al., 2007
HIV/AIDS control		Existing policies and political structure	Knutsen, 2012

Methodological and analytical approaches

Table 3-4 presents an assessment of the methodological and analytical approaches adopted by the 8 papers selected. It is shown that most articles have indicated quite broad objectives or research questions, such as: to analyse the sequence and substance of China's policy response towards HIV/AIDS; to identify similarities and differences between the maternal health policy processes in three Asian countries; and what is the rural health policy process like and what are the main dynamics behind this process? However, an explicit study design to answer the ambitious research question can be discerned in only 3 papers. Adopting single case and comparative case study methods, these studies collected primary data through mixed sets of qualitative data collection approaches, such as review of documentations and archival records, in-depth

interviews, focus group, and observations. The other 5 papers, although 3 of which did not provide any information on their data sources, are apparently based on secondary data, presenting reviews of existing literature and documentary materials.

Half of the papers applied pre-existing public policy theories or frameworks to analysing qualitative data. Wang's study of the NCMS policy process was guided by the policy cycle approach.²³⁵ Green et al. developed their own conceptual framework, by adding two extra factors to Walt and Gilson's policy analysis triangle, to investigate the policy processes of maternal health in Vietnam, India and China.²³³ Huang and Knutsen used multiple theories to analyse the factors affecting the development of and changes in China's HIV/AIDS policies,^{185,231} presenting the only 2 studies with indicated explanatory focuses. However, none of the above researchers explored the applicability and need for adaptation or refinement of the theories and frameworks in studying the health policy making in China. It is difficult to determine the analytical approaches used with qualitative data in the other four studies. These articles appear to adopt inductive approaches in generating narratives of experiences or identifying themes of experiences from policy-relevant data. The selected papers have other analytical weaknesses, such as neglect of the influence of researchers' positions on the study processes (only 3 papers were undertaken by scholars inside China, however, none of the 8 papers has discussed researcher positionality), limited contextualisation of the findings (only two papers contextualised analysis of their data under China's broad policy environment),^{231,235} and inadequate comparison and contrast of cases in analysis (there are only 1 cross-country comparison²³³ and 1 comparative case study of 3 institutions).²³⁶

Table 3-4: Assessment of selected papers on political priority generation in health in China

Author, year, title and journal	Research question (derived from article)	Study design	Data sources	Analytical approach
1. Xue. 2005. HIV/AIDS policy and policy evolution in China. <i>Int J STD AIDS</i> 16 , 459–464.	Depicts China's HIV/AIDS epidemic and policy and illustrate the main factors contributing to its policy evolution.	Not described	Document and literature review	Implicit
2. Huang, Y. 2006. THE POLITICS OF HIV/AIDS IN CHINA. <i>Asian Perspective</i> 30 , 95–125.	Provides a political analysis of the sequence and substance of China's policy response towards HIV/AIDS.	Not described	Not described	Explanatory, using an analytical framework that integrates <i>historical institutionalism</i> and Kingdon's <i>multiple streams theory</i>
3. Wu et al. 2007. Evolution of China's response to HIV/AIDS. <i>Lancet</i> 369 , 679–690.	Describes the influence of scientific studies and other factors on the development of HIV/AIDS policy in China.	Not described	Not described	Implicit
4. Wang, Y. 2008. The policy process and context of the Rural New Cooperative Medical Scheme and Medical Financial Assistance in China. <i>Studies in HSO&P</i> , 23 , 123–156.	What is the rural health policy process like, what are the main dynamics behind this policy process and how did they influence the process?	Not described	A combined strategy of literature review, in-depth interviews and observations in policy seminars and workshops	Policy cycle (<i>stages heuristic</i>)
5. Ngok & Li. 2010. Tobacco control in China: process, actors and policy initiatives.	Examines, from the perspective of public policy, the development of the tobacco control policy in China with a	Not described	Review of literature	Implicit

Journal of Asian Public Policy **3**, 100–110.

focus on policy actors and policy instruments.

- | | | | | | |
|----|--|---|--|--|---|
| 6. | Green <i>et al.</i> 2011. Health policy processes in maternal health: a comparison of Vietnam, India and China. <i>Health Policy</i> 100 , 167–173. | Seeks to identify similarities and differences between the maternal health policy processes in three Asian countries (Vietnam, India and China) in order to understand better the policy processes and factors impinging on them. | Cross-country comparative analysis | Review of 553 documents, 124 semi-structured interviews, 1 focus group and 5 participatory stakeholder workshops | A conceptual framework combining the policy analysis triangle and additional factors |
| 7. | Knutsen. 2012. An Institutional Account of China's HIV/AIDS Policy Process from 1985 to 2010. <i>Politics & Policy</i> 40 , 161–192. | Why did China's HIV/AIDS policy resist change at first, and what were the factors that drove later transformations in the development of this policy? | Case study | Documentations and archival records | Explanatory, using multiple theoretical tools including <i>historical institutionalism</i> , Oliver's antecedents of deinstitutionalisation, Kingdon's <i>multiple streams theory</i> , and <i>institutional theory</i> |
| 8. | Huang. 2015. International institutions and China's health policy. <i>J Health Polit Policy Law</i> 40 , 41–71. | Looks at how international institutions contribute to policy change in China and seeks to explain different outcomes in the relationship between international institutions and China's health policies | Process tracing and comparative case studies | Not described | Implicit |
-

Collectively, this set of papers, despite a few well designed studies, present weakly persuasive and authoritative descriptions or arguments of how priorities are set within China's health policy system. The literature covers very limited health topics in China therefore does not contribute to a great deal to understanding the dynamics of political prioritisation. In addition, the 8 articles share a number of analytical weaknesses which are consistent with those identified in a larger body of health policy literature in low and middle income countries,²²⁹ including being too descriptive, insufficient utilisation of frameworks, inadequate comparison and contextualisation in analysis, and neglect of positionality issues of the researchers. In a review of health policy and systems research in China, Meng and colleagues have suggested a number of factors which may explain the gaps between the needs for health policy studies and the current research performance,¹²³ including:

- The lack of a health policy and systems research agenda agreed by policy-makers and the research community;
- The lack of a bridging mechanism between policy-makers and researchers;
- The lack of incentives for researchers to participate in practical policy and systems studies;
- Weak research capacity;
- Customary lack of critical independence;
- Unfeasibility of policy recommendations;
- The lack of funding opportunities for health policy research projects.

3.5 Challenges for investigating the Chinese health policy process

Based on review of published empirical studies as well as literature on how to conduct health policy analysis, several challenges for researching health policy making in China, including conceptual and practical problems, were identified.

The first challenge is the multiple definitions of “policy” itself which have consequent impacts on research.²¹⁶ Gilson and Raphaely suggested that health policy analysis is ad hoc due to temporality in the policy process.²²⁹ However, according to Exworthy, the way in which decisions “emerge” rather than taking place at particular point of time is not always obvious to researchers.²³⁰ Buse et al. defined health policy as “to

embrace courses of action (and inaction) that affect the set of institutions, organisations, services and funding arrangements of the health system”,²¹⁰ therefore can be made by public sector (government), by private sector, as well as by organisations external to the health system²¹⁶. The complex nature of policy itself and the opaqueness of policy making has resulted in large difficulty in accessing a diverse range of organisations, individuals, and networks involved in the policy process.^{216,237} In addition, capturing and measuring levels of resources, ideas and power of multiple actors is also problematic and time-consuming.^{216,230} Such difficulties can be even more pronounced for health policy analysis in China, because the actors and individuals are widespread both geographically in a vast landscape, and politically due to a matrix accountability system of the Chinese Government caused by decentralisation (discussed in Chapter 2).¹²⁸

Second, the long-term nature of policy development presents a challenge for research which is always funded on a short-term basis and looks for quick answers and solutions.^{216,230} Hunter described the conflicts between the time required to generate scientific and empirical evidence to policy making and the time policymakers are willing to wait as “the curse of temporal challenge”.²³⁸ In China, a significant proportion of health policy studies are pushed by practical consideration, such as the evaluation of existing policies and programmes. Policy analysts are always expected to provide easily implementable recommendations within relatively short time periods. Such trend in health policy research may help explain why very limited studies on health policy making in China can be found. In addition, the policymakers demand for quick remedies may have led, according to international and national scholars, to reductionism and unfeasible policy recommendations.^{123,216}

The third challenge is to contextualise the investigations of actors, interests and ideas in China’s broad policy environment. The focus of health policy analysis change over time due to the changes of nature of policy and policy making.²¹⁶ Since its establishment in 1949, as presented in Chapter 2, the People’s Republic of China (PRC) has experienced a number of social and economic transitions, from planned economy to “reform and opening-up” to the recent focus on improving socio-economic equality.¹³⁴ The relatively frequent shifts of macro policy goals and changes in reform agendas have resulted in incoherent national health policy priorities over the past 60

years,¹³³ which should be taken into account during studying political priority generation for PMTCT of syphilis and other health issues. Chapter 2 has summarised the characteristics of China's health policy environment in different political eras, especially those factors which have shaped the national and subnational agendas. In doing so, it provides the knowledge base for contextualising analysis of the data of this study in broader context.

Researcher positionality, which is commonly neglected in published health policy literature in China, presents the fourth challenge for this study. Being either “insiders” or “outsiders”, researchers' positions in the studies are critical to their capacities to access data and construct knowledge, especially in studies that investigate sensitive political issues and require participation of high profile policy elites.¹²⁴ Thus, the study design of this PhD research should involve greater reflexivity on the author's institutional power, resources and position, and their impact on data collection and interpretation, as well as whether and how the positionality limitations can be addressed, for example, through establishing a study team including both “insiders” and “outsiders” (more details are presented in Chapter 4).

Health policy scholars have suggested that the field of health policy analysis would be advanced if researchers approached it more systematically, developing clear and testable propositions about the issue studied, with explicit frameworks.²¹⁸ However, the majority of published Chinese health policy studies have utilised frameworks insufficiently. Thus, the fifth challenge is to select a proper theoretical or conceptual framework to guide organisation and analysis of the data of this study. The selection process is presented in the following section.

3.6 Analytical framework for assessing the independent variables

“No single policy model offers a fully comprehensive description or understanding of the policy process as each answers somewhat different questions. The selection and appropriate application of these models to health policy analysis is crucial in understanding and

explaining the ways in which social determinants of health are addressed in specific national contexts.”^h

A number of conceptual and theoretical frameworks have been proposed from policy analyses in high income countries, many of which can also help researchers organise and concentrate their efforts to explore health policy making, and in low and middle income countries. However, such concepts should be transferred cautiously, with careful consideration of their applicability and adaptability.^{125,216} Given that there is always no one best framework to employ, the selection of analytical approach for assessing the independent variables of this study (i.e. factors influencing the level of political prioritisation of PMTCT of syphilis and PMTCT of HIV in China) was done through reviewing the most applied theories and frameworks in published health policy literature and assessing them for feasibility and applicability in studying the Chinese health policy process, as presented below.

3.6.1 Theories

Theories are more specific than frameworks. They postulate precise and testable relationships between variables, facilitate understanding of causality, and bring coherence to a fragmented body of knowledge.²²⁵ As health policy scholars have argued, theories are not positivist approaches to public policy analysis, however, they present a more thoughtful conceptualisation of the policy process, which “goes beyond telling the story”.²¹⁶

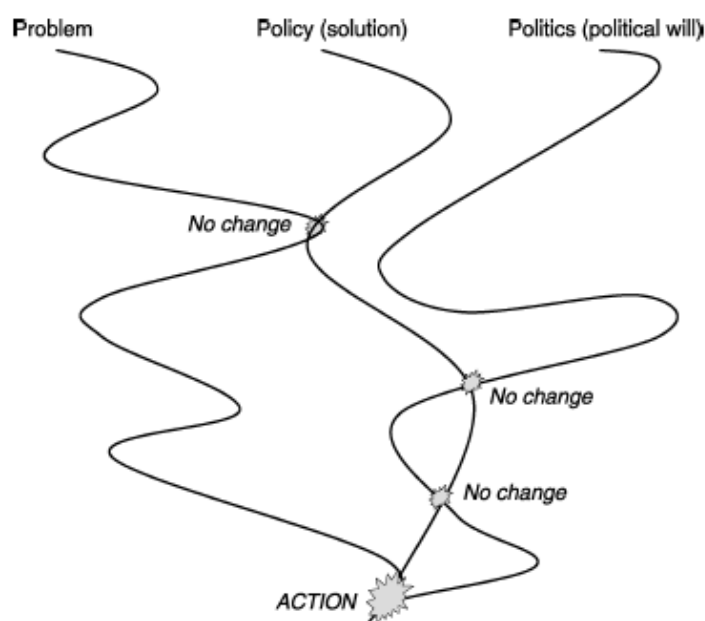
Multiple streams theory

In the *multiple streams theory*,¹¹⁸ one of the most influential theories of public policy process, Kingdon identified three independently flowing streams – i.e. problems, policies and politics - which make the process of agenda setting random (Figure 3-1). The *problem stream* refers to the perceptions of problems as public matters requiring government action and public attention. The *policy stream* consists of the ongoing analyses of problems and proposed policy alternatives to address these problems. This stream also contains ideas and technical proposals regarding how the problems may be solved. The *politics stream* operates quite separately of the other two streams and

^h Exworthy, M. Policy to tackle the social determinants of health: using conceptual models to understand the policy process. *Health Policy Plan.* **23**, 318–327 (2008).

contains particular events such as political transitions, shifts of national mood, changes of government and campaigns by social pressure. The three streams usually work independently but merge or intersect at particular juncture times, which are termed as “*policy windows*”. These are the moments when policy issues go onto the agenda and the governments decide to act.

Figure 3-1: Kingdon’s multiple streams theory. Source: Buse et al., 2005



Ideas from the *multiple streams theory* have been adapted in many health policy studies, including two identified earlier as undertaken in China, to explain how particular issues have emerged on the policy agendas. Knutsen and Huang drew on Kingdon’s ideas in their research on China’s HIV/AIDS policy process.^{185,231} They both demonstrated that the SARS outbreak in 2003 joined the three streams together and opened a policy window for HIV/AIDS advocacies to assert greater pressure for the national government of China.

However, the *multiple streams theory* has not escaped criticisms from scholars and policymakers, such as those for truly separated streams not existing in reality,²²⁵ and neglecting media effects.²³⁹ The most frequently asked questions are around how far Kingdon’s concepts, which were developed mainly to assess mechanisms of policy change in the US,²²⁵ can be applied to other policy environments, especially

developing countries. For instance, Huang expressed concern during applying the theory to investigating China's AIDS policy process that:¹⁸⁵

“Without taking into account different political systems, the model is potentially problematic when applied to policy dynamics in other countries, such as China, where fusion of power is still norm and a robust civil society remains absent.”

Punctuated equilibrium theory

In Baumgartner and Jones' *punctuated equilibrium theory*,¹¹⁹ the policy making process consists of long periods of stability and minimal or incremental policy change, and is disrupted by bursts of rapid transformation. Two concepts, *policy image* and *policy venue*, are central to this theory. *Policy image* refers to the way in which an existing problem and its solutions are portrayed. One image may predominate over an extended period of time, but may be challenged at certain moments as new framing of the problem and alternatives emerge. *Policy venue* is the set of organisations and/or individuals that make decisions regarding particular issues. These actors may take control for a while but eventually will have to compete with new actors who gain power with alternative *policy images* and push for change. Therefore, the policy process comprises both stability and change, rather than one or the other alone.

Through investigating the emergence of global disease control priorities, Shiffman et al. suggested that the *punctuated equilibrium theory* corresponds most closely to the international efforts to control tuberculosis, malaria and polio²⁴⁰. At global level, bursts are associated with three conditions merging together: the prevailing framing of the disease as a threat; a perception that human interventions can control its transmission; and the formation of a transnational coalition of actors sharing concerns regarding combating the disease. However, none of the identified studies on health policy making in China has applied *punctuated equilibrium theory*.

3.6.2 Frameworks

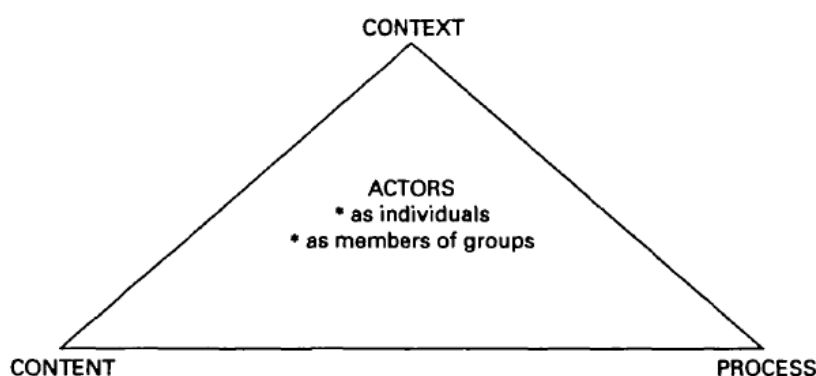
Frameworks provide shared orientations for studying, explaining, and understanding phenomena of interest. They primarily organise inquiry into the health process through

identifying elements and relationships among elements that need to be considered in developing propositions. They do not predict behaviours and outcomes.²²⁵

Policy analysis triangle

In 1994, Walt and Gilson proposed a triangle model²¹⁷ specifically for health policy analysis (Figure 3-2) which considers how a set of influential factors interact to shape the policy process. These factors include *content* (i.e. policy outcomes), *process* (i.e. how policies are made), *context* (i.e. wider issues affecting policy making), and *actors* (i.e. organisations and individuals who make policies). Although the *policy analysis triangle* may bring the impression that each interrelation can be looked at individually, it presents a highly simplified model of the extremely complex interrelations in reality and emphasises on the importance of investigating a number of dimensions of health policy which had been neglected by previous research (focused on the content only).²¹⁰ Stemmed from a political economy perspective, this model has influenced and been applied to numerous studies on a diverse array of health-related issues, including health system reform, mental health, tuberculosis, and reproductive health etc.^{216,229}

Figure 3-2: Policy analysis triangle. Source: Walt and Gilson, 1994



Although the *policy analysis triangle* is useful for helping researchers think more systematically about a full set of aspects of the health policy process, it does not present a clear range of explicit factors affecting policy making and implementation that should be explored during the studies. There is only one study identified which applied the *policy analysis triangle*, with two additional factors, to investigation of the policy processes of maternal health in China and other two Asian countries.²³³ However, to

what extent the framework has helped identify the factors affecting the policy processes and gained from the adaptation is not presented in the article.

Network frameworks

Network frameworks have been developed on hypothesis that the policy process does not operate in isolation but rather than through interactions and interconnectedness between groups of actors, each with their own values, agendas, interests and motivations.^{230,241} There are many definitions of what a policy network is. The most widely agreed one is that policy networks are “clusters of actors with interests in a given policy sector, and the capacity to help determine policy success or failure”.²⁴² Whilst networks establish high-level trust and dependence, they can also exclude other actors from the policy process.²³⁰ In addition, networks advance learning and development as they are grounded in public policy practice. These basic principles are illustrated by two main network frameworks: (1) *policy and issue networks*, and (2) the *advocacy coalition framework*.

Marsh and Rhodes divided policy networks into two ranges: policy and issue networks.²⁴² A *policy network* (or termed as a policy community) comprises a relatively small number of closely interacted actors (such as civil servants, politicians, academics, etc.) who share basic values and resource, integrate tightly around a strong inner or dominant core of actors, and commit to a common cause.^{230,243} On the other hand, an *issue network* gathers many different groups and individuals around a specific “issue”, and may have little continuity in value or participation as well as looser interaction between actors.^{216,230}

The distinction between policy communities and issue networks may revolve due to changes in the degree to which actors are involved in the policy process.²³⁰ According to Marsh and Rhodes,²⁴² policy networks can be characterised by four factors, including:

- Membership (number and type of members);
- Integration (frequency, continuity and consensus);
- Resources (their distribution), and
- Power (balance between members).

Sabatier argued that the policy process involves the formation and maintenance of complex coalitions of interests.^{244,245} Similar to issue networks, the *advocacy coalition framework* interprets the policy process as functioning on a series of networks which composes advocacy organisations and individuals united by a set of core values, ideologies and beliefs which are resistant to changing ideas and introducing new policies – i.e. advocacy coalitions. Although advocacy coalitions are expected to explore and understand the policy environments they are located, change can only occur when the values shared by the advocates are challenged significantly.²³⁰

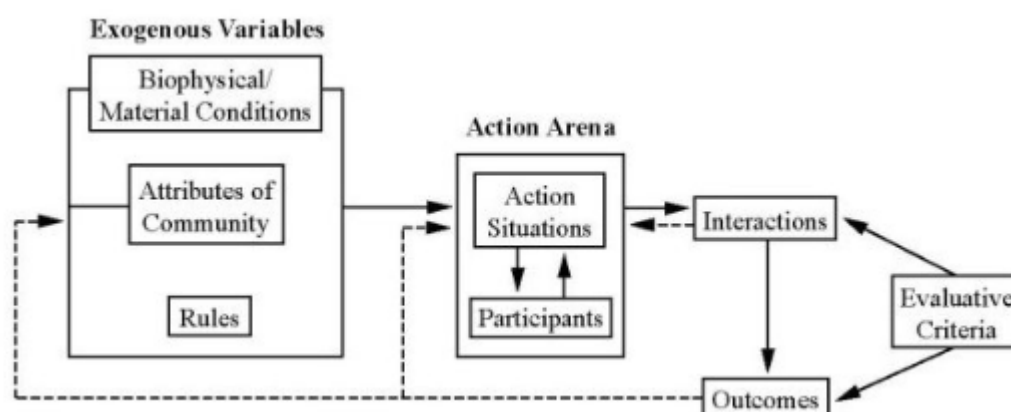
There are many debates surrounding the nature of the concept of networks, such as whether it is descriptive or explanatory, whether it is merely a Western concept generated from the policy making processes in the US and UK, and whether it is also legitimate and applicable to developing countries.²⁴¹ Although some network approaches are not new, they have been seldom utilised empirically in health policy analysis in low and middle income countries until recently.^{237,246} Also, none of the identified published studies on health policy development in China has applied any of the network frameworks.

Institutional analysis and development framework

The *institutional analysis and development (IAD) framework* organises inquiry into institutions from an interdisciplinary political economy perspective and is characterised by a problem-solving orientation.²⁴⁷ Herein, the term institution does not refer to an organisational entity, a business firm, or a political party, but refers to the rules, norm, and strategies adopted by individuals operating within or across organisations.²⁴⁸ Because the primary purpose of studying institutions is to understand how people use institutional arrangements to address collective action problems and provide shared benefits, the *IAD framework* can be applied when a shared problem that people are attempting to resolve is identified.²⁴⁷ The problem could be at an operational tier where actors interact in light of the incentives they face to generate outcomes directly. It could also be at a policy tier where decision-makers have to make policy solutions within the constraints of a set of collective-choice rules.²⁴⁸

As shown in Figure 3-3, the *IAD framework* is a multi-tier conceptual map, with the identification of a conceptual unit (i.e., an *action arena*) in the core. An *action arena*, including an action situation and actors in that situation, refers to the social space where individuals interact, exchange goods and services, solve problems, dominate one another, or fight.²⁴⁸ It is where the policy action is.²⁴⁹ Based on understanding of the initial structure of an *action arena*, institutional analysts can explore the factors that affect the structure (i.e., *exogenous variables*), including factors in the physical and material world, the community, and rules-in-use.^{247,249} Once the constraints of these factors are taken into account, patterns of interaction flow logically from the behaviour of actors in the *action arena*, and insights of outcomes flow logically from similarly well-founded observations about patterns of interaction.²⁴⁹

Figure 3-3: The institutional analysis and development framework. Source: Adapted from Ostrom, Gardner and Walker, 1994²⁵⁰



Over the past 3 to 4 decades, the *IAD framework* has been extensively applied in a range of study areas, including economic development issues, common-pool resource management, public services and governance, constitutional design, and international relations etc,²⁴⁷ however it has been uncommonly applied in the health policy literature referring to low and middle income countries. Although two studies were identified as applying institutional approaches in studying the HIV/AIDS policy process in China,^{185,231} none of them has explored the applicability of the approach or approaches within China's specific context.

Shiffman's political priority framework

In the recent years, there is a growing attention to the importance of better use of existing body of policy analysis – i.e. to explore new approaches to synthesise retrospective studies drawing on research from different disciplines in one policy domain or set of countries. During qualitative synthesis, the findings of large sample studies which enjoy both quantitative and qualitative methods are pooled, and judgement-based qualitative approaches are used to draw conclusions regarding the collective meanings of the pool of research.^{216,218} Drawing on the results of five developing country case studies,^{251–255} Shiffman developed a nine-factor framework (Table 3-5) which assesses priority generation for maternal mortality reduction in those countries through three categories: transnational influence; domestic advocacy; and national political environment,¹²⁴ with the hope to provide implications for setting of health priorities in other resource-poor settings.

This framework offers a useful guide to what to explore in analysis of how health issues are prioritised and treated in the developing world. It has recently been applied to a number of health policy studies on the determinants of political prioritisation of certain health issues (e.g., newborn survival, obesity prevention) in both developing and developed countries,^{226–228} including two single country case studies and one cross-country analysis, all of which revealed good applicability and adaptability of the framework in the specific country contexts.

Table 3-5: Factors Influencing the Degree to Which Maternal Mortality Reduction Appeared on National Policy Agendas: Guatemala, Honduras, India, Indonesia, and Nigeria, Early 1990s to Mid-2000s

Factor	Category	Description
Norm promotion	Transnational influence	Efforts by international agencies to establish a global norm concerning the unacceptability of maternal death
Resource provision	Transnational influence	The offer of financial and technical resources by international agencies to address maternal mortality
Policy community cohesion	Domestic advocacy	The degree to which national safe motherhood promoters coalesced as a political force pushing the government to act
Political entrepreneurship	Domestic advocacy	The presence of respected and capable national political champions willing to promote the cause
Credible indicators	Domestic advocacy	The availability and strategic deployment of evidence to demonstrate the presence of a maternal mortality problem
Focusing events	Domestic advocacy	The organisation of forums to generate national attention for the cause
Clear policy alternatives	Domestic advocacy	The availability of clear policy alternatives to demonstrate to political leaders that the problem is surmountable
Political transitions	National political environment	Political changes, such as democratisation, that positively or adversely affect prospects for safe motherhood promotion
Competing health priorities	National political environment	Priority for other health causes that divert policymaker attention away from maternal mortality reduction

3.6.3 Why use Shiffman's framework?

As presented above, researchers have applied a range of social science theories to health policy analysis, drawing these from dimensions such as public policy, economics, and sociology. Although much of these approaches have resonance for and can inform research in China, most of them reflect the logics of developed countries therefore need to be adapted to the country's specific policy environment.

Kingdon argued that it was only with the confluence of three streams – problems, policies and politics – that opportunities for policy action would arise. However, because PMTCT of syphilis was neglected at both policy and programme levels in

China prior to 2010 (as presented in Chapter 1), identifying the three streams as well as tracking how they flew and merged over time may be difficult as a result of insufficient data. Similar problem may occur if Baumgartner and Jones' theory is applied. The *policy image* of MTCT of syphilis in China prior to 2010 was characterised by the absence of widely agreed incidence data (by both scholars and health officials) and decision-makers' unawareness of policy solutions (as discussed in Chapter 1). In addition, no new actors emerged during this period to lead promotion for control of MTCT of syphilis, presenting a relatively stable *policy venue* which was against policy change. Thus, none of the two theories was selected for this PhD study.

Walt and Gilson's *policy analysis triangle* has proved useful for helping researchers think more systematically about the policy process. However, it is more likely to show the main research directions but that a range of factors affecting policy making and implementation have yet to be included.²¹⁰ For instance, the analysis of actors may include exploration of the roles of different actors, their interest, power and interaction; contextual factors may comprise situational, cultural, and international or exogenous features; and the policy process can be broken down into a series of stages, each of which can be the subject of inquiry.²²⁵ Therefore, the *policy analysis triangle* is not considered for this study due to unclearness of what explicit factors to look at during analysis of policy-relevant data.

For network frameworks, although a few published studies revealed that whether the policy networks functioned well can affect setting of health priorities in China,^{185,232–234} a number of contextual and situational factors have also been identified as significantly influential, including establishment of norms, international assistance, national political environment, as well as the emergence of focusing events.^{98,231,232,235} This makes the assessment of policy networks more like a component of a comprehensive framework rather than an individual approach. Also, institutional approaches were not considered due to concern of its applicability in China where the fundamental institutional arrangements are characterised by hierarchies, differentiating from those characterised by markets, and may need specific explanatory theory.²⁴⁸

As discussed earlier, there is limited literature on political prioritisation of health issues in China, presenting difficulties for synthesis of findings related to why some problems or issues get taken up as a priority over others. Shiffman's framework was, finally, chosen for this PhD study because in comparison with other approaches it provides a more applicable and detailed guidance with regard to what to explore during the analysis. First, in contrast to many classical public policy theories and frameworks (i.e., the *multiple streams theory* and *punctuated equilibrium theory*, and institutional approaches etc.), it focuses specifically on health and therefore is more capable to capture the dynamics of health policy processes. Second, drawing on a number of empirical country case studies from the developing world and having been validated in both developing and developed countries, it is more generalisable in China, compared to those approaches drawn on evidence from developed countries only (such as institutional and network frameworks). Third, compared to other approaches especially the *policy analysis triangle* and network frameworks, Shiffman's framework looks at a more comprehensive range of factors which shape health agendas. It incorporates components of a number of widely utilised approaches, for example, the factors of credible indicators and clear policy alternatives overlap with Kingdon's *policy stream*; the factors of policy community cohesion and political entrepreneurship are, to various degrees, close to Baumgartner and Jones' *policy venue, actors* in the the *policy analysis triangle*, as well as the principles of network and institutional frameworks; the factors under the category of national political environment overlap with Kingdon's *politics stream* as well as *context* in the *policy analysis triangle*; the factor of focusing events and Kingdon's "policy window" are very similar.

In addition, although Shiffman's framework has never been utilised to studying Chinese health policies before, each of the nine component factors was identified at least once as relating to political prioritisation of particular health issues in the country in the 8 published health policy studies (as presented in Table 3-3), suggesting relatively good applicability.

However, Shiffman's framework also has some limitations, such as some of the factors (e.g., transnational and national influences) being not neatly separated under particular context,²²⁸ difficulties in assessing the interactive effects between factors as well as the neglect of perceptions of the problems and their solutions which are core

components of some other public policy approaches such as the *multiple streams theory* and *punctuated equilibrium theory*. In addition, Shiffman himself has acknowledged difficulties in controlling for confounding influences on the outcome of political interest and presenting causality. In his own words:¹²⁴

“...inferences in this study must be understood as propositions that require further research, ideally in comparative context...In the absence of additional comparative inquiry, one cannot be certain that the factors identified were the primary forces at work nor of their relative causal weight.”

According to health policy scholars, causality of the study results can be significantly enhanced by adopting a comparative study design,¹²⁴ ideally of similar issues.¹²⁵ At the time when this PhD study was commencing, two policy cases – i.e. PMTCT of syphilis and PMTCT of HIV - emerged as strong candidates for such a comparison. Given the similarities in the risks and vulnerability, and intervention delivery patterns, as well as the contrasting levels of political priority afforded to the two infections (details presented in Chapter 1), applying Shiffman’s framework to investigating the two policy cases can not only help assess the determinants of political prioritisation in China, but also the causal weight of each factor identified can be potentially increased. This will be addressed in more detail in Chapter 4. In addition, it is also important for this study to suggest potential refinement and adaptation of Shiffman’s framework in order for it to better adapt to China’s unique context.

3.7 Chapter summary and discussion

This chapter provided the theoretical background of this PhD study. Based on comparison of the policy processes of PMTCT of syphilis and PMTCT of HIV in China, a decision was made to focus the study explicitly on the agenda setting and policy formulation stages of both policy processes in order to unfold the determinants of political prioritisation. Using three validated criteria (i.e. national leaders’ sustained attention, an overall planning document followed by a series of policies and initiatives, and resource allocation), political prioritisation of PMTCT of syphilis and PMTCT of HIV in China was identified in 2010 and 2003, respectively, reemphasising the

research question of what accounts for the country's far slower policy response to MTCT of syphilis compared to the response to MTCT of HIV. In order to answer the research question, the aim and objectives of this PhD study were then set down, which include to identify the key features driving or hampering political prioritisation (dependent variable) of the two causes in China (independent variables); to determine the similarities and differences between the dynamics of political priority generation at national and subnational levels; to arrive at a set of implications for promoting PMTCT of syphilis as well as other neglected health issues; and to provide a useful analytical approach for future research on China's health policy making.

This chapter then revealed a relative absence of health policy analyses on the dynamics of political prioritisation that only 8 papers covering 5 health topics were identified from 2005 to 2015. The field of health policy analysis in low and middle income countries generally and in China in particular share a number of analytical weaknesses, including the lack of explicit explanatory focuses; less chances of the study findings being contextualised in national contexts; the neglect of researchers' positionality issues; inadequate comparison of cases in analysis; and insufficient methodological guidance on how to investigate the health policy process. Although the literature has highlighted some constraints and opportunities to improve generation of political priority for particular health issues, it is non-cumulative and contributes only limited understanding of the dynamics underlying the Chinese health policy process. Based on the literature review, the most important challenges for this study were identified, including a complex decision-making landscape caused by bureaucratism and decentralisation; the conflicts between the long-term nature of policy making and decision-makers' demand for quick remedies; contextualisation the investigation in China's unique health policy environment characterised by a number of economic and social transitions shifting the basic national priorities; the researcher's positionality; as well as what analytical framework should be used.

Finally, the rationale of selecting the analytical approach for this PhD study was presented. By reviewing the most applied analytical frameworks and theories in published health policy literature, Shiffman's framework was considered as most suitable to guide organisation and analysis of the policy-relevant data, and explanation of the independent variables of this study. The framework not only has proved useful

in a wide variety of structural/political/socio-economic contexts, but also applicable in China though adaptation may be needed. Considering the limitations of the framework, particularly on presenting causality, it is applied in a comparative context for assessing political prioritisation of PMTCT of syphilis and PMTCT of HIV in order to strengthen causal weight of the study results.

Chapter 4 Study methodology

“You would use the case study methods because you wanted to understand a real-life phenomenon in depth, but such understanding encompassed important contextual conditions – because they were highly pertinent to your phenomenon of study.”ⁱ

4.1 Introduction

Health policy scholars have argued that few health policy analyses in low and middle income countries discuss specific study design, and this field would benefit from reflection on the range of available methodologies, and their relative benefits and limitations.²¹⁶ This chapter presents such reflection of this PhD study. It describes the research design and methodological approach that has been employed for data collection and analysis and considers the ethical issues and difficulties encountered during the research process.

4.2 Research design

4.2.1 A qualitative approach

As presented in Chapter 3, this PhD study seeks to achieve a deeper understanding of how the national and subnational health agendas are set in China, with the hope that the study findings can inform promotion of political prioritisation for prevention of mother-to-child transmission (PMTCT) of syphilis and other neglected health issues. To achieve these objectives required the researcher to delve into the complex policy processes and explore the key factors that shaped the levels of political priority set for the two very issues, all of which suggest a qualitative approach.

Different from quantitative techniques, qualitative methods rely on textual data rather than numerical data, analyse those data in their textual form rather than converting them to numbers for analysis, aim to understand the meaning of human action, and ask

ⁱ Yin, R. K. *Case Study Research: Design and Methods*. 5, (SAGE, 2009).

open questions about phenomena as they occur in context rather than setting out to test predetermined hypotheses.^{256,257} As Miles et al. have put it:²⁵⁸

“Qualitative data, with their emphasis on people’s lived experiences, are fundamentally well suited for locating the meanings people place on events, processes, and structure of their lives and for connecting these meanings to the social world around them.”

Qualitative methods are flexible and innovative, able to produce discursive descriptions, and facilitate the researchers to examine the complex interrelationships behind various issues, such as policy processes.^{259,260} However, they are also criticised for being too subjective, and vulnerable to biases in data collection, interpretation and analysis. A fundamental weakness of qualitative methods is that the data available to researchers consists mostly of what the researchers can access and what the informants have talked about, but neglects what the researchers cannot access, and what the informants have not said and whether they are correct or truthful about what they have said. According to Thorogood, there is always a tension between explicit procedure and informal judgement in qualitative research.²⁶¹

One important approach to enhance validity of qualitative data is triangulation, which involves the utilisation of multiple data sources, multiple data collection methods, multiple disciplinary perspectives, and comparison with existing theory,²⁶² all of which help understand phenomenon more fully.²⁶³ Lincoln and Guba discussed the importance of triangulation, which is a means of improving the rigor of the analysis by assessing the integrity of the inferences that one draws from more than one vantage point.²⁶⁴ This PhD study combined and triangulated data collected from three methods – documentation review, in-depth stakeholder interviews, and nonparticipant observation – of which more details are presented later in this chapter.

4.2.2 A comparative policy analysis

Social research methodologists have argued that qualitative “research design should be a reflexive process operating through every stage of a project”; the activities of collecting and analysing data, developing and modifying theories, elaborating or refocusing the research questions, and identifying and dealing with validity threats are

usually going on more or less simultaneously, each influencing all of the others.²⁶⁵ As this study aims to unfold the complex dynamics of political prioritisation of particular health issues, a case study approach was employed. Case studies, which are widely utilised by social scientists, are thought of as suitable for exploration of relatively complex situations in which the problems are not well defined and competing and contradictory interpretations exist.²⁶⁶ Yin has defined case studies as in-depth and empirical investigations of a contemporary phenomenon within its real-life context when boundaries between phenomenon and context are not clearly evident and multiple sources of evidence are used.²⁶⁷ It allows an impressionistic analysis of a problem and facilitates identification of features which might not have been expected to be related to the issue. Scott and Russell have explored the potential for case study methods in researching voluntary and community action, and identified several advantages of case studies insofar as:²⁶⁸

- They provide contextual details about different actors, agencies, events and processes;
- They are capable to demonstrate the dynamic of social and organisational relationships;
- They are able to reveal hitherto undisclosed information;
- They can locate their explanations within wider political and economic frameworks.

Over the past a couple of decades, increasing attention has been paid to the value of case studies in health policy analysis due to their special capacity to examine political or social phenomena in their contextual conditions, as well as to reflect the wider policy environment.^{267,269–271} Many other commonly used methodologies in public health studies, such as structured surveys, randomised controlled trials, statistical analysis and formal modelling, do not have these advantages.^{267,271} Gilson and Raphaely have revealed in a review of a set of health policy studies in low and middle income countries that most investigations are case studies.²²⁹

On the other hand, however, there are many criticisms for case studies regarding their unmanageability and generalisability.^{267–270} Nevertheless, Scott and Russel have suggested that researchers should not abandon the case study approach simply because

of its unmanageability, but should instead retain a clear sense of the analytical themes at the core of the studies. Similarly, although case studies can rarely be defended by reference to large representative samples, they do enable researchers to “look more subtly at apparent social and economic trends and their impacts.”²⁶⁸ Case study methodologists have argued that the value of case studies in social research can be significantly improved by asking a few simple questions, such as what is it a case of; and why is this case a useful one to study?²⁶⁹ According to Ragin and Becher, some cases may be clear to the analysts whilst some others may be established or re-established during the study period as their defining characteristics can only be revealed gradually.²⁷⁰ Such processes of clarifying the cases enable the researchers to specify a body of knowledge which they may contribute to. Also, consideration of the above issues can help the researchers decide which methods and theories will be applied to explore the cases and whether and how the study results will be generalised.²¹⁶

Generalisability, in the case study context, refers to the ability of the study to expand and refine existing theory. Beyond careful case selection and classification, it can be advanced by increasing the number of study cases.^{125,216,267} This would imply a purposively designed cross-policy research aiming at assessing the various factors in the framework, using the same measures for each comparative case.¹²⁵ Yin has described the value of multiple case designs as:²⁶⁷

“Even if you can do a ‘two-case’ case study, your chances of doing a good case study will be better than using a single-case design. Single-case designs are vulnerable if only because you will have put ‘all your eggs in one basket.’ More important, the analytic benefits from having two (or more) cases may be substantial.”

There are several strong examples of cross-country comparative studies,^{124,272,273} all of which demonstrate that comparisons between different country contexts can facilitate generalisation of country-specific factors in policy making, adaptation and implementation. However, cross-country comparison is intensively time- and resource-consuming and require careful consideration of historical and contextual influences, thus is not considered for this study.

The logic of comparison, however, which allows for the exploration of diversity, held considerable appeal. Walt and Gilson have suggested that conceptual framework can help generate stronger propositions regarding the policy processes if it is applied to comparative analysis of similar issues rather than a diversity of issues, differentiating more clearly between types of policies and types of contexts.¹²⁵ This directs to the adoption of a comparative case study of PMTCT of syphilis and PMTCT of HIV in China, applying a pre-existing and validated framework (details presented in Chapter 3). The two cases were selected for the study based on the following attributes.

- Mother-to-child transmission (MTCT) of syphilis and MTCT of HIV share a number of characteristics in the transmission routes, vulnerability, distribution of interventions, and controversial nature of the infection;
- The priority generating process can be tracked (in documentation) from the emergence of the problem to political prioritisation achieved in both cases.

Given the significant contrast in China's policy responses to MTCT of syphilis and MTCT of HIV, the in-depth comparisons between the policy processes of the two similar issues, applying the same set of measure, can not only help overcome subjectivity of the qualitative research design but also yield robust results regarding what drives political prioritisation in China.

Because PMTCT of syphilis was highly prioritised by a couple of municipal governments many years before it first appeared on the national agenda, in addition to the national level comparison, this study also investigated and compared a few selected provincial and municipal cases (the rationale of selecting the study units at provincial and municipal levels is presented in Section 4.3.1) and compared them to the national cases in order to identify a full set of aspects of the Chinese health policy process which are related to political prioritisation. Although the underlying dynamics of political prioritisation at multiple administrative levels were not identical, the subnational analysis and comparison between different levels added important evidence to the national level comparison regarding more general combinations of factors shaping policy making as well as any additional factor which might be able to explain the slowness in China's policy response to MTCT of syphilis.

4.2.3 A historical perspective

As discussed in Chapter 2, policy decisions are not made at particular points of time but after development of several months and even years. This nature has resulted in difficulties in understanding the continuous and complex process of policy making which is affected by a set of highly interrelated factors over time.^{216,230} Public policy scholars have suggested that the aspects of policy processes (i.e., contemporary, historical/retrospective, or perspective) which policy analyses look at have implications for deciding methods and study timeframe.^{216,237} For example, short horizon approaches are more appropriate for research in fast moving political environments,²¹⁶ whilst stakeholder analyses focusing on position, power, players and perception are often utilised in prospective studies pushing for policy change.²⁷⁴

The historical context of this PhD study is crucial since it is interested in not only political prioritisation, but also its genesis and long-term ramifications. A short horizon approach is not able to generate such understanding. As Maines has stated, “studies...that do not take into account fundamental differences in temporality will always produce misrepresentative conclusions.”²⁷⁵ If the analysis is not merely to inform but to improve practice in promoting political prioritisation of certain health issues, then the sequential model of “historical prediction” should be utilised. Tosh has viewed this model as a systematic analysis of trends which attempts to separate those features which are ephemeral from those which are enduring so as to help understand how feasible certain reforms may be, therefore can inform efforts to manage social and political change.²⁷⁶ Consequently, this PhD study collected data from the establishment of New China in 1949 to 2010 when PMTCT of syphilis was eventually put highly onto China’s policy agenda. Although such a historical approach presents challenges for data collection and analysis, such as recall bias,²¹⁶ it can help identify those unintended and unexpected elements of the policy processes therefore avoid temporality of the study findings.

4.2.4 Researcher positionality

As discussed in Chapter 3, the researcher’s positionality can influence the research process, and presents one of the main challenges for this PhD study. According to health policy scholars, positionality has implications not only for access to data but

also for knowledge construction. It is tightly linked to the power relations between researchers therefore have implications on which issues they look at, how research questions are asked, and how research agendas are set.²¹⁶ The most commonly used distinction of researcher positionality is between “insiders” and “outsiders”. As Merriam et al. have specified:²⁷⁷

“Being an insider means easy access, the ability to ask more meaningful questions and read non-verbal cues, and most importantly, to be able to project a more truthful, authentic understanding of the culture under study. On the other hand, insiders have been accused of being inherently biased...The outsider’s advantage lies in curiosity with the unfamiliar, the ability to ask taboo questions, and being seen as non-aligned with sub-groups thus often getting more information.”

The author’s “insider” position

The author is a native Chinese speaker, a registered public health doctor in China, and, before this PhD, had worked for two year as the project associate for a municipal programme to provide universal PMTCT of syphilis and HIV services. Although not directly involved in the policy processes of PMTCT of syphilis and PMTCT of HIV at national level, her position in relation to the two policy areas was certainly that of an “insider”, which drove the final decision to conduct this PhD study, and the selection of the two comparative cases. Having worked with the World Health Organization (WHO) Representative Office in China, National Center for STD Control (NCSTD), National Center for Women and Children’s Health (NCWCH), and a few provincial and municipal health institutions on a number of projects and programmes related to prevention of sexually transmitted diseases (STDs) and HIV, the author did not meet much difficulty reviewing documentary sources or interviewing key stakeholders. The related work experience and contacts helped secure the author’s access to key policy actors, documents, and related meetings and trainings, as well as funding for the study. Her contacts with many of the stakeholders due to other professional links also proved helpful in obtaining access to a number of potential respondents. In addition, the “insider” position offered significantly

enhanced understanding of the two policy processes and therefore facilitated data analysis.

However, the author's "insider" position may have also caused inherent bias.²⁷⁷ As Walt and colleagues have argued:²¹⁶

"Researchers linked to particular policy environments will naturally be inclined to focus on specific and contemporary features of the particular policy space, rather than more universal themes that cut across policy or country contexts. They may also be more concerned with developing policy relevant conclusions than new theoretical or methodological understanding."

A combined study team of both "insiders" and "outsiders"

Buse has suggested that health policy analysis may involve both insiders, ideally policy actors, and outsiders in data collection and analysis, in order to achieve better understanding of the policy process.²⁷⁸ However, to organise such a research team is not easy in reality because "insider" researchers are sometimes hard to recruit and "outsider" researchers may be expensive and time-constrained.²¹⁶

This PhD study was partly funded by the Department of Reproductive Health and Research, WHO, and based on the collaboration between the WHO, NCSTD, and University College London (UCL), which laid foundation for the adoption of a study team consisting of both "insiders" (including the author herself, a supervisor from the NCSTD, and national and local data collection coordinators) and "outsiders" (i.e., supervisors from UCL, and responsible staff members at the WHO). The WHO funding, which aimed to gather evidence which would guide the MOH of China in its proposals to scale up control of MTCT of syphilis nationally (Appendix 1), was influential on setting down the aim of this PhD study. It also proved effective in establishing legitimacy of the study, attracting attention from related national and local health institutions, and enhancing respondents' compliance. As a result, a small group of stakeholders from the NCSTD, NCWCH, and the Guangdong Provincial Center for STD Control (Guangdong STD Center) were active in coordinating data collection for this study and discussing the study results. The WHO headquarters and the WHO

Representative Office in China also helped the author approach a few policy actors for interviews.

On the other hand, funding from the WHO might have shaped the study aim because of its ongoing promotion for the dual elimination of MTCT of syphilis and HIV globally. It was particularly influential on data collection and analysis as it urged for policy recommendations within a one-year period. As discussed in Chapter 3, there are significant conflicts between the time needed for policy studies and policymakers' demand for quick remedies. To solve this, the data of this PhD study was collected in two rounds, with a two-year gap in between, and the second round did not use external funding (more details are presented later in this chapter). In the meantime, the intense involvement of the NCSTD in the study prevented it from being a simple response to external political imperatives, which may run the risk of superficiality and decontextualisation. Because the NCSTD, NCWCH, and Guangdong STD Center have played important roles in priority generation for PMTCT of syphilis and PMTCT of HIV, at both national and subnational levels, their participation was keen to understand the policy processes better and generate more feasible implications. For example, two programme directors in the NCSTD and NCWCH reviewed the policy case summaries and helped check for data accuracy.

In addition, the author further invited a number of external experts (e.g., from the UNAIDS) and academics (e.g., from UCL and the Chinese University of Hong Kong) to comment on and provide suggestions for the study design and data analysis. These experts and academics hold different nationalities, come from various background (including health policy, epidemiology, and HIV/STDs prevention etc.), and play different roles in the policy processes, therefore can compensate for the author's "insider" thinking and help yield more comprehensive understanding of the Chinese health policy process.

4.3 Data collection

4.3.1 Units of study

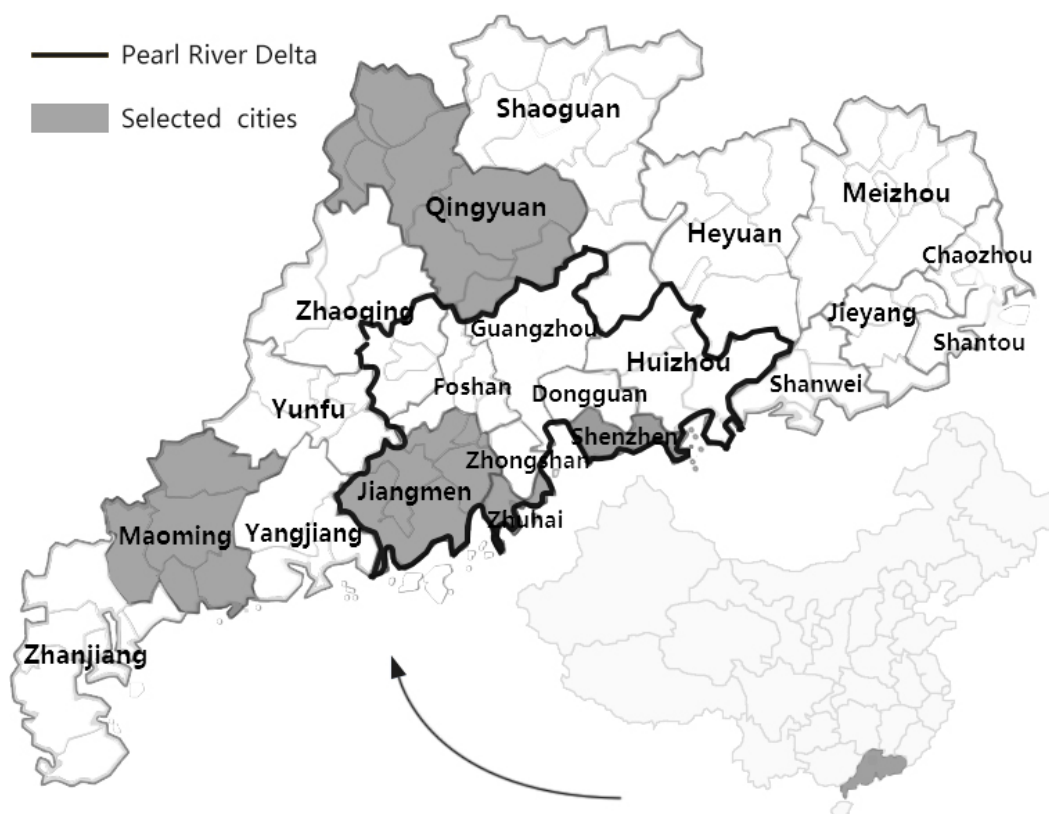
As presented in the previous chapters, because of increased autonomy of the local government of China in financing and delivering health services, there is significant

variance in local policy making and adoption of national priorities, particularly between rich and poor cities. This can be well exemplified by that universal programmes to provide antenatal syphilis screening and treatment for maternal syphilis were initiated in a couple of economically developed cities, backing with funding from the local government finance, almost a decade before the MOH issued the ten-year syphilis control plan. Thus, in order to achieve more comprehensive understanding of the determinants of political prioritisation of PMTCT of syphilis in China, in addition to investigation at national level, this PhD study further collected data at the provincial level and in five cities in Guangdong Province.

Guangdong is a relatively economically developed province located on China's South coast (Figure 4-1). It was selected for research due to a number of reasons as listed below.

1. It is the most populous province-level division in China, of which about 30% of the total population are migrants;¹⁵⁶
2. The economic development level varies largely across the province, especially between areas inside and outside the Pearl River Delta;
3. Guangdong is one of the most syphilis prevalent provinces in mainland China,⁷⁵ and significant difference in reported congenital syphilis incidence has been observed between different areas within the province. For example, the reported syphilis incidence in the Pearl River Delta was nearly 10 times as the incidence in the eastern region;⁷⁶
4. A couple of pilot programmes for PMTCT of syphilis were initiated at municipal level many years before the national and provincial governments first committed to the cause;^{78,88}
5. Prior to 2010, the coverage of antenatal syphilis screening was imbalanced across the province. According to published literature, it was as high as 97.4% in a special economic zone,⁸⁸ but remained only 11.8% in most rural areas;⁸⁹
6. The author's previous work experience and contacts in Guangdong Province has ensured convenience in data collection.

Figure 4-1: A map of Guangdong Province and the five study cities



Compared to other provinces, the demographic and epidemiological characteristics of Guangdong as well as its diversities of reported syphilis incidence, PMTCT programme coverage, and economic development level presents a representative sample for studying for the dynamics of political prioritisation of PMTCT of syphilis at local level of China. This could be done through identifying and comparing the factors influencing the levels of policy and resource attention paid to the issue in different cities. The selection of study cities followed a background justification section. Data regarding demographic and economic characteristics, burden of MTCT of syphilis, antenatal syphilis screening rate, existence of local PMTCT of syphilis policies and programmes, and resource allocation for all the 21 cities in Guangdong were aggregated and compared first to explore variance (Table 4-1).

Table 4-1: Basic information, reported congenital syphilis incidence, and the status of local policies and resources for PMTCT of syphilis of all the 21 cities in Guangdong Province (the five cities highlighted are selected for research)

City	Population ⁱ	GDP per capita in 2010 (US\$) ⁱⁱ	Congenital syphilis incidence in 2010 (per 100,000 live births) ⁱⁱⁱ	Antenatal syphilis screening coverage	Launch of municipal PMTCT of syphilis policies and/or programmes	Allocation of municipal government funding
Shenzhen	10,357,938	16,196	13.8	97.4% ⁸⁸	2002 ^{iv}	2 million yuan per year since 2002 ^{iv}
Jiangmen	4,448,871	5,600	71.0	Unknown	2008 ^v	2011, matching funding for implementing the national programme to prevent MTCT of HIV, syphilis and hepatitis B
Guangzhou	12,700,800	15,573	Unknown	Unknown	2011, municipal implementation plans of the national Implementation Guidelines for Prevention of MTCT of HIV, Syphilis and Hepatitis B	
Zhuhai	1,560,229	12,239	Unknown	Unknown		
Shantou	5,391,028	3,576	Unknown	Unknown		
Foshan	7,194,311	14,303	Unknown	Unknown		
Shaoguan	2,826,612	3,491	Unknown	Unknown		
Heyuan	2,953,019	2,452	Unknown	Unknown		
Meizhou	4,240,139	2,242	Unknown	Unknown		
Huizhou	4,597,002	6,610	Unknown	Unknown		
Shanwei	2,935,717	2,430	Unknown	Unknown		
Dongguan	8,220,237	10,149	Unknown	Unknown		
Zhongshan	3,120,884	11,010	Unknown	Unknown		
Yangjiang	2,421,812	4,052	Unknown	Unknown		
Zhanjiang	6,993,304	3,044	Unknown	Unknown		
Maoming	5,817,753	3,651	Unknown	Unknown		
Zhaoqing	3,918,085	4,160	Unknown	Unknown		
Qingyuan	3,698,394	4,412	Unknown	Unknown		
Chaozhou	2,669,844	3,297	Unknown	Unknown		
Jieyang	5,877,025	2,644	Unknown	Unknown		
Yunfu	2,360,128	2,454	Unknown	Unknown		

Guangdong Province	104,303,132	7,189	137.1	56.9% (11.8% in some rural areas) ⁸⁹	2011	2011
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- i. Source: Statistics Bureau of Guangdong Province. Communiqué on Major Figures of the Guangdong Province 2010 Population Census [1] (No. 2),²⁷⁹
- ii. Source: Data from prefectural statistics bureaus, 2010.
- iii. Source: Data from the Guangdong Provincial Center for Women and Children's Health.
- iv. In 2002, the department of health of Shenzhen initiated a programme to control MTCT of syphilis and HIV dually, bacing with funding from the municipal government finance.⁸⁸
- v. In 2008, Jiangmen was chosen by the WHO as a pilot city to promote rapid syphilis testing for pregnant women in rural health facilities.²⁸⁰

The three criteria for validation of political prioritisation (Section 3.2) were adapted in order to catch the provincial and municipal conditions, including:

1. Provincial/municipal leaders' sustained attention to the issue, for example, the provincial/municipal leaders' presence at related key events;
2. The emergence of a provincial/municipal authoritative decision (e.g., Implementation Plan of the national Action Plan) followed by launch of a series of strategic documents (e.g., Notifications, Opinions etc.) and initiatives (e.g., Implementation Guidelines) to address the issue; and;
3. Allocation of provincial/municipal government matching funding or inclusion of the initiatives in provincial/municipal government annual budget planning.

Finally, five cities (three inside and two outside the Pearl River Delta, Figure 4-1) were selected to represent different economic, epidemiological, and levels of political prioritisation in relation to PMTCT of syphilis in Guangdong. Shenzhen and Zhuhai, two special economic zones, are far more economically developed than Jiangmen, Qingyuan, and Maoming. Using the three adapted criteria, significant political prioritisation of PMTCT of syphilis can only be identified in Shenzhen before the national government first committed to the cause, that a municipal government-funded programme was launched in 2002 to provide antenatal screening for 97.4% of pregnant women. Jiangmen, despite the lack of government financial support, initiated a pilot programme to prevent MTCT of syphilis among rural pregnant women in 2008. On the other hand, however, PMTCT of syphilis was neither on the provincial agenda or the municipal agendas of Zhuhai, Maoming and Qingyuan until 2011 when the

integrated PMTCT of HIV and syphilis programme was launched based on a huge amount of central government fund. This may help explain why congenital syphilis incidence and intervention uptake data in the 2000s are unavailable for most of the cities in Guangdong.

4.3.2 Two rounds of data collection, funding status and facilitators

As shown in Table 4-2, data collection of this PhD study was split into two rounds because of (1) funding conditions; (2) convenience in access to policy actors and relevant events; and (3) the author's interruption of study.

Table 4-2: Time, funding status and facilitators of the two rounds of data collection

	Data collection	Funding status	Base Institution	Facilitators
First round	09/2011 – 09/2012	WHO	NCSTD	NCSTD, WHO Representative Office in China
Interruption of study	10/2012 – 09/2013			
Second round	10/2014 – 09/2015	None	NCSTD	NCSTD, Guangdong STD Center

Both rounds of data collection were based in and mainly coordinated by the NCSTD. The first round (from September 2011 to September 2012) further received a fund and technical support from the WHO, and the NCWCH and Guangdong STD Center facilitated the author's access to many key stakeholders and policy-relevant events. In addition to the NCSTD, the second round (from October 2014 to September 2015) was coordinated by the Guangdong STD Center, when the author was working with the center on a provincial government-led project aiming at improving syphilis control within the province. Consequently, more emphasis was given to those factors accounting for the variation in the prioritisation level of PMTCT of syphilis on local health agendas. Finally, the data collected from both rounds were combined and analysed for the purpose of this PhD, with permissions obtained from both coordinating institutions.

According to Jenkins, “the nature of the policy problem is such that a variety of approaches are required to deal with the complexity of the process.”²⁸¹ The potential loss of data and misinterpretation arising from the adoption of a singular approach can be great when dealing with a multidimensional issue such as political priority generation. The selection of data collection methods of this PhD study was enlightened by Yin’s definition of case studies as using multiple sources of evidence.²⁶⁷ Consequently, three methods were used to triangulated data and minimise bias, including (1) documentation analysis, (2) in-depth interviews with stakeholders, and (3) nonparticipant observation, which are discussed in the following three sections.

4.3.3 Documentation analysis

Documentation analysis was an ongoing and iterative process, which has its unique advantages compared to other qualitative data collection methods. First, unlike interview and observation data which are more commonly analysed by qualitative researchers, documents are normally produced prior to the studies, therefore are less likely to be influenced by the research processes.²⁸² Second, the analysis of documents can complement existing knowledge, and also contribute new knowledge that is not available in other forms, e.g., the ideas and interests of the documents’ producers, as well as the processes involved in developing the documents.^{282,283} Therefore, documentation review was utilised in this PhD study alongside stakeholder interviews and nonparticipant observations in order to generate richest results, and ensure that the findings of the study were textually supported.

Searching strategies and document sources

An extensive review, synthesis and interpretation of primary and secondary sources, published and unpublished, relating to generation of political priority for PMTCT of syphilis and PMTCT of HIV in China was undertaken. Documents were obtained by using a number of search strategies, including website searches, database searches, following citation pathways from publications, direct solicitation from informants, as well as the author’s visits to relevant national and local institutions. In addition, the authors’ work experience in the field and personal contacts directed her to particular projects and studies. Discussions with supervisors (from UCL and the NCSTD) and previous colleagues also facilitated targeting some of the materials. The major types

of documentation reviewed and how they were obtained are shown in Table 4-3. A detailed list of all the documents reviewed is presented in Appendix 2.

Table 4-3: The major types of documentation reviewed and sources

Types of documentation	Sources
Laws (e.g., <i>Law on Prevention and Treatment of Infectious Diseases</i>)	<ul style="list-style-type: none"> • The State Council website • The National People's Congress website
Government planning (e.g., health chapters of the Five-Year Plans), policy (e.g., the ten-year syphilis control plan) and project documents (e.g., project/programme proformas and status reports, etc.)	<ul style="list-style-type: none"> • The State Council website, provincial and municipal government websites • The MOH website, provincial and municipal health department websites • China HIV/AIDS Information Network • Solicitation from informants • Following publications' citation pathways
UNGASS reports, Joint Assessments of HIV/AIDS Prevention, Treatment and Care	<ul style="list-style-type: none"> • The MOH website • The WHO, UNAIDS, UNICEF websites • China HIV/AIDS Information Network
Technical guidelines (e.g., <i>Working Guidelines for PMTCT of HIV</i>)	<ul style="list-style-type: none"> • The MOH website, provincial and municipal health department websites
Government news online releases	<ul style="list-style-type: none"> • The State Council website, provincial and municipal government websites • The MOH website, provincial and municipal health department websites • China HIV/AIDS Information Network
Epidemiological and implementation reports (e.g., National annual reports of epidemiological data on syphilis)	<ul style="list-style-type: none"> • The China CDC, NCSTD, NCWCH and NCAIDS websites • Websites of provincial and municipal CDCs and related health institutions • Solicitation from informants,
Meeting and training materials (e.g., Compilation of PMTCT of syphilis and hepatitis B project training materials, 2012)	<ul style="list-style-type: none"> • Solicitation at meetings and trainings, and from informants
Published studies	<ul style="list-style-type: none"> • PubMed, Google Scholar • UCL Library online resources • China National Knowledge Infrastructure (CNKI) • Following publications' citation pathways
Media coverage	<ul style="list-style-type: none"> • Mainstream media websites, such as Xinhua News Agency, China Daily, People's Daily, China.org.cn, People.cn etc. • Local media websites • Following publications' citation pathways
Others (e.g., conference presentations)	<ul style="list-style-type: none"> • Solicitation from informants

Analysing the documents

These documents were reviewed continuously throughout the whole study with particular focus on variance in the level of political priority afforded to MTCT of syphilis and MTCT of HIV and factors that might help explain the variance, at both national and subnational levels. Government planning, policy and project documents relating to control of the two infections were analysed as well as various project implementation reports and minutes of work meetings. The recently adopted strategies and policies were compared with earlier versions so as to track changes and assess the impact of different policy actors and a few focusing events on the final versions. Based on this, the organisational and institutional interests influencing priority generation was mapped and changes in these interests were tracked along both policy processes. The above documents also helped uncover how the policy issues were framed, which actors were most powerful, any new ideas emerging during policy making, as well as the impact of a few focusing events on the policy processes.

Similarly, documents emanating from international organisations (e.g., WHO, UN Theme Group on HIV/AIDS in China), national institutions (e.g., NCSTD, NCWCH) as well as local implementing institutions were analysed to offer further insights into who was seeking to influence the level of political priority at different stages of the policy processes and at different levels, and when. In addition, this study reviewed online media coverage and published literature of the two cases, and particular articles or features were highlighted if they illuminated or reinforced findings that emerged from other data sources. This strategy proved effective in both cases as the media coverage and a few published studies were commented on by a number of respondents

In summary, analysis of these documents revealed meaningful information regarding the practices of and communication between those important policy actors who involved in the two policy processes, as well as relevant events (e.g., projects, collaborations, conferences etc.) that could not be observed during the study period. However, the documentation analysis was also subject to selection bias, particularly as a large proportion of the documents were obtained through online searches. The author was not allowed to access the archives of the governmental departments and institutions which included, for example, important correspondence files relating to political priority generation for PMTCT of syphilis and PMTCT of HIV, as well as

project coverage data. Although she managed to collect some policy documents, project reports, and training and meeting materials during the interviews and observations, these documents were far from enough to tell a complete story, particularly regarding what happened before the final policy documents were released. The sources of bias of the data collection methods are discussed at the end of this chapter.

4.3.4 In-depth stakeholder interviews

By definition, an interview aims at obtaining in-depth information on a particular issue from a single individual.²⁵⁹ As Blaikie has described:²⁶⁰

“The qualitative interview, particularly the in-depth variety, can get close to the social actors’ meanings and interpretations, to their account of the social interaction in which they have been involved.”

Interviews can be organised in different ways. While a structured interview has a rigorous set of questions which does not allow one to divert, a semi-structured interview is open, allowing new ideas to be brought up during the interview as a result of what the interviewee says.²⁸⁴ In this study, semi-structured interviews were used to investigate the informants’ own assessments of the priority levels of MTCT of syphilis and MTCT of HIV in China, as well as the influencing factors. Instead of a uniform survey instrument, open-ended questions were applied to explore each respondent’s unique knowledge about the policy processes.

Stakeholder mapping and sampling frame

Hammersley has assumed that an understanding of the realities could be obtained from respondents’ descriptions.²⁸⁵ If these respondents are policy elites, according to Lilleker, the number of interviewees must be of a reasonable size and must be representative of the larger body to add greater depth to the analysis of an event/phenomenon.²⁸⁶

Respondents of this PhD study were selected through purposive sampling which meant that each of them were identified as having played a role in the policy process of either PMTCT of syphilis or PMTCT of HIV. Denzin and Lincoln have suggested that

purposive sampling helps researchers access the interest groups, actors and contexts “where the processes studied are most likely to occur”.²⁸⁷ A simple stakeholder mapping²⁸⁸ was conducted to guide identification of informants, based on consultation of documents such as government reports and meeting materials, the author’s previous experience of involving in scaling up PMTCT of syphilis in China, as well as interviewees’ referrals regarding whom they thought to be most influential on the policy processes studied. According to the mapping, around 50 stakeholders (including 10 at national level, 5 at the provincial level of Guangdong, 5 in each of the five study cities, 5 from international agencies, and an additional of 5 academics and clinicians) were identified as key stakeholders and should be interviewed for data collection. These stakeholders are likely to be:

- Officials at the Division of Women and Children’s Health and Division of Disease Control within the MOH;
- If possible, officials at the State Council, the Ministry of Finance, and other related ministries and national commissions;
- Representatives of the UNICEF, WHO, UNAIDS, and other related international organisations;
- Representatives of international donors, such as the Global Fund and Gates Foundation;
- Heads and programme directors in the NCWCH, the NCSTD, and the National Center for AIDS Control and Prevention (NCAIDS);
- Officials at provincial and municipal governments and health departments, and other related governmental departments;
- Heads and directors in implementing institutions/hospitals, such the provincial and municipal centers for disease control and prevention (CDCs), centers for STD control (STD centers), and centers for women and children’s health (WCH centers) etc.;
- The main authors of two influential publications of China’s MTCT of syphilis incidence in world’s leading journals;
- Other related academics and clinicians.

Access to respondents

As mentioned earlier, the WHO funding for the first round investigation, to some extent, enhanced participation of national and local political elites, and the NCSTD, NCWCH, and Guangdong STD Center facilitated the author's access to a number of identified stakeholders. The author successfully generated attention from the respondents by introducing to them that the research was funded by the WHO headquarter in Geneva therefore deserved their participation. During the second round, related health officials and professionals in Shenzhen, Zhuhai and Qingyuan were interviewed when the author was working on a project aiming at improving syphilis control in Guangdong Province. The provincial government-led nature of this project has secured the author's access to all policy-relevant documents as well as high-level compliance of respondents in the three project cities. The author also used personal network of contacts to further secure participation of a provincial health official of Guangdong. The stakeholders were met and interviewed either by appointment, or during meetings, trainings, and monitoring trips. A snowball technique was used during these activities to identify and approach additional respondents who happened to be present. The respondents were free to nominate anyone they thought of as playing an important role in the policy processes. If the nominees were from outside the original sampling frame, they were contacted for interview as described above.

The final sample of stakeholders interviewed

A total of 54 semi-structured in-depth interviews were undertaken during the two rounds of data collection (Table 4-4), including 9 at national level, 5 at provincial level, 36 at municipal level, 2 with informants from international organisations, and 2 with related academics.

Table 4-4: Number of stakeholder interviews conducted at national, provincial and municipal levels, and with informants from international organisations and academics

	First round	Second round	Total
International organisation	1	1	2
National level	7	2	9
Provincial level	2	3	5
Municipal level	13	23	36
Academics	2	0	2
Total	25	29	54

A relatively large proportion of the respondents within the sample frame were interviewed. The final sample included the 2 directors at the NCSTD and NCWCH and 5 programme directors at the two institutions, 1 official from the WHO China Representative Office, a former country director of the UNAIDS Country Office of China, 1 provincial and 8 municipal health officials, 4 directors and programme supervisors at provincial implementing institutions/hospitals and 28 at municipal institutions/hospitals. In addition, this study succeeded in interviewing the first authors of 2 recognised important publications in the policy process of PMTCT of syphilis (including 1 executive director at the NCSTD and 1 international scholar). One national academic who was nominated by the WHO as a key person during political priority generation for congenital syphilis control in China was also interviewed. Two stakeholders were interviewed twice. A summary of where the respondents were from is shown in Table 4-5.

Table 4-5: A summary of the respondents' institutional information

	First round	Second round	Total
WHO	1	0	1
UNAIDS	0	1	1
NCSTD	5	1	6
NCWCH	2	1	3
Guangdong provincial health department	0	1	1
Guangdong STD Center	1	1	2
Guangdong WCH Center	1	1	2
City-level health departments	5	3	8
City-level STD Centers	5	8	13
City-level WCH Center	2	6	8
City-level CDC	1	6	7
National scholar	1	0	1
International scholar	1	0	1
Total	25	29	54

Nonetheless, there was invariable access problems during interviewing civil servants. The most prominent reason might be power dynamics, particularly when the author was younger, junior in her career, and the interviews were for a PhD purpose only. At national level, the author only had chance to contact a couple of officials at the MOH (and none from the State Council and other ministerial departments), however both were either too busy or unwilling to participate. Such problem also occurred during accessing and interviewing officials at the provincial and municipal governments. In addition, some administrative rules were problematic, too. For example, during the second round investigation, some municipal health officials refused to meet the author due to a local government rule that officials could only participate in interviews of which the interviewers had official referral letters from higher-level departments. Consequently, compared to the sampling frame, neither any official from the national, provincial and municipal governments nor anyone from the MOH and other related ministries and national commissions was interviewed. The author also failed to

interview anyone from the Gates Foundation, UNICEF and Global Fund, all of which, according to documentation, were active in the early stage of political priority generation for PMTCT of syphilis and PMTCT of HIV (mainly through funding provision).

Pilot

It was expected that different respondents may have different views on the determinants of prioritisation because of their own experiences in the policy processes, as well as the level of institutions they were based in. Therefore, whilst it was important to prepare a general interview guide in advance on the key themes that had emerged from stakeholder mapping, it was also necessary to retain a flexible approach to the interview process. As the author used to work on a project to provide antenatal syphilis screening for all pregnant women in one of the study cities, it was possible to conduct a small number of pilot interviews based on her own network of contacts. From October to November 2011, a pilot study was undertaken during which five stakeholders including local health officials and STD experts interviewed. This tentative step proved useful in helping develop and refine the interview guide (Appendix 3). All the five pilot interviews and documents collected during visiting the respondents were included for data analysis later.

Interview process and consent

All the interviews were conducted by the author alone following the interview guide. Each informant was given an information sheet (in Chinese or English, Appendix 4) prior to the interview explaining the identity of interviewer, study objectives, range of questions, and confidentiality principles. Informed consent was then obtained from each informant orally. Written consent was not considered due to a shared concern among the interviewees that the interviews could be formalised and what they said during the interviews would be documented by their signing on the consent form. Also many interviewees perceived the questions regarding policy making as “sensitive”, therefore disagreed to sign on the consent forms. Finally, no respondent declined to be interviewed after the consent process. In addition, the informants’ permission for audio-recording was sought before the interviews started.

All interviews lasted 40 to 60 minutes to prevent the interviewees being over-tired. In order to explore as much as possible every stakeholder's unique knowledge and experience around political prioritisation of the two infections, questions were carefully selected basing on the interviewees' position and responsibilities within the policy processes and limited to no more than four per interview. Interviewees were encouraged to talk more about actor power, ideas, political contexts, issue characters and policy outcomes, not statistics. If feasible, they were also asked to comment on other interviewees' answers (without releasing their identities). At the end of each interview, the interviewee was asked about which factor he or she believed to be most influential on the policy processes. The author left at least 30 minutes between interviews in order to complete and check notes, and clear mind before the next interview.

Most interviewees agreed to be audio-recorded. For those who refused, detailed notes of their interviews were taken. Also, notes were taken of all the important documents, statistics, news, speeches, and key events mentioned by the interviewees. All the audio-recorded interviews were transcribed, and notes of those not audio-recorded were completed and checked, by the author alone, within a few days after the interviews. All audio records, transcripts and notes were kept strictly confidential. Unnecessary collection of personal data was avoided. The identities of respondents were not released in any study output or related dissemination and communication.

4.3.5 Nonparticipant observation

As identified in Chapter 3, the opaqueness of decision-making (and especially non-decisions) is problematic for researchers.²³⁰ Observation of the policy making processes in action may provide insights into the ongoing interactions between different actors, interests and ideas. Participant observation, during which the observer participates in ongoing activities and records observations, is a useful method but was not feasible in this study. Nonparticipant observation is more commonly used in case study research in which the researcher enters a social system to observe events, activities, and interactions with the aim of gaining a direct understanding of a phenomenon in its natural context. It is distinguished from participant observation by the observer's level and kind of involvement in the research setting. A nonparticipant

observer adopts a more distant and separate role without participating directly in the activities being observed.²⁸⁹ Therefore, nonparticipant observation was used in this study as it might reduce reactivity problems and provide the opportunity to gain an intuitive understanding of how the health issues were portrayed and prioritised, thereby allowing for the collection of more reliable data and for improved insights into the data collected.

Genzuck has suggested three methodological principles for planning and conducting observation in qualitative research.²⁹⁰ These principles are:

1. *Naturalism*, referring to the necessity of blending with the background and not disrupting the natural dynamics of the observed event. Nonparticipant observation may be overt or covert.²⁸⁹ Although most of the observations in this study was overt, with people knowing that the author was there for research purposes, the nonparticipant principle has ensured that the events were not disturbed during the observations;
2. *Understanding*, referring to the ability of the researcher to follow the flow of the event. Being an “insider”, the author was familiar with the specific terminologies used during the meetings and training, as well as the roles of particular actors, therefore had no difficulty following the events;
3. *Discovery*, referring to the idea of inductive or discovery-based research. In this study, the author derived messages from the observed events which contributed to answering the main research questions, i.e., what accounted for political prioritisation of PMTCT of syphilis and PMTCT of HIV in China.

The events for observation were identified through consultation with a number of key stakeholders, and access to the meetings and trainings was facilitated by the three institutions mentioned earlier. However, due to the limited time and funding, the author only observed eight policy-relevant events (Table 4-6), including meetings and trainings relevant to PMTCT of HIV and syphilis at national (n = 1), provincial (n = 1), and municipal levels (n = 4), as well as national academic conferences (n = 2). Notes were taken during observations, and relevant parts of the meetings and trainings were audio-recorded, with permission obtained from the organisers.

Table 4-6: Policy-relevant events observed from 2012 to 2014

Time	Level	Event	Place	Organiser
August 2011	City-level	Expert meeting to development a syphilis control plan for Shenzhen	Shenzhen, Guangdong Province	Shenzhen STD Center
October 2011	Provincial	Annual monitoring meetings on syphilis control	Shenzhen, Guangdong Province	Guangdong STD Center
October 2011	Provincial	Annual monitoring meetings on syphilis control	Jiangmen, Guangdong Province	Guangdong STD Center
October 2011	Provincial	Annual monitoring meetings on syphilis control	Maoming, Guangdong Province	Guangdong STD Center
March 2012	National	Annual meeting on prevention and treatment of STDs and leprosy in Guangdong Province	Guangzhou, Guangdong Province	Guangdong STD Center
April 2012	National	Annual training of the national programme to provide integrated PMTCT interventions for HIV, syphilis and hepatitis B	Beijing	NCWCH
May 2012	National	The 6 th national academic conference on prevention and treatment of STDs	Shenzhen, Guangdong Province	NCSTD
May 2014	National	The 7 th national academic conference on prevention and treatment of STDs	Nanjing, Jiangsu Province	NCSTD

Although the author only had opportunity to observe a limited number of meetings and conferences, all of which took place later than 2010 when PMTCT of syphilis had already achieved political prioritisation (the identification of prioritisation was presented in Chapter 3), it was still useful to do so due to many reasons. First, topics discussed at these activities provided first-hand knowledge of the policy processes and outstanding issues, programme achievements, as well as recent research trends, providing content for later interviews. Second, through the observations, the author gained an appreciation of the interests of and interactions between related national and local policy actors, particularly the informal mechanisms of coordination. Third, communication with the attendees helped build up trust and contact with them, as well as identify interview respondents.

4.4 Data analysis

4.4.1 Data validation

Because the qualitative data drew heavily on description and interpretation of the policy processes by both the respondents and the researcher, it can be subject to significant bias. As mentioned earlier, one general method to address this is triangulation, which helps corroborate evidence and draw a more complete picture of the study cases by using a range of data sources and research methods. The three data collection methods made data triangulation feasible. Once all the data had been collected, policy-relevant documents and interview and observation transcripts/notes were carefully read, compared, and cross-checked to verify the accuracy of information, and to develop a history of political priority generation for each case. Interview data were compared to documentary data to verify and extract information on major developments within the policy processes, and to assist development of propositions regarding the determinants of political prioritisation. Such comparison and cross-checking was crucial because the respondents sometimes did not remember precisely when particular events and/or developments happened. Another validation technique used was peer checking. Two key stakeholders, one from the NCSTD and one from the NCWCH, were invited to review both case summaries to check for factual accuracy and probe for alternative interpretations. In addition, preliminary conclusions were shared and discussed informally with a number of stakeholders, further refining and verifying validity.

4.4.2 Framework synthesis

The three sources of data produced large amounts of textual data in different forms, which pose a challenge for rigorous analysis. A framework synthesis approach, which entails deductive and thematic analysis of qualitative data,²⁹¹ was considered most appropriate for this study. Framework synthesis is based on framework analysis, which was outlined by Pope and colleagues,²⁹² and drawn on previous work by qualitative methodologists.^{258,293} In contrast to grounded theory which is based exclusively on inductive inquiries,²⁹⁴ framework synthesis offers a highly structured approach to organising and analysing qualitative data,²⁹¹ reducing the researcher's inherent biases.

As presented in Chapter 3, Shiffman's framework, which consists of three categories of nine factors, was selected to guide assessment of the independent variables of this PhD study – i.e. factors shaping political prioritisation (dependent variables) of PMTCT of syphilis and PMTCT of HIV. In order to synthesise the qualitative data, all the documents, interview transcripts, and observation notes were read carefully and coded into themes. A two-tier coding frame (Appendix 5) was adopted with the tier one themes set in accordance to the nine factors of Shiffman's framework and tier two themes emerging during coding. When coding was finished, each factor theme was summarised in text form. Where appropriate, illustrative quotes were presented to clarify or support a conclusion drawn in the text. Because this is a comparative case study looking at both national and subnational levels, the themes are compared between the two policy cases and between different administrative levels to identify similarities and differences. Data analysis was therefore iterative – documents and transcripts were read and audio records were listened to more than once in order to compare the phenomena being coded constantly. Such constant comparison enhanced validity of the study findings through linking closely the multiple sources of data and existing and emerging theories.

Second, flexibility was maintained, allowing revision of existing themes and inclusion of emerging themes throughout iterative data coding and comparison. Consequently, the data analysis process entailed ongoing review of the original framework against the data it had extracted, as well as comparison across different materials to identify whether (and how well) the data fitted against the framework, as well as whether there were any extra issues of relevance in political prioritisation of the two infections. Drawing on these reviews and comparisons, the original framework was adapted, with modifications of some existent factors and inclusion of new factors, as well as categorisation, to capture China's unique health policy process. The national and subnational coding frames are presented in Appendix 5 and adaptations of Shiffman's framework are described and discussed in Chapter 8.

4.4.3 NVIVO 10

The qualitative data analysis software NVIVO 10 (QSR international) offered a systematic and convenient method of coding, managing, and analysing the policy-

relevant data, particularly in the early stages of data analysis of this study. As described earlier, a two-tiered coding frame reflecting Shiffman's framework was adopted to develop descriptive codes covering the main analytic themes and to include additional themes. On the other hand, the author preserved an opinion that that qualitative data analysis should not rely on mechanistic processing of textual materials, especially when the research is looking at ideas, interests, interactions to explore causality. In this study, the late data analysis stages focusing on interrelationships within and between themes and similarities and differences between cases and administrative levels was mainly done on paper.

4.4.4 Language issues

Most interviews were conducted in Chinese Mandarin, with only two exceptions – one with an official from the UNAIDS and one with an American scholar, both of whom requested to be interviewed in English. In addition, the documentation review process also included materials in both Chinese and English. The bilingual data posed a question of whether, when and how the data should be translated. Finally, a decision was made not to translate the Chinese data into English because (1) the huge amount of Chinese data (approximately 75% of all data) would make the translation extremely time-consuming, especially that the author conducted this study alone; (2) there was a fear of meaning loss in the translation process;²⁹⁵ and (3) no technical problem emerged when NVIVO 10 was used in analysing both Chinese and English data.

4.5 Ethical issues

Ethical approval for this study was obtained from the Research Ethics Committee of UCL in September 2012 (Appendix 6), and from the Ethics Committee of the NCSTD in November 2012 (Appendix 7). Protection of the study data is compliant with the UK Data Protection Act 1998 and relevant content in the China Good Clinical Practice 2003. This study was registered with the UCL Data Protection Officer in June 2012, reference No Z6364106/2012/06/12, section 19, research: health research.

However, despite the fact that informed consent was obtained from all the informants and confidentiality was preserved throughout the study, interviewing stakeholders in the specific policy fields still raised some anonymous issues. For instance, the

executive directors of both the NCSTD and NCWCH, as well as an official from the WHO Representative Office in China could be easily identified given their particular roles in the two policy processes. Similar problems also happened on provincial and municipal respondents, especially those who were initiators and directors of particular programmes. Given these potential difficulties, all respondents were offered opportunities to recall what they had said at the end of the interviews and asked whether their responses could be quoted in this study. Fortunately, most respondents agreed to be quoted with just a few requests for the author, such as avoiding releasing their exact names and positions. The only exceptions to this general rule were a financial manager of the NCSTD and three officials at municipal health departments, who requested not to be quoted. All these requests were complied with carefully during the study.

4.6 Chapter summary and discussion

This chapter outlined the study design as well as approaches for data collection and analysis of this PhD study. The decision to adopt a qualitative research design was appropriate given the nature of the study aim and objectives. However, there are methodological concerns regarding the generalisability and validity of the findings. Analysis of qualitative data can be challenging because of biased data sets and that the process spills over into the data collection, transcription, and synthesis stages. In this study, not all institutions and identified stakeholders were equally willing to share information on their perspectives and knowledge or work. As a result, data sets remained incomplete and patchy. It introduced a potential selection bias in that, possibly, conclusions were largely drawn from evidence provided by those institutions and stakeholders who were amenable or most active in coordination.

Qualitative methodologists have identified a number of characteristics of “good” studies, including being exhaustive and non-selective, avoiding cherry picking of data, and using multiple approaches and cases.^{287,293} Although a multiple country study was not feasible here, the in-depth comparisons between the policy processes of two similar issues and at multiple administrative levels, adopting a pre-existing conceptual framework, helped overcome subjectivity of the qualitative research design and strengthen finding causality. Although data collection in a few study cities was

difficult, the subnational analysis and comparison between national and subnational levels were broadly suggestive of more general patterns of political priority generation for health issues in China, particularly given the significance of context in the country's uniquely distinct health policy environment characterised by fragmented authority and unclear accountability. Validity of the qualitative data was enhanced by triangulation and, moreover, a framework synthesis approach has proved useful to focus analysis of the qualitative data on outputs which were relevant to the study objectives. The conceptual framework held the analysis to a certain range of questions, preventing biases from being over-present²⁶¹ as well as of having only one researcher.

Holding an "insider" position, the author may be able to overcome some of the validity problems by distinguishing between the informants' and her own interpretations of the policy processes. However, an "insider" is also subject to inherent bias. A multi-partner team combining external funder, international and national officials, health professional, as well as academics, not only overcame the author's "insider" limitations, but also facilitated data collection. From September 2011 to September 2014, policy-relevant data were collected at both national and municipal levels, through documentation review, stakeholder interviews, and nonparticipant observation. The multiple sources of data were validated through triangulation and constant comparison. During iterative data analysis, evidence related to political prioritisation was coded into themes in accordance to the nine factors within Shiffman's framework, allowing revision of original themes and inclusion of emerging themes.

Another concern regarding finding strength was due to the lack of participation of officials from either the MOH or national and local governments, who had the closest proximity to the health agendas. In addition, no informant from any non-health department/organisation was interviewed. The result may be that the study findings mainly focus on specific health issues with less consideration of wider fundamental issues and values such as equity and social determinants of health,^{229,230} which had to be acknowledged and accounted for in the analytical process. However, a relatively large proportion of the acknowledged stakeholders were interviewed, which reduced uncertainty about the representativeness of the sample. At national level, the study benefited from participation of the executive directors of NCWCH and NCSTD, the

main supervisors of the national PMTCT of syphilis and PMTCT of HIV programmes, and officials from the WHO and UNAIDS, who were active in the two policy processes. At provincial and municipal levels, most of the key stakeholders who involved in generation of political prioritisation for PMTCT of syphilis and initiation of pilot programmes were interviewed. In addition, validity of the study results was further strengthened by participation of the authors of two important publications of China's MTCT of syphilis incidence, which have played important roles in putting the cause onto the national agenda. To summarise, reliability and validity of the findings were advanced by the broad range of insights and the balance of views, providing a strong story of how political priority were set for the two infections in China, and at both national and subnational levels.

Chapter 5 Prevention of mother-to-child transmission of syphilis on China's national agenda, what caused the neglect?

"The Chinese government is developing a National Programme for Syphilis Control, one of the core components of which is increased awareness of syphilis prevention and enhanced screening among women attending antenatal care, and consequent treatment of cases for prevention of mother-to-child transmission. Strategies for control of congenital syphilis should be the first priority. However, more commitment from central and local governments is needed to ensure the programme is effectively implemented."^j

5.1 Introduction

As presented in the previous chapters, this PhD study is conducted to understand how and why China prioritised and responded to mother-to-child transmission (MTCT) of syphilis and MTCT of HIV differently, despite the similarities of the two issues as well as potential for dual elimination. Although both epidemics emerged in the 1990s, political prioritisation of prevention of mother-to-child transmission (PMTCT) of syphilis was achieved (in 2010 September) many years after prioritisation of PMTCT of HIV (in 2003 December). The significant slowness in the national policy response to MTCT of syphilis resulted in comparatively low intervention coverage, contributing to a rapidly increasing incidence in the 2000s. In order to achieve a comprehensive understanding of the dynamics of political prioritisation within the Chinese health policy arena and provide lessons for promoting elimination of MTCT of syphilis, the two contrasting policy cases were tracked and compared at both national and subnational levels to identify factors affecting political prioritisation in the agenda setting and policy formulation stages. In doing so, policy-relevant data were collected from three sources (i.e., interview transcripts, policy-relevant documents, and observation notes) and synthesised and analysed under a validated conceptual framework. This chapter presents the main findings obtained at national level, with

^j Chen, X.-S. & Cohen, M. S. Congenital syphilis in China – Authors' reply. *The Lancet* **369**, 1165 (2007).

data related to the determinants of political prioritisation, or neglect, of the two causes summarised under factor themes in accordance to Shiffman's political priority framework. Beyond the original framework, evidence of additional factors which were influential on the policy processes is also presented.

5.2 Norm promotion

According to Shiffman's framework, national policy preferences are shaped by two forms of transnational influence - norm promotion and resource provision. International organisations set expectations for appropriate behaviours of national decision-makers through promotion of norms.²⁹⁶ They try to convince national governments that it is appropriate, for ethical reasons, to address a particular issue.^{121,297} For example, the WHO brought tuberculosis, after a long period of neglect, back on global and national health policy agendas through branding and marketing the control strategy as Directly Observed Treatment, Short-course Chemotherapy (DOTS).²⁹⁸

5.2.1 MDG 6 and the UNGASS Declaration of Commitment on HIV/AIDS

When being asked about the most important reasons explaining the different priority levels of PMTCT of syphilis and PMTCT of HIV in China, virtually all the respondents mentioned in their initial responses that the international shaping of norms of the seriousness and unacceptability of HIV/AIDS, including the mother-to-child transmission (MTCT), made an initial push for the Chinese Government to combat the epidemic. Many believed that the United Nations (UN) had played a key role in bringing the issue of MTCT of HIV to the attention of China's decision-makers. From the early 2000s onwards, Millennium Development Goal (MDG) 6 (to halt and reverse the spread of HIV/AIDS),²⁹⁹ along with the UN General Assembly Special Session (UNGASS) on HIV/AIDS, committed countries to reduce the proportion of infants infected with HIV by 50 percent by 2010, by ensuring that 80 percent of pregnant women have access to PMTCT of HIV services, including antiretroviral therapies (ARTs).²²⁴ China signed on to the 2001 UNGASS Declaration of Commitment on HIV/AIDS and joined other countries in committing to submit biennial reports reviewing progress made regarding national responses to the HIV/AIDS epidemic – the Global AIDS Response Progress Reporting (GARPR) System.⁴ Among the 25 core

indicators identified for the first generation of UNGASS reports, two were related to PMTCT of HIV:

- Percentage of HIV-positive pregnant women who receive ARTs to reduce the risk of MTCT;
- Percentage of infants born to HIV-infected mothers who are infected.

Some respondents perceived that the international initiatives not only created concern among China's decision-makers about the problem of MTCT of HIV, but also helped establish strong governmental accountability for controlling the infection. This view was supported by the related content of the UNGASS Declaration as follows.²²⁴

“Strong leadership at all levels of society is essential for an effective response to the epidemic. Leadership by Governments in combating HIV/AIDS is essential and their efforts should be complemented by the full and active participation of civil society, the business community and the private sector.” (UNGASS, 2001)

Additionally, a study on the impact of the GARPR System has revealed that, despite recognised limitations such as data quality and availability, it had great impact on countries' accountability for HIV prevention and proved one of the most powerful reporting mechanisms in the UN system.³⁰⁰

5.2.2 Influences from international agencies on PMTCT of HIV

Efforts from international organisations especially several UN agencies were particularly important in pushing the Chinese Government to first take up the cause of PMTCT of HIV. This view was shared by both international and national respondents, and evidence was identified from relevant policy documents. In 1996, the Joint United Nations Programme on HIV/AIDS (UNAIDS) established its Country Office in Beijing.

“UNAIDS led and coordinated international efforts to raise awareness of the seriousness of the threat HIV/AIDS could bring to China.” (A former country director of the UNAIDS Country Office of China)

In 1996, the UN Theme Group on HIV/AIDS in China^k representing the nine cosponsors of UNAIDS was established in Beijing.¹¹¹ It actively transferred international norms of the risk of HIV/AIDS into political influence on the Chinese Government.

“The UN Theme Group brought global experts to work with the Chinese Government, enhanced decision-makers’ recognition of the significant transmission route of HIV through contaminated blood, and built consensus on the scale or magnitude of HIV evidence in China.” (A former country director of the UNAIDS Country Office of China)

Incepted in 1998, the United Nations Children’s Fund (UNICEF) also played a critical leadership role in setting the national PMTCT of HIV agenda and scaling up PMTCT of HIV programmes in relatively high-risk and resource-limited areas, such as Henan Province (more details are presented later in this chapter).⁹⁹

Promotion of government leadership

On December 1st, 2003, the Ministry of Health (MOH) and UN Theme Group issued the first *Joint Assessment of HIV/AIDS Prevention, Treatment and Care in China*¹¹¹ which defined HIV/AIDS as a security and development problem for China and urged for strong leadership and political commitment at all levels as a “precondition to break through the silence and contain the spread of HIV.”¹ Although a State Council AIDS Coordination Mechanism was established in 1996 to lead and coordinate the national AIDS response, the Joint Assessment questioned its effectiveness by stating that:¹¹¹

“Greater participation from higher authorities, collaboration between the various sectors and coordination of resources are still urgently needed.” (MOH & UN Theme Group on HIV/AIDS in China, 2003)

^k UN Theme Group of HIV/AIDS in China represents the nine cosponsors of UNAIDS: United National Children’s Fund, World Food Programme, United Nations Development Programme, United Nations Population Fund, United Nations Office on Drugs and Crime, International Labour Organization, United Nations Educational, Scientific and Cultural Organization, World Health Organization, and World Bank.

¹ Quote in the text were verbatim from the documents and informants.

In response to the UN's expectations, the Chinese Government issued the *China Medium- and Long-Term Plan for HIV/AIDS Prevention and Control (1998-2010)*³⁰¹ in October 1998, which was China's first strategic document for HIV/AIDS control. This plan established norms of the risk of an increased HIV infection rate in China, as well as the urgent need for comprehensive response to the epidemic. It set an overall goal to establish a national AIDS control mechanism which consists of three key elements: government leadership, multi-sectoral cooperation, and social mobilisation. After that, the national government's commitment to strengthening government leadership and accountability in the AIDS response was indicated in almost every AIDS-related policy, government report and working guidelines.

In 2001, the *China Action Plan on HIV/AIDS Containment and Prevention (2001-2005)*¹¹² further indicated the national government's commitment to delivering PMTCT of HIV services, including ARTs and other interventions, and caesarean section delivery for HIV-positive mothers, as well as formula feeding for their infants. This Action Plan acted as the first overall planning document for PMTCT in China, which was later followed by a series of policies (such as ministerial Notifications and Opinions, and the national working guidelines) and launch of the national PMTCT of HIV programme, based on sustainable funding from the central government from 2003 onwards. All these act as proofs of PMTCT of HIV being politically prioritised in China. As presented in Chapter 3, political prioritisation can be validated by using three criteria – i.e. national leaders' sustained attention, an overall planning document followed by a series of policies and initiatives, and resource allocation.

In 2004, the State Council Working Group on AIDS (SCWGA) was established. Directed by Minister of Health Wu Yi, the SCWGA comprises 23 ministry members and is responsible for developing a comprehensive policy framework for AIDS control.²²³ Each province, autonomous region and municipality was required to set up its own AIDS Working Committee to coordinate local responses to HIV/AIDS.¹¹³ The SCWGA organises monitoring activities and work meetings every year in order to ensure implementation of the national AIDS control plans.¹¹² There was a widely shared view among the respondents of this study that establishment of the SCWGA and a vertical policy framework effectively asserted all-level government leadership in controlling HIV/AIDS, as well as high-level priority set for PMTCT of HIV at both

national and subnational levels. According to the UNGASS report (2008-2009),⁴ the Chinese Government built up accountability for HIV/AIDS control with particular focus on negligence - i.e. if the epidemic was spread by ineffective work. Consequently, awareness raising among government leaders was set as a priority of AIDS response, resulting in a significant increase in training and capacity building programmes for government officials from 2004 onwards.

Promotion of multi-sectoral cooperation

The organisation of multi-sectoral response to a particular issue can be difficult in China due to its hierarchical and departmentalised government structure, which was discussed in detail in Chapter 2. Evidence of international agencies' efforts to promote multi-sectoral response to HIV/AIDS in China was found in both published literature and international media coverage.^{223,302} Since the late 1990s, the World Health Organization (WHO) Global Programme on AIDS, UNAIDS, UNICEF, jointly with other UN agencies in Asia and the Pacific, worked closely with the Chinese Government and the Chinese Center for Disease Control and Prevention (China CDC) to facilitate cross-sectoral discussions between ministries and national commissions, and organise study tours to the United States, Brazil, Thailand and some African countries. These tours not only provided valuable lessons of HIV/AIDS control for the national policy elites, but also laid foundation for establishment of a cooperative response mechanism.

The multi-sectoral cooperation represented a complete change in perspective for the Chinese Government and produced a new approach to policy making.³⁰² With support from UN agencies, members of the study tours later took important roles in setting targets for China's response to HIV/AIDS, and made significant contributions to the development of the two essential policy planning documents mentioned earlier. In February 2004, the multi-sectoral cooperation mechanism was further strengthened, with the establishment of the SCWGA to coordinate between the 23 ministry members and international organisations.¹¹³

5.2.3 China's Five Commitments for HIV/AIDS Control

In September 2003, at the high-level HIV/AIDS meeting of the UN General Assembly, Executive Vice Minister of Health, Gao Qiang, on behalf of the Chinese Government, reaffirmed China's commitment to HIV/AIDS control by announcing the Five Commitments.¹¹¹

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.
2. Providing free antiretroviral (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.
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.
4. Protecting the legitimate rights of HIV/AIDS patients and opposing social discrimination against them; integrating ARV treatment, care and financial aid to HIV/AIDS patients living in poverty.
5. Increasing international cooperation on HIV/AIDS by welcoming continued financial and technical support from other countries and international organisations.

This study identified a consensus among the respondents that the Five Commitments also resulted in HIV/AIDS control being placed on top of China's health policy agenda because it was portrayed as a political task. The Chinese Government sought to establish good international image by realising these commitments, therefore paid intense attention and allocated sufficient resources to HIV/AIDS control, including PMTCT of HIV.

5.2.4 Relatively neglect of PMTCT of syphilis at global level

On the contrary, MTCT of syphilis enjoyed no such high-level commitment from the international community. Despite a large body of international evidence of the disease burden and effectiveness of available interventions,^{21,25} as well as the World Bank's recommendation on integrating PMTCT of syphilis services into essential health package (1993),³⁰³ the issue did not receive multi-sectoral attention from UN agencies. According to several respondents, the result has been serious unawareness of the risk of MTCT of syphilis among the national decision-makers. It was not until 2007 that the WHO issued *The global elimination of congenital syphilis: rationale and strategy for action*.²⁵ However, in contrast to PMTCT of HIV, there was no global reporting instrument, let alone one which reported to the UN General Assembly.

In summary, national policy preferences are not established through domestic political processes only, but also through the decision-makers' participation in the international political arena, which helps shape national norms and therefore policy outcomes. Since the late 1990s, the UNAIDS and other international agencies succeeded in presenting HIV/AIDS (including MTCT of HIV) as an exceptional disease, and pushed the Chinese Government to take a leading role in the response and set up institutions dedicated to the cause. In contrast, the decision-makers were less aware of the risk of MTCT of syphilis due to the relative neglect at global level, and therefore unlikely to act against the resurgent epidemic.

5.3 Resource provision

International relations scholars have identified several other forms of transnational influence on national agendas. One mechanism is compulsion, such as the leverage wielded by the International Monetary Fund threatening to deny loans to states in financial crises if they fail in adopting structural adjustment programs. Another mechanism is resource provision, referring to the enticement of financial and technical assistance from international organisations to national governments if they agree to enact particular priorities and policies.³⁰⁴

5.3.1 Intense international support for PMTCT of HIV

Many respondents identified that the various types of international support provided a long-term enticement for the Chinese Government to invest in HIV/AIDS control generally and PMTCT of HIV in particular. Since the late 1990s, HIV/AIDS has been a funding priority for China's international development partners. Financial assistance from the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), UN agencies, as well as bilateral organisations, increased continuously and accounted for a significant proportion of the total AIDS funding in China. In 2003 and 2004, the total budgeted international support reached 256 million yuan and 421 million yuan, respectively¹¹³. By receiving these funding, the Chinese Government was required to provide match funding. One main result has been that the Ministry of Finance (MOF) set up a special fund particularly targeted on HIV/AIDS control and prevention in 1996.¹¹¹ The central government's investment in HIV/AIDS control then increased quickly from 5 million yuan in 1996 to 1.07 and 1.22 billion yuan in 2008 and 2009, respectively,⁴ compare to the total amounts of government spending on health of 359.4 billion and 481.6 billion yuan in the two years.³⁰⁵

It was identified during both literature review and stakeholder interviews that the decision-makers' interests on PMTCT of HIV was also inspired by participating in a variety of collaborative activities with international agencies (especially UN agencies) and donors (e.g., Global Fund, Ford Foundation etc.), European Union, United State, as well as international non-governmental organisations (NGOs).¹¹¹ For example, the national government's cooperation with the UN Theme Group has exemplified a long-term and effective partnership.^{111,306} According to an UNAIDS official, to conduct the Joint Assessments every year imposes a constant impetus for the decision-makers of China to focus on HIV/AIDS.

"The first Joint Assessment was issued in 2003, and that was the first assessment through better joint efforts to estimate the magnitude of HIV/AIDS in China. The UN and Chinese authorities first agreed on the estimated number and ranges of people living with HIV, the different modes of transmission, and also recognised the authority efforts that

had been taken by the government, and proposed the way forward.”

(A former country director of the UNAIDS Country Office of China)

Since the *Action Plan on HIV/AIDS Containment and Prevention (2001-2005)*¹¹² was issued, many international agencies, particularly the UNICEF and Global Fund, actively collaborated with the MOH and related national institutions to promote scaling up control of MTCT of HIV. In 2002, with financial and technical assistance from the UNICEF, the MOH and the National Center for Women and Children's Health (NCWCH), piloted a PMTCT of HIV programme in Shangcai County, Henan Province.⁹⁹ In 2003, the Global Fund began to finance follow-up services of HIV-positive mothers and their babies, including early diagnostic testing for the infants.⁴ Drawing on experiences gained from Henan, and with external technical support, China's first *Working Guidelines for Prevention of Mother-to-Child Transmission of HIV* were developed and enacted in 2004.^{99,223}

“WHO, UNICEF, as well as the U.S. Centers for Disease Control (US CDC) and Prevention of the United States have been consistently supporting the MOH and the NCWCH to develop the plans and guidelines for PMTCT of HIV. Whenever there is a policy-related issue, we always discussed with the MOH and NCWCH together.” (An official at the WHO China Representative Office)

The intense financial and technical inputs from international organisations have driven China's AIDS policy making from the late 1990s to mid-2000s. For instance, a UNAIDS respondent revealed that the 2003 Joint Assessment provided evidence base for the Five Commitments for HIV/AIDS Control. In the meantime, China's successful application for external financial assistance, such as the Global Fund AIDS Rolling Continuation Channel Programme, significantly enhanced prioritisation of PMTCT of HIV at both national and subnational levels.^{111,113} When interviewed by the Xinhua News Agency on the 19th International AIDS Conference in July 2012, Dr Zunyou Wu, Director of the National Center for AIDS Control and Prevention (NCAIDS), expressed that:³⁰⁷

“In the early years, China was the recipient country of most AIDS-related international collaborations, on either the financial or technical

aspects. Through supporting China to combat HIV/AIDS, the international community introduced advanced concepts and techniques, and shifted China's AIDS control strategies. In addition, these collaborations also facilitated capacity building of a large group of HIV/AIDS professionals in China.” (Xinhua News Agency, 2012)

5.3.2 Scaling up PMTCT of HIV through integration with China CARES

International support has also helped China establish its own working mechanisms for PMTCT of HIV. Based on experience gained from the collaborative activities, the central government launched the China Comprehensive AIDS Response (China CARES) in 2003, with the aim to explore comprehensive and feasible working mechanisms for HIV/AIDS control in the country's certain circumstances.⁴ From 2003 to 2008, the first round of China CARES assisted 127 HIV-prevalent counties (out of 2,862 county-level divisions nationally) in providing care and support for people living with HIV. In addition to funding from the central government, the third round of Global Fund Project was integrated into China CARES which supported 39 of the 127 programme counties.¹¹³ In December 2003, a Notification for conducting PMTCT of HIV in all the China CARES areas was issued¹¹⁷ and provision of the services was included in government annual budget planning, securing sustainable implementation resources.⁴

Integration with China CARES has not only facilitated scaling up PMTCT of HIV nationally, but also enhanced its priority level on the national policy agenda. As mentioned earlier, political prioritisation of PMTCT of HIV can be identified at this point by using the three criteria. From 2003 to 2009, funding from the central government finance increased gradually from 6.43 million yuan to 82.66 million yuan, with the share of spending on PMTCT of HIV in total investment in HIV/AIDS control also increased.^{6,308} Sufficient government investment has facilitated expansion of the national PMTCT of HIV programme from one pilot county in 2002 to 453 county-level divisions in all the 31 provinces in 2009.^{4,99}

5.3.3 Dearth of international resources for PMTCT of syphilis

In contrast to PMTCT of HIV, the Chinese Government received limited support from international agencies for PMTCT of syphilis. The result has been a lack of interests from the national decision-makers to address the rising incidence of congenital syphilis. It was not until 2007 when a plan of action for the elimination of MTCT of syphilis in China was drafted by the NCWCH with technical support from the WHO China Representative Office and inputs from external experts. However, the international assistance was not backed with any financial input from the organisations, and were insufficient by themselves to get MTCT of syphilis onto the national agenda. Consequently, the drafted action plan was not approved by the MOH until 2010.

In summary, international organisations offered financial and technical supports to provide material backing for their norm promotion efforts, which prompted the Chinese Government to prioritise PMTCT of HIV and undertake pilot programmes. In contrast, PMTCT of syphilis received insufficient international assistance to achieve policy change, resulting in a lack of interests from the national decision-makers to address the issue.

5.4 Policy community cohesion

International organisations and donors brought issues to global and national agendas, however, adoption and operationalisation of these norms, according to Shiffman, require domestic advocacy. In the original framework, domestic advocacy comprises five aspects which are crucial for priority generation, including policy community cohesion, political entrepreneurship, credible indicators, focusing events, and clear policy alternatives.

Many public policy scholars have argued that the membership, structure and organisation of policy communities determine how influential they are likely to be on the policy processes.^{118,309} As discussed in Chapter 3, policy communities are similar to working groups, which are constituted by a few actors interacting closely surrounding a core of actors.²³⁰ Members of the networks come from different types of organisations (bureaucracies, legislatures, NGOs, academia, etc.) and committed to a common cause. Haas has identified several factors that shape the degree of influence

of policy communities, such as their levels of moral authority, knowledge, and coherence.²⁴³

5.4.1 The cohesive PMTCT of HIV policy community

According to national and international respondents, the PMTCT of HIV policy community in China coalesced into a tight network, transforming international norms, moral and knowledge-based authorities into political influence and pushing the central government to act. In the early 2000s, a small group of around 20 people were active in promoting prioritisation of PMTCT of HIV. Members of the group consisted of officials from the MOH Division of Women and Children's Health, representatives of the UNICEF and WHO, professionals from the NCWCH, as well as clinicians and academics. All the members held moral authority by indicating their commitments to a humanitarian cause – to reduce the infection rate among “innocent” women and babies. In addition, because the group was largely composed of medical experts, all held knowledge-based authority, and policymakers deferred to them on particular technical issues. The community then organised regular cross-sectoral meetings to which the policymakers were always invited.

“During development of the PMTCT of HIV policies and guidelines, whenever external opinions were needed, international organisations (such as the WHO, UNICEF, and US CDC etc.) were invited to comment on the existing work. This is a typical procedure for developing of AIDS-related policies in China. Normally the NCWCH is responsible for coordinating meetings and discussions. Officials from the MOH usually present at occasions when international organisations are invited.”
(An official at the WHO China Representative Office)

A few respondents recognised that the cohesive PMTCT of HIV community had facilitated initiation of the Henan pilot programme. Based on the experiences gained, members of the community were active in developing a national policy framework for PMTCT of HIV and drafting the content of the national working guidelines.¹¹¹ The community members also travelled to provinces and lower administrative levels to mobilise local health bureaucracies to take action against MTCT of HIV. These efforts were well documented. According to the 2004 Joint Assessment,¹¹³ the PMTCT of

HIV community made a number of important accomplishments in promoting scaling up PMTCT of HIV that year, which include:

- Formal establishment of a national PMTCT of HIV experts' team to finalise the national *Working Guidelines for Prevention of Mother-to-Child Transmission of HIV*;
- Completion of trainer workshops (under China CARES) among maternal and child health related staffs, including administrators, clinicians and nurses, from 85 cities/counties in 15 provinces;
- Expansion of the national PMTCT of HIV programme from 1 county in 2002 to 8 (in 5 provinces) in 2004, with counselling and testing services provided for 290,000 pregnant women during antenatal care;
- The decision of the Government of Hubei Province to provide free treatment for pregnant women living with HIV and free milk powder for their infants, and the decision of the Government of Shenzhen City to provide free HIV counselling and testing services for all pregnant women.

5.4.2 A poorly unified PMTCT of syphilis policy community

A lack of mechanism for the policy community to unify

In contrast, no equivalent level of cohesion was observed in the PMTCT of syphilis policy community. Many informants attributed the little political attention paid to PMTCT of syphilis to the loose linkages between PMTCT of syphilis promoters, between related institutions, and between policymakers and health professionals. Experts had no formal mechanism through which to interact and around which to coalesce closely.

It was recognised during both interviews and literature review that the promotion of antenatal syphilis screening in the 2000s largely depended on single institutions and individual professionals. As early as in the early 2000s, a universal PMTCT of syphilis programme was initiated by the Government of Shenzhen City.³¹⁰ In 2007, in response to the WHO plan of action for the elimination of congenital syphilis, the WHO-Peking University Cooperation Center for Maternal and Child Health Research and Training (WHO-Peking University MCH Center) conducted a cohort study of infants born to

syphilis-positive mothers in three syphilis-prevalent provinces and autonomous region – Zhejiang, Hunan, and Guangxi (according to an academic from Peking University). In the same year, the NCWCH piloted PMTCT of syphilis in two counties – i.e. Zhoushan in Zhejiang Province and Luzhai in Guangxi Autonomous Region (according to a programme supervisor from the NCWCH). Nonetheless, despite that all these pilots revealed promising outcomes, there was a lack of clear mechanism for the institutional efforts to unify to be influential, and a cohesive policy framework had yet to form.

Disconnection between sectors

Some informants also identified the lack of cross-sectoral communication between sectors related to PMTCT of syphilis, and even between divisions within the MOH. Both the National Center for Sexually Transmitted Disease Control (NCSTD) and NCWCH claimed some responsibilities for PMTCT of syphilis and managed to place the cause onto the national agenda. The NCSTD reported the alarming MTCT of syphilis incidence to the national and local decision-makers in various occasions, whilst the NCWCH drafted an action plan for the elimination of MTCT of syphilis during 2007-2008. However, because the two centers are under the authority of different MOH divisions, their initiatives operated in relative isolation with limited communication in between, therefore were neither unified nor influential.

“We drafted an action plan for the elimination of MTCT of syphilis around 2007 to 2008, which was a task assigned by Division of Women and Children’s Health of the MOH. However, when we handed it in for approval, it was rejected by Division of Disease Control. The Division of Disease Control thought that PMTCT of syphilis should be integrated into an overall syphilis control plan as the NCSTD had suggested, therefore a particular PMTCT of syphilis plan was not necessary.” (The executive direction of the NCWCH)

Overall, the policy communities of PMTCT of syphilis and PMTCT of HIV have existed in China for nearly two decades. However, they differed in their degree of cohesion as well as efficiency in influencing policy making, contributing to the contrasting levels of political priority afforded to the two causes. Compared to the

strongly cohesive PMTCT of HIV community, the PMTCT of syphilis community was loosely structured, with promotion efforts remained non-unified and under fragmented authority.

5.5 Political entrepreneurship

Scholars have also suggested that policy communities can function more effectively in shaping the policy agendas where political entrepreneurs emerge to lead them.^{118,311} These political entrepreneurs are politically influential and capable elites who are passionate in promoting a cause.¹²⁴ As described by Kingdon:¹¹⁸

“These entrepreneurs are not necessarily found in any one location in the policy community. They could be in or out of government, in elected or appointed positions, in interest groups or research organisations. But their defining characteristic ... is their willingness to invest their resources – time, energy, reputation, and sometimes money – in the hope of a future change.”

Not just anyone can be a policy entrepreneur. Research has shown that great political entrepreneurs share certain characteristics: they are persistent and knowledgeable about the issue; they have good coalition-building skills and credibility that facilitates the generation of resources; they articulate vision amid complexity; they generate commitment by appealing to important social values; they know the critical challenges in their environments; they infuse colleagues and subordinates with a sense of mission; and they are strong in rhetorical skills.²⁵¹

5.5.1 The leading role of the NCWCH in promoting PMTCT of HIV

It was believed by some respondents that China’s PMTCT of HIV policy community functioned effectively when it was led by a few capable individuals from the NCWCH. Around the same time when PMTCT of HIV was first piloted in Henan Province in 2002, the NCWCH was formally established in Beijing under the authority of the MOH Division of Women and Children’s Health. One year later, it joined the newly established China CDC as an affiliated agency. The main responsibility set for the NCWCH at its establishment was to provide technical guidance for women and

children's health services, with particular focus on PMTCT of HIV. A number of influential officials and professionals as well as clinicians and academics were convened and appointed to high-level positions of the center. These officials and experts included largely members of the PMTCT of HIV policy community and brought with them knowledge-based authority and excellent skills.

"Before the establishment of the NCWCH, most PMTCT of HIV researchers were based in Peking University, and I was the team leader. When I was appointed as executive director of the NCWCH in 2002, I brought almost all the PMTCT of HIV efforts from Peking University to the new center." (The executive director of the NCWCH)

The establishment of the NCWCH was seen as an integration of PMTCT of HIV efforts through which the influence of the policy community was enhanced. Thereafter, the NCWCH played a key entrepreneurial role, initiating a series of programmes and projects, in scaling up PMTCT of HIV services across China.

"The establishment of the NCWCH provided a platform for all the domestic PMTCT of HIV efforts, which were fragmented in different departments and institutions at the moment, to integrate. This integration enhanced influence of the professional network and saved resources. In addition, because the NCWCH was set up under the authority of both the MOH and China CDC, it is more influential during generation of political priority compared to other institutions." (The executive director of the NCWCH)

5.5.2 Absence of political entrepreneurship for PMTCT of syphilis

In contrast, it was unclear which people or institution was actually leading the PMTCT of syphilis initiatives. Since mid-2000s, a few health professionals were enlightened on international conferences about the urgent need to tackle MTCT of syphilis, and started to promote the control when they returned to China. According to respondents from the NCWCH and NCSTD as well as Peking University, a number of attempts were made to integrate PMTCT of syphilis into China's existing disease control

programmes and strategies. For instance, the WHO-Peking University MCH Center collaborated with the MOH to revise and add content related to PMTCT of syphilis into the *Technical Guidelines for Prevention and Treatment of Reproductive Tract Infections*.^m The center then integrated PMTCT of syphilis into a national programme to prevent reproductive tract infections in 10 counties in 10 provinces. From 2008 onwards, the NCWCH required counties covered by the national PMTCT of HIV programme to conduct PMTCT of syphilis too. In addition, the NCSTD integrated PMTCT of syphilis into several of its ongoing programmes and researches such as those to standardise diagnosis and treatment for syphilis and to refine evaluation of congenital syphilis cases, as well as health education programmes related to STD control, etc. Nonetheless, neither any individual emerged as a political entrepreneur nor any of the above institutions was recognised as a leading institution during promotion for PMTCT of syphilis. The result has been fragmented promotion efforts, which were less influential to push for policy change.

To summarise, the PMTCT of HIV policy community of China functioned well in the 2000s when a strong leading institution consisting of many politically influential people emerged to unite and lead the community. However, there was neither institutional leadership clarified nor any political entrepreneur appeared within the PMTCT of syphilis community, hampering the effectiveness of the priority generating efforts.

5.6 Credible indicators

Policy making analysts have also demonstrated that the availability of clear indicators, such as incidence and mortality rates, constitutes another important factor that shapes whether an issue will generate the attention of decision-makers.^{118,312} Shiffman himself has argued that credible indicators are not only useful for monitoring purposes, but are politically influential because they can make the hidden issues visible to decision-makers. If such indicators are not available, policymakers may ignore the problem either because they are unaware of the existence of it or unconvinced due to the absence of reliable evidence.¹²⁴

^m The 2nd edition of the *Technical Guidelines* was not published until 2011.

5.6.1 Sentinel surveillance data of MTCT of HIV

The first case of MTCT of HIV was reported in Yunnan province, Southwest China, in 1995.¹¹¹ Two years later, the first HIV sentinel site for pregnant women was established in Yining City, Xinjiang Autonomous Region, followed by the establishment of a network of national and provincial sentinel sites.⁹⁹ By 2003, 18 national sentinel sites for MTCT of HIV had been established in eight provinces with high HIV prevalence¹¹¹.

It was identified from relevant literature and documents that the publication and proper interpretation of sentinel surveillance data helped make the problem of MTCT of HIV visible to policymakers in the early 2000s. For instance, the sentinel system revealed that HIV prevalence among pregnant women in certain areas of Yunnan Province and Xinjiang Autonomous Region as 1.3% and 1.2%, respectively.¹¹¹ These numbers were published and interpreted by scholars as being indicative of a generalised epidemic.^{99,313} The sentinel system also reported an increased proportion of MTCT infections in all HIV cases from 0.1% in 1997 to 0.4% in 2002, which was released in the 2003 Joint Assessment.¹¹¹ Despite the fact that only a total of 93 MTCT of HIV cases were reported between 1997 and 2002, both the 2003 and 2004 Joint Assessments stated concerns that the increased proportion of MTCT cases in all HIV cases could be a sign of China's HIV/AIDS epidemic "spreading from high-risk groups into the general population" which therefore should be targeted by the Chinese Government for prevention. As the 2004 Joint Assessment described:¹¹³

"With the spread of the epidemic beyond high-risk groups to the general population, the risk of mother-to-child transmission (MTCT) of HIV has become an area of increasing concern." (MOH & UN Theme Group on HIV/AIDS in China, 2004)

Attention on MTCT of HIV was further attracted by a few studies in Henan Province which suggested a prevalence of HIV among infants born to HIV-positive mothers, far higher than expected, as 38.4 – 41.7%.^{99,314} Using these shocking numbers, the PMTCT of HIV policy community successfully compelled the MOH to take action and quickly piloted a PMTCT of HIV programme in Shangcai County, one of the most HIV-prevalent counties in Henan Province, in 2002.⁹⁹

5.6.2 Policymakers' unawareness of the MTCT of syphilis burden

For MTCT of syphilis, however, although the sentinel system was established earlier than that of MTCT of HIV and an alarmingly increased incidence since the early 1990s was reported,¹ the data was not well deployed during promotion of political prioritisation. The incidence data was neither publicised nor highlighted in any report from the MOH or central government. According to informants from the NCWCH and NCSTD, the national policymakers were neither aware of the crisis nor motivated to take action. It was not until 2007, with a publication of the national surveillance data in *The Lancet*, a leading international medical journal, that China's significant burden of MTCT of syphilis first became widely known to the decision-makers.¹ The impact of this publication is discussed in a later section of focusing events.

5.6.3 Lack of a recognised case definition of congenital syphilis

Another challenge for PMTCT of syphilis promotion, as recognised both by the respondents and published studies,³¹⁵ was the complexity of evaluating congenital syphilis cases. The diagnostic criteria for congenital syphilis set by the *National Standards of the People's Republic of China: Diagnostic Criteria and Management of Syphilis (GB 15974-1995)*⁸² combines microscopic examination, serological tests, as well as longitudinal follow-up records, therefore is too complicated to operate in real practices, especially in low-resource settings and by non-professional institutions. The result has been inconsistency in case evaluation, especially between high- and low-resource settings, and between STDs and non-STDs clinics. According to literature, the lack of a practical and recognised case definition of congenital syphilis may have resulted in a significant proportion of misdiagnosed cases in China.^{315,316}

There have been many debates around the quality of the congenital syphilis incidence data in China. For instance, in 2008, on a panellist meeting convened by the MOH, many experts (not only from the NCSTD and NCWCH, but also from other institutions such as the NCAIDS) suggested the rapid increase in the reported incidence be a result of systematic changes in diagnosis and reporting, particularly the adoption of the China Information System for Disease Control and Prevention (CISDCP) in 2003.³¹⁶ Some informants also expressed that, due to a strict accountability mechanism for underreporting within the CISDCP, hospitals prefer to report more cases even many

of the diagnoses are not fully confirmed rather than underreport. Although many STD professionals did not agree with the doubts about over-reporting of congenital syphilis cases and insisted that there was still serious under-reporting of the epidemic (because the CISDCP does not catch syphilis-related adverse pregnancy outcomes other than congenital syphilis, e.g., syphilitic stillbirths),^{74,87} the policymakers were not convinced enough to prioritise the control due to concerns around the accuracy of reported incidence data.

Comparatively, although sentinel sites for both MTCT of HIV and MTCT of syphilis were established in the 1990s, the use of MTCT of HIV surveillance and research data has proved much more efficient in provoking the national policymakers to act. In contrast, policymakers were less willing to act against MTCT of syphilis because of (1) unawareness of the burden, and (2) the lack of a recognised case definition, all of which underscored the importance of development and utilisation of credible indicators during generation of political priority.

5.7 Focusing events

Focusing events refer to large-scale happenings such as crises, global forums, conferences, and major scientific discoveries. – can also shape the level of political priority. Focusing events function similarly as indicators, bringing visibility to relatively neglected issues.¹²⁰

5.7.1 The “blood selling” scandal

China has experienced rapid economic development since the late 1970s, but there were also large economic and social disparities between urban and rural areas.¹²³ The rural poor looked for alternative sources of income, and in the 1990s hundreds of thousands of rural Chinese were infected with HIV through participation in paid plasma donation (“blood selling”) – this came to be known internationally as the “blood selling” scandal and particularly affected central provinces such as Henan.³¹⁷ From 2000 onwards (around World AIDS Day on December 1st), an increase in international media attention towards the scandal and the resultant “AIDS villages”, combined with pressure from national scientists and health workers, helped the

disaster, which had been covered-up and denied by the local governments, become progressively exposed.¹⁸⁵

The “blood selling” scandal was identified by many informants from international agencies and domestic health institutions, as well as in published studies,^{185,223} as one of the most important focusing events for HIV/AIDS control in China. In particular, it attracted intense political attention, for the first time in history, around the victims of the scandal - infected women and infants. According to an academic interviewed, the national policymakers were frightened by the outbreak in central provinces, therefore placed HIV/AIDS onto top of the national health agenda as a result of absolute uncertainty about the spread of the epidemic.

5.7.2 The UNGASS Declaration and China’s Five Commitments

The 2001 UNGASS Declaration of Commitment on HIV/AIDS²²⁴ was the first major global focusing event for HIV/AIDS control. By signing the Declaration, the Chinese Government deemed the international commitments, including commitment to PMTCT of HIV, as legitimate and worthy of compliance.^{300,318} Soon thereafter, the *China Action Plan on HIV/AIDS Containment and Prevention (2001-2005)*¹¹² was issued and China’s Five Commitments to tackle HIV/AIDS were announced at the UN General Assembly. The Five Commitments, according to a few informants, have resulted in AIDS being labelled as a “political disease” which therefore warranted the highest level of attention.^{185,319}

5.7.3 The SARS crisis and establishment of the CDC hierarchy

The central government’s concerns around transmissible infectious diseases were heightened in the winter/spring of 2002-2003 with the outbreak of SARS. As discussed in Chapter 2, the SARS epidemic exposed serious deficiencies in the health system¹⁹¹ and precipitated a critical review of the effectiveness of the state’s apparatus to control life-, economy-, and social stability-threatening infectious diseases including HIV/AIDS.^{223,320} From 2002 onwards, centers for disease control and prevention (CDCs) were set up at national, provincial, municipal, and county levels.¹⁴⁰ Each center has its own department or sub-center for HIV/AIDS control, which works closely with the health department and other related health institutions at the same

administrative level. A vertical supervision mechanism was adopted which, according to scholars, not only strengthened capacity building within the public health system, but also facilitated implementation of national programmes.¹⁴⁰ Some informants shared the opinion that establishment of the CDC hierarchy and HIV/AIDS control network in China was a mutually beneficial process. A typical description is as follows.

“HIV control efforts and the disease control system have mutual benefits. The new techniques, skills, as well as professionals of HIV prevention helped build up the national disease control system, while the establishment of CDCs helped rolling down HIV prevention programmes and projects from national to local levels.” (A programme supervisor from the NCSTD)

It is widely believed by AIDS policy scholars, and the UN Theme Group, that the SARS epidemic opened a “policy window” for proponents of the AIDS responses to assert greater pressure for AIDS policies in China.^{113,185,223,306} There was a growing recognition among policy makers that both SARS and HIV shared characteristics which initially favoured the epidemic spread: initial cover-up at the outset of the epidemic, social stigma of those contracting the illness, and lack of affordable health care.³²¹ Government officials were concerned about the social and economic impact if HIV ran out of control as SARS did.¹⁸⁵ On the other hand, the government’s capacity to respond relatively rapidly towards SARS raised the question of whether such strong responses would be warranted for prevention of other infectious diseases, especially HIV/AIDS, as well.¹⁸⁸ On June 11, 2003, an opinion piece entitled “Learn from SARS to Fight AIDS” in *China Daily* stated that:¹⁸⁵

“Timely and accurate release of information based on all-level training campaigns was the key to prevent SARS from spreading to rural areas, however similar response towards HIV/AIDS had been “hampered by ideological shackles.” (Huang, 2006)

Consequently, the national responses to AIDS became significantly more public and aggressive.³⁰⁶ Several effective strategies for SARS control were translated into control of HIV/AIDS and other infectious diseases, e.g., the real-time case reporting system.^{185,223} In addition, in controlling SARS, contact between the Chinese

Government and international agencies such as the UN, WHO, and the US CDC was essential and further stimulated stronger international collaboration for HIV/AIDS prevention and treatment.²²³

5.7.4 Publication of the congenital syphilis incidence and Expo 2010

In contrast to HIV/AIDS, the PMTCT of syphilis promoters did not catch the opportunity of SARS to generate political priority. It was not until 2007, as discussed earlier, that a publication of national syphilis surveillance data in *The Lancet* and subsequent media pressure helped put the issue onto China's health policy agenda. In this paper, Chen and colleagues first reported China's congenital syphilis incidence which "had grown at a very rapid rate with an average yearly increase of 71.9%, from 0.01 cases per 100,000 livebirths in 1991 to 19.68 cases per 100,000 live births in 2005."¹ The alarming numbers quickly generated attention from western media.

"Many western journalists went to the MOH to interview health officials about why China's syphilis epidemic was like this and how the MOH would deal with it. The MOH officials felt extremely embarrassed because they were neither aware of the alarming incidence nor informed of any existing response to the epidemic." (An programme supervisor from the NCSTD)

Soon thereafter, the MOH urged a plan to eliminate MTCT of syphilis in China and assigned this task to the NCWCH. The MOH also began to address the issue of integrating PMTCT of syphilis into existing PMTCT of HIV programmes, of which the consideration was first expressed in the *2009 Work Essentials for Women and Children's Health and Community Health*.²²² From 2007 to 2009, China's own plan of action for the elimination of MTCT of syphilis was prepared by the NCWCH, however, as mentioned earlier, this plan was not approved by the MOH until 2010 as a result of fragmentation in the health policy system.

In May 2010, an American scholar's publication in the *New England Journal of Medicine* revealed, again, China's increasing congenital syphilis problem.² The published data was widely cited and the author was interviewed by a number of western media between May and June.^{322–325} According to a couple of informants from

the NCSTD, the national decision-makers believed that publication of the data in a leading medical journal and western mainstream media would “largely affect China’s image in the international society specifically because it was released on the eve of the opening of Expo 2010 in Shanghai.” This provided the impetus for the two relevant but relatively disconnected MOH divisions (i.e., Division of Women and Children’s Health and Division of Disease Control) to join forces to push the timetable forward so as to finalise the *China 2010-2020 Plan for Syphilis Control and Prevention* in June 2010.⁷ Three months later, in the *National Guidelines for the Management of HIV Control Programmes*,¹⁰⁰ the MOH further committed to providing integrated HIV, syphilis and hepatitis B interventions for 80% of all pregnant women by 2015, a special central government fund of more than 839 million yuan per annual.⁶ Using the three criteria, political prioritisation of PMTCT of syphilis was, at last, recognised in September 2003.

In summary, a few domestic and global focusing events for PMTCT of HIV can be identified, including the “blood selling” scandal in Henan Province in the 1990s, the 2001 UNGASS Declaration of Commitment on HIV/AIDS, and the outbreak of severe acute respiratory syndrome (SARS) in 2003. These events shared a character that they opened “policy windows”³²⁶ afterwards for the PMTCT of HIV efforts to assert greater pressure for policy making. In contrast, the PMTCT of syphilis promoters missed the opportunity of the SARS crisis, and it was only until the late 2000s that the revelations of China’s alarming MTCT of syphilis incidence in international academic press and media helped put the cause onto the national health agenda.

5.8 Clear policy alternatives

The last domestic factor in Shiffman’s framework is the existence of clear policy alternatives. Policymakers are more likely to commit to tackling a problem if they are convinced by proposals demonstrating that the problem is readily solvable.^{118,309} If policy communities failed to generate clear and commonly accepted proposals, policymakers may be unwilling to take action because they prefer to allocate resources towards issues they believe can be effectively addressed.¹²⁴

5.8.1 Feasible policy alternatives for PMTCT of HIV

A large body of evidence regarding feasibility of PMTCT of HIV programmes, from both international and national levels^{327,328} was transferred by the policy community into influences to China's national policymakers. According to published literature, the central government was convinced that PMTCT of HIV was imperative in China, especially since use of ARTs for the infected mothers during pregnancy and for the infants after birth.⁹⁹ On the basis of experiences gained from the Henan pilot, the central government further perceived that PMTCT of HIV was possible in China and included provision of the services in government annual budget planning in 2003.⁴ Using the central government fund, the NCWCH started to enrol infected pregnant women in HIV-prevalent provinces like Guangdong, Guangxi, Henan, Xinjiang, and Yunnan to find effective control models,⁹⁹ and the PMTCT of HIV programme was gradually expanded to all the 31 provinces in 2009.⁴

5.8.2 Unclear policy options for PMTCT of syphilis

Since mid-20th century, evidence regarding the practicability and cost-effectiveness of PMTCT of syphilis, in both developed and developing countries, has been widely available and known to the WHO and its partners.^{25,38–40} In 1993, the World Bank issued the *World Development Report*³⁰³, recommending PMTCT of syphilis as “one of the most cost-effective interventions currently available” which should be included in essential health packages. However, international evidence was insufficiently transferred by the policy community into political influence to the national policymakers. The policymakers might have ignored the issue of MTCT of syphilis either because they were unaware of possible policy options or were unconvinced that MTCT of syphilis could be effectively controlled.

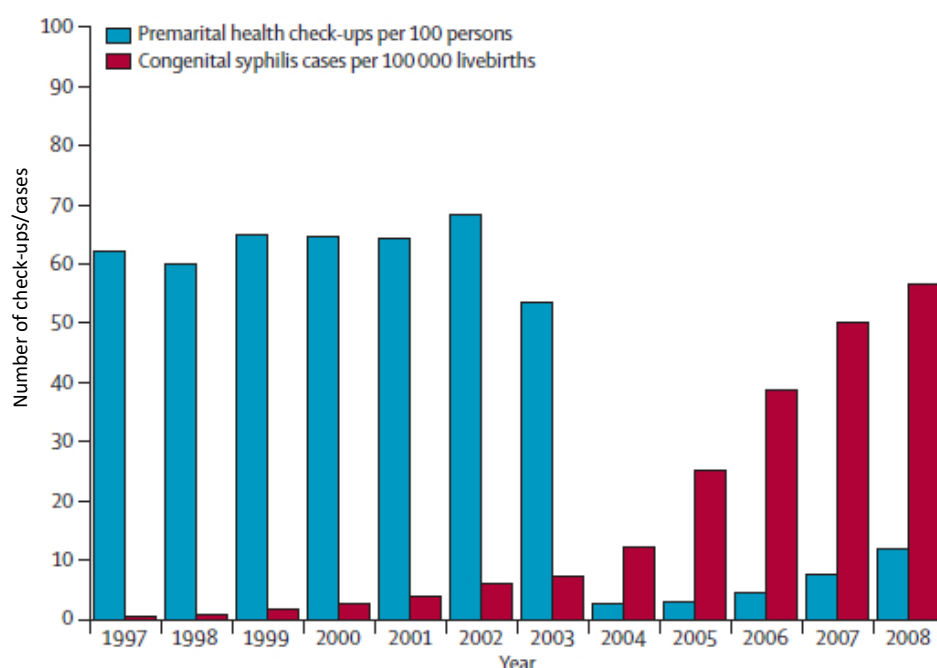
5.8.3 The abolition of compulsory premarital check-ups

By adopting the *Law of the People's Republic of China on Maternal and Infant Health Care* in 1994,³²⁹ premarital check-ups including a syphilis test were once compulsory in China,³³⁰ and treatment was required before the marriage if either of the couple was tested positive.³³¹ In 2003, however, the compulsory premarital check-ups were abolished by the *Marriage Registration Regulations (State Council Decree No. 387)*,

that received wide applause as an indication of social progress and increased respect for privacy in China.^{332,333} However, the resultant increases in the rates of birth defects and infections between spouses sparked a long debate on the restoration of compulsory premarital check-ups, not only among health experts but among legislators as well.^{332,334,335} In 2005, a Vice Minister of Health, stated on a press conference that the government should pay for free premarital check-ups in order to increase the uptake rate.³³⁶

“Premarital check-ups are not personal consumption, but a public health task, and must be addressed by public health strategies.” (Cui, People.cn, 2005)

Figure 5-1: The national rate of premarital medical check-ups and reported incidence of congenital syphilis in China. Source: Chen and Yin. 2012²⁷



Several STD experts interviewed in this study expressed that the abolition of compulsory premarital check-ups may have contributed to the rapid increase in the MTCT of syphilis incidence in China, particularly because most of the infants are born to married couples under the rules of the *One Child Policy*. This view is consistent with Chen and Yin’s findings that the huge decrease in the rate of would-be couples undergone premarital check-ups (from 68% to 5%) may have contributed to the increased incidence of syphilis among infants (Figure 5-1).²⁷ The two authors further

suggested that the effectiveness of PMTCT of syphilis interventions has been challenged by a higher syphilis prevalence among prospective couples compared to pregnant women, as well as relatively lower rates of antenatal care attendance in less developed areas, therefore the provision of acceptable and affordable premarital syphilis testing and treatment should be put onto the health agenda.

Nonetheless, the concerns around the huge decrease in premarital syphilis testing rate and its impact on pregnancy outcomes were not sufficiently transferred into political pressure. Although free premarital check-ups have been initiated in some areas,^{333,335} the PMTCT of syphilis promoters did not generate any proposal for provision of universal premarital syphilis testing. It was not until 2010 that provision of syphilis consulting and testing services during voluntary premarital check-ups was first highlighted in the ten-year syphilis control plan.⁷

The findings presented above demonstrated the importance of applying clear policy options in generation of political priority. The policymakers in China paid attention to PMTCT of HIV because of existence of clear and widely accepted proposals. In contrast, the PMTCT of syphilis promoters failed in transferring international and national evidence of the intervention cost-effectiveness into political influence. The result has been the national policymakers' insufficient understanding of potential policy alternatives. Also, there was a lack of proposals to promote voluntary premarital syphilis testing after the abolition of compulsory premarital check-ups in 2003.

5.9 Political transitions

According to Shiffman, the political and social environments in which policy advocacy function can also shape political priorities.¹²⁴ One of such contextual factors is political transitions. According to political reform researchers, major political transitions and reforms such as democratisation and public sector decentralisation can alter political priorities by empowering new entrepreneurs in agenda setting and policy formulation, and by changing the basic processes by which public policies are developed and implemented. One particular reform may affect the policy agenda in different ways, depending on the context.^{337,338}

5.9.1 The change of national leadership in 2003

It was recognised by both international and national scholars that the change of national leadership in 2003 had substantially accelerated the commitment to and implementation of evidence-based AIDS policies in China.^{123,185,223,306} In 2003, a new government led by President Hu Jintao and Premier Wen Jiabao took office. The new generation of leadership concentrated power and expanded its political space through setting new goals and building new ideology. As presented in Chapter 2, Hu Jintao introduced an overall political goal of speeding up modernisation and establishing an “Xiaokang” society by 2020.^{172,173} As informed by a former country director of the UNAIDS Country Office of China, the Hu-Wen leadership perceived HIV/AIDS as a potential obstacle in the face of China’s plan to achieve “Xiaokang”, therefore worthy of political attention from the highest level. Consequently, the new government introduced a number of initiatives and allocated sufficient resources for HIV/AIDS control, such as China CARES.

At the same time, the new leaders also took the opportunity of visiting AIDS patients to present a new image of being close to people especially the socially marginalised population.¹⁸⁵ On the World AIDS Day 2003, Premier Wen Jiabao and Minister of Health Wu Yi shook hands with AIDS patients at Ditan Hospital, Beijing, in order to send a strong signal to the public that HIV/AIDS was an issue worth paying attention to and people living with HIV/AIDS deserved support and care. On the same day, the central government announced the “*Four Free and One Care*”¹¹³ policy which indicated provision of:

- Free ARV drugs to AIDS patients who are rural residents or people without insurance living in urban areas;
- Free voluntary counselling and testing;
- Free drugs to HIV-positive pregnant women and free HIV testing for their newborns;
- Free schooling for AIDS orphans;
- Care and economic assistance to the households of people living with HIV/AIDS.

Thereafter, the national leaders, either Hu or Wen, visited Ditan Hospital every year. Many informants of this study shared an opinion that the national leaders' frequent presence at AIDS-related events was not only a reflection of the highest-level attention, but also a push for local government to take action. Similar view was expressed in a book entitled "AIDS and Social Policy in China"³⁰⁶ published by the Harvard University Asia Center in 2006. The authors described the situation as following:

"Given the many pressing policy challenges that China's leaders face and the concentration of the epidemic in marginal areas with respect to economic growth, HIV/AIDS policy was placed on a back burner until recently." (Harvard University Asia Center, 2006)

In contrast, however, the PMTCT of syphilis promoters did not grasp the opportunity of changing national leadership to promote prioritisation of PMTCT of syphilis on the national health agenda.

5.9.2 The new health system reform for universal coverage

Another major political transition - the new health system reform launched in 2009 - was identified by many respondents and in relevant documents as that has helped enhance prioritisation of PMTCT syphilis and HIV. As discussed in Chapter 2, since the late 1990s, China has been making great efforts on its health system reform towards universal coverage.^{134,179} In April 2009, the Central Committee of the Communist Party of China and the State Council jointly issued a new health system reform plan - i.e. the *Implementation Plan for Deepening Pharmaceutical and Health System Reform 2009 – 2011*,¹¹⁵ and set "promotion of equal access to basic public health services" as one of the five key priorities for the new phase of health system reform. In order to implement this priority, the MOH announcing a number of Major Program of Public Health Services, including PMTCT of HIV, in 2009, backing with budgeted funding estimated at 850 billion yuan.^{6,193,196} In addition, it was informed by a couple of respondents from the NCWCH that, in areas not covered by the central government fund, the local governments were also required to invest in PMTCT of HIV in order to ensure universal coverage.

Before 2009, vertical health initiatives often operated in relative isolation, but the new health system reform made a number of attempts to integrate different priorities into a comprehensive and holistic view. For instance, PMTCT of syphilis was not included in the Major Program of Public Health Services at first, however, many respondents recognised that the shift of health system reform targets has facilitated integration of PMTCT of syphilis services into existing priorities such as PMTCT of HIV. The PMTCT of syphilis initiatives became more effective when they were linked to the new health system reform targets. In 2010, the central government finance budgeted 839 million yuan to expand integrated PMTCT of HIV, syphilis and hepatitis B services to 1,156 county-level divisions across the country.⁶ This amount was 10 times larger than the budget allocated for PMTCT of HIV alone in 2009. Being included into the Major Program of Public Health Services, it was the first time when PMTCT of syphilis received sustainable funding from the central government.

In summary, national political transitions particularly how policy communities use the opportunities of the transitions have a profound impact on political priority generation. In China, the change of national leadership in 2003 as well as the new health system reform started in 2009 both have facilitated prioritisation of PMTCT of HIV. However, the PMTCT of syphilis community did not make good use of these transitions to promote the cause on the national health policy agenda.

5.10 Competing health priorities

The second aspect of national political environment, also the last factor in Shiffman's framework, is competing health priorities which refers to the competing demands between health causes for scarce resources as a force to the policy process in developing countries. Donors contribute to this competition by offering limited health funding. According to Waddington, there are many health interventions that yield great health benefits. However only those viewed as affordable can generate sustainable government support.³³⁹

The rising incidence of MTCT of syphilis since the 1990s coincided with a period of intense international and national political attention and donor prioritisation being paid to MTCT of HIV. The high-level prioritisation of HIV/AIDS may have overshadowed

the problems of syphilis and inadvertently hampered its priority generation. As informed by an official from the NCSTD, the central government finance did not budget any funding for STDs control before 2010 when the ten-year syphilis control plan was issued. In the 2000s, there were only a disproportional yearly amount of 3 to 4 million yuan allocated from the MOH to support STDs control projects, compared to 1.07 and 1.22 billion yuan for AIDS responses in 2008 and 2009, respectively.⁴ Some informants believed that the huge difference between the national AIDS and STDs funding has created a strong norm that HIV/AIDS should be prioritised over STDs despite the fact that the estimated burden of some STDs, such as syphilis, were higher or at least equal to that of HIV/AIDS.

It was not until 2009, as discussed in the previous section, that the new health system reform opened a window for promoters of other PMTCT interventions to link their issues to the reform targets, and enhance prioritisation of the issues through integrating them with the existing priorities such as PMTCT of HIV.

Shiffman's framework has proved useful to guide organisation and analysis of the different sources of data. In general, most evidence was consistent with the three categories of factors. However, two additional factors were highlighted by respondents and documents that were not contained in the original framework. These two factors are legal/constitutional issues and the framing of issues, each of which is going to be explored in turn in the following sections.

5.11 Legal and constitutional systems

Some health policy scholars suggested that constitutional and legislative systems were particularly important in the policy process,^{237,340} yet this distinction was not specifically referred to in Shiffman's framework. By reviewing policy documents and mainstream media coverage, this study found evidence of how legislations and constitution rights shaped for the political priority levels of PMTCT of syphilis and PMTCT of HIV in China.

5.11.1 Impact of the Criminal Law on syphilis control

Prioritisation of PMTCT of syphilis in China has been restricted by the syphilis-related amendments of the Criminal Law.ⁿ

“Article 360. Those engaging in prostitution or visiting a whorehouse knowing that they are suffering from syphilis, clap, or other serious venereal diseases are to be sentenced to five years or fewer in prison or put under criminal detention or surveillance, in addition to having to pay a fine.”

Although Article 360 only targets those people who spread STDs by participating in commercial sex activities, syphilis and gonorrhoea are the only two diseases of which the exact terms were presented in the law. Many health official and professional interviewees believed that Article 360 has established extremely strong linkage between syphilis and criminality, resulting in absolute unwillingness of the decision-makers to combat the resurgent syphilis epidemic (including MTCT of syphilis). Such unwillingness was exemplified, according to a provincial health official, by the fact that testing and treatment for syphilis are not covered by any basic health insurance scheme in China.

5.11.2 Impact of the Constitution on provision of premarital check-ups

As discussed earlier, there were debates on whether compulsory premarital check-ups should be restored after they were abolished in 2003 due to increases in the rates of birth defects. This study found evidence that such restoration was avoided by the adoption of the Constitution Amendments^o regarding recognition of human rights in 2004. The abolition of compulsory premarital check-ups was portrayed by mainstream media as implementation of the Constitution Amendments, therefore should not be restored. According to Xinhua, the most influential media outlet in China:³³³

ⁿ The Criminal Law of the People's Republic of China was adopted by the Second Session of the Fifth National People's Congress on July 1, 1979 and amended by the Fifth Session of the Eighth National People's Congress on March 14, 1997.

^o The Constitution of the People's Republic of China was amended on March 14, 2004 to include guarantees regarding private property ("legally obtained private property of the citizens shall not be violated"), and human rights ("the State respects and protects human rights").

“On the way of establishing a state ruled by law, it is absolutely not allowed to drive back...The abolition of compulsory premarital check-ups is related to improved human rights conditions – is the actual implementation of the Constitution Article ‘the State respects and protects human rights’. The core reason is that compulsory premarital check-ups may be in conflict with the privacy of citizens.” (Lu, Xinhuanet, 2005)

5.12 Framing of issues

Beyond Shiffman’s framework, this study further found evidence of another important dynamic facilitating political attention - issue framing. According to McInnes and Lee, the framing of a health issue can influence how the issue is presented to decision-makers and therefore affect whether or not and how the issue is placed on policy agenda.³⁴¹

In China, “AIDS politics” were introduced during the first national conference on HIV prevention in 2001. HIV was described as an epidemic with severe impacts on public health, economic development, social stability, and national security, and thus could only be solved “politically.”³¹⁹ According to several interviewees, HIV/AIDS is “incurable” and “leading to death” and therefore worthy of high-level priority. One respondent from the NCWCH expressed the view that, in the early 2000s, the central government began to shift its attention to AIDS because a large proportion of people infected, although seriously stigmatised, were deemed “innocent”—especially the women and infant “victims of the ‘blood selling’ scandal.”

Syphilis was virtually eradicated as “chronic illness of the old society” in mainland China during the 1960s.⁶³ The return of syphilis from the late 1970s onward was interpreted as a result of increased levels of extramarital sex, commercial sex, homosexuality, and drug use,⁶⁸ all of which are deemed as “criminal” and/or “immoral” in China. Consequently, government officials have been reluctant to admit and respond to the resurgent epidemic. In addition, several informants further attributed the low policy priority to the framing of syphilis as “a disease without severe symptoms and can be easily cured by cheap drugs.”

5.13 Chapter summary and discussion

This chapter explored the determinants of political prioritisation of PMTCT of syphilis and PMTCT of HIV at national level of China. A set of factors, as extracted from the data by using Shiffman's framework, may have accounted for the difference in the level of political priority set for the two issues. In addition, this chapter found evidence of two extra factors beyond the original framework which may also have been influential. A summary of the main findings is presented in Table 5-1.

Table 5-1: Factors affecting political prioritisation of PMTCT of syphilis and PMTCT of HIV in China

Factor	PMTCT of syphilis	PMTCT of HIV
1. Norm promotion	<p>No global norm until 2007 when the WHO elimination plan was issued</p> <p>No global reporting mechanism</p> <p>Did not reach the UN General Assembly</p>	<p>MDG 6 and UNGASS Declaration urged countries to act against MTCT of HIV</p> <p>The GARPR strengthened government accountability</p> <p>UN agencies facilitated adoption of the global norms by promoting “strong leadership at all levels” and multi-sectoral cooperation</p> <p>China’s Five Commitments for HIV/AIDS Control made at the UN General Assembly</p>
2. Resource provision	<p>No financial support and limited technical support from major international agencies</p> <p>Few international collaborations in the response to MTCT of syphilis</p>	<p>Sufficient financial and technical supports from the Global Fund, UN agencies, and bilateral organisations, requiring the Government to provide match funding and integrate international assistance with national and local priorities</p> <p>The UNICEF and Global Fund helped establish the first pilot in Henan in 2002</p>
3. Policy community cohesion	<p>Promotion efforts poorly unified to be influential</p> <p>Lack of a comprehensive policy framework as well as cross-sectoral communication</p>	<p>A cohesive policy community which was active in implementing the pilot programme, developing the national working guidelines, and setting local health agendas</p>
4. Political entrepreneurship	<p>Some professionals and institutions initiated PMTCT of syphilis programmes, however none emerged to lead and coordinate these efforts</p>	<p>The NCWCH was appointed the leading institution in 2002 and a few health professionals and officials were recognised as leaders of the policy community</p>
5. Credible indicators	<p>The alarming incidence data was not strategically deployed by the policy community</p> <p>Lack of a recognised case definition of congenital syphilis</p> <p>The policymakers’ concerns around the quality of incidence data</p>	<p>The sentinel surveillance data was used by the policy community to create concerns around the burden of MTCT of HIV among policymakers</p>
6. Focusing events	<p>From 2007 to 2010, public revelations of the congenital syphilis incidence in international academic press and media, especially one released on the eve of Expo 2010 in</p>	<p>The “blood selling” scandal attracted intense international and national attention around HIV-positive women and their infants</p>

	Shanghai, eventually stimulated decision-makers' attention from the decision-makers	<p>The Government signed on the UNGASS Declaration and deemed the international commitment to PMTCT of HIV as legitimate</p> <p>The SARS crisis questioned the state's apparatus to control infectious diseases</p>
7. Clear policy alternatives	<p>Insufficient understanding of the possible policy options among the policymakers despite a few promising pilot programmes</p> <p>No policy alternative to promote premarital syphilis testing after the abolition of compulsory premarital check-ups</p>	The policy community used international evidence and experiences gained from the pilot programme to demonstrate to the policymakers that MTCT of HIV was solvable
8. Political transitions	The policy community did not use the opportunity of changing national leadership to promote prioritisation of PMTCT of syphilis	<p>The Hu-Wen leadership and its focus on socioeconomic equality</p> <p>The new health system reform included PMTCT of HIV in the Major Program of Public Health Services</p>
9. Existing health priorities	<p>The intense political and donor attention paid to HIV/AIDS may have hampered attention to syphilis</p> <p>Prioritisation of PMTCT of syphilis was strengthened through integrating with PMTCT of HIV - an existing priority</p>	<p>The huge gap between national AIDS and STD funding sent a signal that HIV/AIDS should be prioritised over syphilis</p> <p>The local government and institutions prioritised HIV/AIDS to get more funding</p>
10. Legal and constitutional system (additional)	<p>The Constitution amendments (2004), recognising human rights, restricted the restoration of compulsory premarital check-ups</p> <p>The Criminal Law (1997) associated syphilis with criminality</p>	
11. Framing of the issues (additional)	<p>Syphilis was eliminated in China in 1964 as "chronic illnesses of the old society"</p> <p>Attention to the resurgent syphilis epidemic was restricted by the framing leading to serious stigmatisation</p> <p>The policymakers were not motivated to act due to the perception that syphilis is a simple and easily curable disease</p>	<p>AIDS was portrayed as a "political disease" due to the shame brought by the "blood selling" scandal and the fear for its possible impact on China's economic development</p> <p>Many women and infants infected with HIV were deemed "innocent" and "victims of the 'blood selling' scandal"</p> <p>HIV was considered as more urgent because it is "insurable" and "leading to death"</p>

5.13.1 Reasons for the high-level prioritisation of PMTCT of HIV

Despite a small number of cases reported from the sentinel system, PMTCT of HIV occupied a prominent position on China's health agenda in late 2003. Pressure from the international community, including establishment of specific and powerful norms (factor 1) and provision of financial and technical supports (factor 2), had a major impact on the priority generation process. Globally, HIV/AIDS was successfully framed as a development and security issue calling for "strong leadership at all levels" (factor 11) as well as multi-sectoral cooperation in the response. By adopting MDG 6 and signing on the UNGASS Declaration, the Chinese Government deemed these international commitments, including commitment to PMTCT of HIV, as legitimate and made its own Five Commitments for HIV/AIDS Control at the UN General Assembly. In addition, since the late 1990s, the national leader's attention on PMTCT of HIV was stimulated by accepting funding from and participating in collaborative activities against MTCT of HIV with the Global Fund, UNICEF etc.

In the meantime, national political attention on PMTCT of HIV was also strengthened by a few focusing events (factor 6) such as the "blood selling" scandal and SARS crisis. Around 2000, the shame brought by the "blood selling" scandal in central provinces and the policymakers' perception of the disease being "insurable" and "leading to death" (factor 11) resulted in AIDS being considered a "political disease" which called for action and compliance from the highest level. The decision-makers therefore portrayed women and infants infected as "victims of the 'blood selling' scandal", who were "innocent" and therefore worthy of attention (factor 11). In addition, the change of national leadership in 2003 (factor 8) substantially enhanced prioritisation of control of HIV/AIDS, including MTCT of the infection, which was painted as an obstacle on China's way to achieve its overall political goal (factor 11). A policy window was opened for PMTCT of HIV promotion after the SARS crisis which brought critical reviews of the effectiveness of China's health system to control life- and economic-threatening infectious diseases. The priority level was further advanced by integrating PMTCT of HIV with one of the main targets of the new health system reform – to promote equal access to basic public health services (factor 8 & factor 9).

Since the early 2000s, a strong and cohesive policy community (factor 3) succeeded in lobbying for political attention and concomitant resource allocation to address MTCT of HIV in China. Led by a number of capable entrepreneurs at the NCWCH (factor 4), the community employed credible indicators (factor 5), including epidemiological measures and estimation of the impact of HIV/AIDS on economy, as well as clear policy proposals (factor 7) to convince the policymakers that the problem was urgent but absolutely surmountable.

5.13.2 Factors accounting for the neglect of PMTCT of syphilis

In contrast to PMTCT of HIV, the lack of national political attention on and much slower response to MTCT of syphilis reflected the relative neglect of the issue at global level. Although the WHO issued an action plan for the elimination of MTCT of syphilis in 2007, it neither emphasised on government leadership nor introduced any global reporting instrument to enhance countries' accountability (factor 1). Compared to PMTCT of HIV, China received very limited assistance from international organisations for PMTCT of syphilis (factor 2), resulting in a serious lack of interests among the decision-makers.

The absence of a unified and vocal policy community (factor 3) with recognised leading entrepreneurs or institutions (factor 4) further set back the cause of PMTCT of syphilis. There was no accountability and coordination mechanism around which the efforts to promote PMTCT of syphilis could unify to be influential. Despite a large and rapid increase in the reported incidence and cost-effective pilot programmes initiated at local levels, the policy community did not strategically transfer the evidence into political influence. The result has been the policymakers' insufficient understanding of the seriousness of the epidemic (factor 5) as well as possible policy options (factor 7). The policymakers were not convinced to prioritise MTCT of syphilis also because of the debates regarding quality of the incidence data due to the lack of recognised case definition of congenital syphilis. In addition, the incohesive community missed the opportunities of the change of national leadership (factor 8) and SARS outbreak (factor 6) to place PMTCT of syphilis onto the national health agenda. The Constitution adopted amendments regarding recognition of human rights in 2004, which prevented the restoration of compulsory premarital check-ups (factor 10).

Despite a lot of concerns around the huge decrease in premarital syphilis testing rate thereafter, the PMTCT of syphilis community failed to generate any new policy alternative to encourage attention on premarital syphilis testing (factor 7).

In addition, political efforts to tackle MTCT of syphilis were restricted by the prevailing framing of syphilis (factor 11) leading to serious stigmatisation. Syphilis was strongly linked to immorality due to Chinese traditional ideas as well as to criminality due to the Criminal Law (factor 10). The policymakers tended to perceive syphilis as a simply cured disease and the patients as “condemnable” and “punishable” which therefore does not deserve high-level political and resource attention.

Since the early 2000s, the intense political and donor attention being paid to HIV/AIDS may have hampered prioritisation of other diseases (factor 9), including syphilis. From 2007 to 2010, public revelations of the shockingly high congenital syphilis incidence in international academic press and media coverage (factor 6) eventually prompted the national government to combat the epidemic. In 2010, the PMTCT of syphilis promoters successfully took opportunity of the new health system reform (factor 8), linking PMTCT of syphilis to the existing priority of PMTCT of HIV, to generate priority for elimination MTCT of syphilis.

As discussed in Chapter 2, since the late 1970s, the local government of China has gained more autonomy to make local health policies and adapt national policies to local circumstances. However, sometimes local governmental priorities may collide with hierarchical objectives, making the national and subnational agendas not always consistent. This is well exemplified by that a PMTCT of syphilis was prioritised on a couple of municipal health agendas almost one decade before the national government first committed to the cause (Chapter 1). In order to achieve a more comprehensive understanding of the dynamics of political prioritisation within the health policy arena, it is important to further look at how the health agendas are set and policies are made at subnational level, as well as the similarities and differences between the features functioning at national and subnational levels. As described in Chapter 4, this study collected data at the provincial level of Guangdong as well as in 5 cities with various conditions of congenital syphilis incidence, control strategy, and economic development level. The findings regarding the factors shaping priority generation for

PMTCT of syphilis and PMTCT of HIV at these two levels are presented and discussed in the next chapter.

Chapter 6 Prevention of mother-to-child transmission of syphilis on China's subnational agendas: what accounted for the variance?

"A commonly used term for syphilis infection in Southern China is 'Guangdong boils', thought to be related to the historical position of Guangdong as an important economic and trade hub that has concomitantly suffered from substantial syphilis epidemics in the past."^p

6.1 Introduction

This chapter starts with an overview of the epidemiological and political conditions related to control of mother-to-child transmission (MTCT) of syphilis and MTCT of HIV in Guangdong Province. The alarming burden of MTCT of syphilis along with its uneven levels of political priority in different cities and at the provincial level presents an excellent opportunity for analysing the factors influencing political prioritisation at subnational level of China. In addition, this chapter seeks to understand how and to what extent an existing national policy priority -i.e. prevention of mother-to-child transmission (PMTCT) of HIV – was adopted and affect health policy making at provincial and municipal levels. Using Shiffman's framework, policy-relevant data collected from the five study cities and at the provincial level are organised into factor themes, and compared between cities as well as to the national findings to explore the determinants of political prioritisation, or ignorance.

6.2 Background information

6.2.1 General information of Guangdong

Guangdong Province, locating on China's South coast, is the most populous province in mainland China. It has a population of about 104 million according to the 2010 National Census,³⁴² and governs 21 cities which are divided into 121 county-level divisions.⁸⁹ Being a pioneer of China's economic reform since 1979, Guangdong has

^p Yang, L.-G. *et al.* Primary syphilis cases in Guangdong Province 1995-2008: opportunities for linking syphilis control and regional development. *BMC Public Health* **10**, 793 (2010).

maintained a more than 10% annual Gross Domestic Product (GDP) growth over the past three decades,⁷⁶ and its per capita GDP has exceeded US\$ 7,000 in 2010.³⁴³ According to data from the provincial and municipal statistics bureaus, Guangdong has reached the upper-middle-income level, and some particular areas within the province even have reached high-income level.³⁴⁴ The Pearl River Delta, containing eight cities in the middle of the province, has been known as “world’s factory” because its sprawling industrial zones churn out everything from Nike shoes to iPhone.³⁴⁵ The booming manufacturing industries have brought a tremendous migrant population of rural labour force of about 31 million people, accounting for 30% of the total population in 2010.^{342,345}

The rapid economic and social transitions facilitated the spread of HIV/AIDS and syphilis as well. Guangdong’s access to the ocean, proximity to Hong Kong, and historical links to overseas Chinese people have significantly increased the risks of crossing border transmissions. After the first HIV infection was reported in 1986, almost all positive cases in the province were imported until 1996.³⁴⁶ The fast economic development has also reintroduced prostitution and drug use to Guangdong. In 1996, HIV infection was found among local drug users for the first time, indicating the start of a rapid growth in the reported HIV/AIDS epidemic.³⁴⁶ The rates of sexually transmitted and MTCT cases also increased, which accounted for 37.9% and 0.7%, respectively, of all the reported HIV infections in 2007.³⁴⁷ By October 2010, 28,039 people were estimated to be HIV-positive in the province, with approximately 6,000 new HIV infections per year, and a total of 5,404 AIDS-related deaths documented.³⁴⁸

Syphilis, although once eliminated in the 1960s, returned to South China in the 1980s. According to Yang et al., the incidence of primary syphilis rose from 0.88 per 100,000 in 1995 to 7.61 per 100,000 in 2008, and was higher in relatively richer areas, i.e. inside the Pearl River Delta.⁷⁶ Syphilis is now the most commonly reported sexually transmitted diseases (STDs) and the second most commonly reported infectious disease in Guangdong.⁷⁶ In the meantime, the burden of MTCT of syphilis also increased rapidly. According to data from the National Center for STD Control (NCSTD), and the Guangdong Provincial Center for STD Control (Guangdong STD Center), the yearly reported number of congenital syphilis cases in Guangdong ranks among top five among all the 31 provinces. The reported congenital syphilis incidence

has been at least two times higher than the overall rate of China since 2005. The reported syphilis and congenital syphilis burden of Guangdong, in comparison to the national rates, is presented in Table 6-1.

Table 6-1: A comparison of the reported syphilis and congenital syphilis incidences of Guangdong Province and China, 2005-2010. Source: data from the NCSTD and Guangdong STD Center

	N of new syphilis cases reported		Incidence of syphilis (per 100,000 total population)		N of new congenital syphilis cases reported		Incidence of congenital syphilis (per 100,000 live births)	
	Guangdong	China	Guangdong	China	Guangdong	China	Guangdong	China
2005	18,641	132,775		10.21	772	4,066		25.15
2006	25,333	186,149	27.55	14.24	1,342	6,349	136.53	38.66
2007	29,428	225,601	31.65	17.16	1,857	8,408	180.72	50.30
2008	35,414	278,215	37.48	21.06	1,906	9,480	185.49	56.76
2009	39,112	327,433	40.57	24.66	1,567	10,757	152.50	64.41
2010	45,399	358,534	47.10	26.86	1,409	12,166	137.12	66.55

6.2.2 PMTCT of syphilis in Guangdong prior to 2010

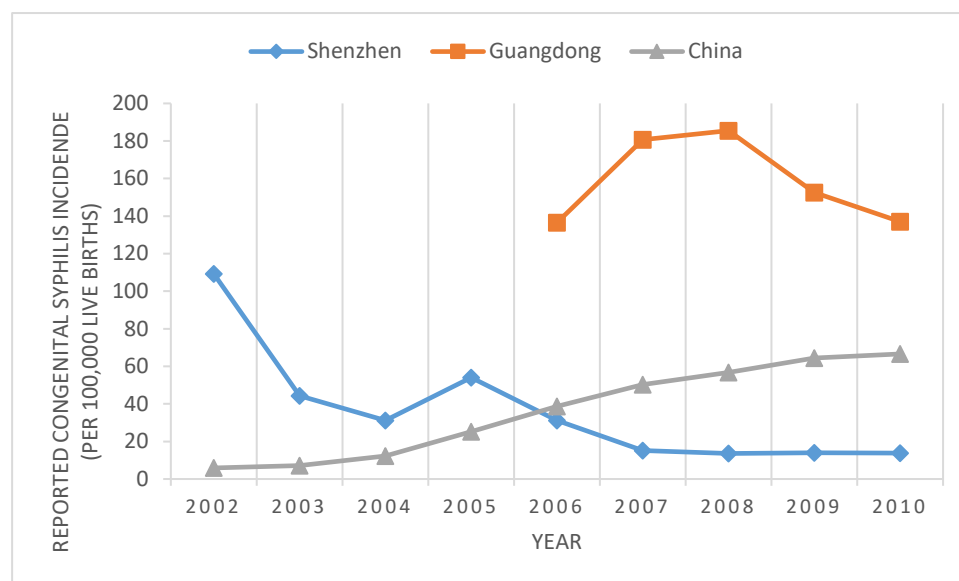
As presented in Chapter 4, there was significant variance in the levels of political and programmatic priorities set for PMTCT of syphilis among the five study cities. Using the three adapted criteria, political prioritisation of PMTCT of syphilis can only be identified in Shenzhen that control plans were issued, working guidelines were developed, and a multi-level government funding mechanism was established in 2002 to provide integrated PMTCT of HIV and syphilis interventions for all pregnant women.^{88,349–351} This initiative was eight years before the national government first committed to the cause,⁷ and even earlier than the first national PMTCT of HIV pilot programme in Henan Province.³⁵² The equal priorities set for both infections and integration of the dual control into routine antenatal care have ensured high intervention coverages and programme effectiveness. According to published data, up to 2,000,000 pregnant women have been tested for syphilis by 2011,⁸⁸ and about 1,800,000 have undergone HIV screening by 2010.³⁵³ The syphilis and HIV screening rates among pregnant women in Shenzhen are 97.4%⁸⁸ and 96.2%,³⁵³ respectively. In

addition, it has been estimated 99% of the potential MTCT of syphilis cases have been avoided.⁸⁸

In Jiangmen, despite the lack of municipal government funding, a pilot programme to promote rapid syphilis testing among pregnant women in low-resource settings was conducted from 2008 to 2009, based on funding from the Gates Foundation and technical support from the WHO and NCSTD.²⁸⁰ The programme screened a total of 12,239 subjects, including pregnant women visiting township hygiene stations, women at child-bearing age, and people at high risk or acquiring syphilis, and treated all the 383 syphilis-positive women for free. This programme strengthened the level of political priority afforded to PMTCT of syphilis at both the provincial and municipal levels, which is addressed in more detail later.

In contrast to Shenzhen and Jiangmen, however, there was neither any policy issued nor any governmental resource allocated to scaling up PMTCT of syphilis in the other three study cities as well as at the provincial level in the 2000s. It was not until early 2010 that the Health Department of Guangdong Province first allocated a small fund to provide PMTCT of syphilis services in selective less developed areas outside the Pearl River Delta. The neglect of PMTCT of syphilis on the provincial and many municipal agendas may have contributed to the overall low antenatal syphilis screening rate of 56.9% in the province (11.8% in rural areas outside the Pearl River Delta).⁸⁹ Figure 6-1 compares the reported congenital syphilis incidence of Shenzhen to the incidences of Guangdong province and whole China from 2002 to 2010. It is shown that Shenzhen's incidence rate was 20 times higher than the national rate in 2002, but decreased remarkably after the dual control programme were implemented. The two incidence lines crossed each other in 2006, and thereafter Shenzhen maintained a low rate of around 14 cases per 100,000 live births. On the other hand, however, the provincial rate was shockingly high, which was almost ten times as the Shenzhen rate, suggesting that programme effectiveness in most parts of the province was probably low.

Figure 6-1: A comparison of the reported congenital syphilis incidences (per 100,000 live births) of Shenzhen City, Guangdong Province, and China. Source: data from Shenzhen STD Center, Guangdong STD Center, and the NCSTD



6.2.3 PMTCT of HIV in Guangdong

The policy process of PMTCT of HIV in most parts of Guangdong Province (except Shenzhen) can be viewed as mechanical implementation of the national health priorities. In 2001, the provincial government enacted an implementation plan of the *China AIDS Action Plan on HIV/AIDS Containment and Prevention (2001-2005)*.³⁵⁴ However, this plan focused more on treatment for HIV-positive mothers and their babies, whilst an effective mechanism for promoting universal antenatal HIV screening was lacking.

Despite that the national PMTCT of HIV programme expanded in Guangdong through integrating into China Comprehensive AIDS Response (China CARES)⁴ and has covered at least one county-level division in each of the study cities by 2009, the findings obtained from the five cities revealed that the experiences gained from China CARES were not utilised sufficiently in informing local health policy making. For instance, although the national *Working Guidelines for Prevention of Mother-to-Child Transmission of HIV*¹¹⁷ has required all city- and county-level governments and health departments to develop local plans and policies for implementing the national PMTCT of HIV targets,¹¹⁷ only the Government of Shenzhen City issued policies and allocated a special fund to support provision of the services.³⁴⁹ As shown in Table 6-2, none of

the other four study cities have issued specific municipal policies or allocated any matching fund for PMTCT of HIV prior to 2011.

Table 6-2: Political priority level and programme effectiveness of PMTCT of HIV in the five studies cities and at the provincial level of Guangdong

	Year covered by the national programme	National programme coverage ⁱ	Local working guidelines ⁱⁱ	Local government funding (yuan/year)	Antenatal HIV screening rate	ARV treatment rate of HIV-positive mothers	MTCT of HIV rate ⁱⁱⁱ
Shenzhen	2004	6/6	2002	2 million since 2002	96.2% ³⁵³	87.9% ³⁵³	5.3% ³⁵³
Qingyuan	2008	3/7	2011	2011	Unknown	Unknown	Unknown
Jiangmen	2005	5/7	2011	2011	Unknown	51.0% ³⁵⁵	Unknown
Maoming	2008	1/6	2011	2011	Unknown	Unknown	Unknown
Zhuhai	2005	1/3	2011	2011	Unknown	Unknown	Unknown
Guangdong	2004	31/121	2011	2011	40% in 2008 90% in 2010^{iv}	48.15%³⁵⁶	13.9%³⁵⁶

i. Programme coverage = number of county-level divisions covered/total number of county-level divisions within the city

ii. Only policies headed by the provincial/municipal government rather than transmitted documents from higher-level government were considered

iii. MTCT of HIV rate = percentage of infants born to HIV-infected mothers who are infected

iv. Source: data from Guangdong WCH Center

The inconsistent level of political attention paid to PMTCT of HIV between cities has contributed to the “lower-than-expected” availability of the services and the expectant target of reducing the MTCT of HIV rate down to lower than 5% (set by the national guidelines in 2004) not achieved in Guangdong prior to 2010.³⁵⁶ Activated in 2008, the Prevention of Mother-to-Child Transmission Management Online Information Direct Reporting System⁴ has revealed an increased antenatal HIV screening rate from about 40% in 2008 to 90% in 2010 (Table 6-2). However, according to experts from the Guangdong Provincial Center for Women and Children’s Health (Guangdong WCH Center) where the provincial PMTCT of HIV data is managed and analysed, a substantial proportion of pregnant women were tested for HIV shortly before their deliveries and many opportunities for antenatal interventions were missed. From 2007

to 2010, only 48.15% of HIV-positive mothers received antiretroviral (ARV) treatments before their deliveries, and 80.56% of infants born to these mothers were treated in Guangdong Province.³⁵⁶ Both rates are lower than the targets set by the national working guidelines (90% for infected mothers and 90% for infants born to infected mothers). The provincial rate of MTCT of HIV around that period was 13.9%, compared to 5.3% in Shenzhen City³⁵³ and 9% nationally.⁴ As Li and colleagues have argued, the effectiveness of the PMTCT of HIV programme has been heavily cut down in Guangdong because of the relatively low intervention availability.³⁵⁶

6.2.4 The ten-year syphilis control plan and “3 in 1” programme

From mid-2010 onwards, eventually, the priority levels of PMTCT of syphilis and PMTCT of HIV on the provincial and municipal agendas were advanced simultaneously by the launch of the *China 2010-2020 Plan for Syphilis Control and Prevention* in 2010⁷ and inclusion of integrated PMTCT of HIV, syphilis and hepatitis B services as Major Program of Public Health Services (details presented in Chapter 5).^{6,100} In February 2011, the Ministry of Health (MOH) further issued guidelines to implement the “3 in 1” programme nationally¹⁰² indicating expansion of the integrated services to 87 county-level divisions (out of 121) in Guangdong Province.

Two months after the national guidelines were enacted, the provincial health department issued the *Guangdong Province Guidelines for Prevention of Mother-to-Child Transmissions of HIV, syphilis and Hepatitis B*,³⁵⁷ which set targets to screen 80% of pregnant women for HIV, syphilis and hepatitis B and provide treatment for 90% of mothers tested positive and their infants in all the 21 cities. The provincial guidelines contain a detailed funding plan to guide allocation of the central government fund in order to maximise its effectiveness. In addition, the provincial health department further issued a small matching fund of 0.7 million yuan per year to support researches related to effective implementation of the “3 in 1” programme, such as studies on the implementation barriers and factors influencing multi-sectoral cooperation.

In summary, prior to 2010, the emergence of PMTCT of syphilis on a couple of municipal health agendas within as well as the variance in adopting the national PMTCT of HIV targets between different cities within Guangdong Province suggest

that political prioritisation of health issues at subnational level of China does not always follow the instructions from upper administrative levels mechanically, but can be shaped by various local conditions. As presented in Chapter 2, such variance may be explained by the largely increased autonomy of the local government in policy making, budgeting, and sectoral allocation at their localities. Herein, in order to explain the geographic differences in the political priorities set for an emerging health issue (e.g., PMTCT of syphilis) and an existing national policy priority (e.g., PMTCT of HIV), the provincial and municipal data were synthesised into analytical themes in accordance to Shiffman's framework (as presented in the rest of this chapter) and compared between cities as well as to the national level findings.

6.3 Norm promotion

6.3.1 The international and national norms relating to PMTCT of HIV

As discussed in Chapter 5, in the early 2000s, the national government's commitment to PMTCT of HIV was stimulated by the norms established at the UN level as well as external financial and technical supports. In response to pressure from the international community, the *China Action Plan on HIV/AIDS Containment and Prevention (2001-2005)*¹¹² urged each level of the government to develop its own plan, and invest in PMTCT of HIV through including it into annual government budget planning and establishing a government-centered, multi-channel funding mechanism. The State Council AIDS Coordination Mechanism⁹ monitored implementation of the action plan, and organised work meetings to distribute monitoring results every year.¹¹² With particular focus on government negligence, this monitoring mechanism has proved very useful in strengthening accountability and capacity of the government at provincial level and below,⁴ especially when the local officials were afraid of their inefficient work being reported on the national meetings. Consequently, in November 2001, a provincial implementation plan³⁵⁴ of the national HIV/AIDS action plan was issued, first indicating the provincial government's commitment to offering PMTCT of HIV services for HIV-positive pregnant women and their babies.³⁵⁸

⁹ The State Council AIDS Coordination Mechanism was established in 1996, and replaced by the State Council Working Group on AIDS (SCWGA) in 2004.

Premier Wen Jiabao's visit to AIDS patients on December 1st, 2003 and the launch of the "*Four Free and One Care*" policy built up an extremely powerful norm that the Government should take a leading role in providing support and care for people living with HIV, particularly HIV-positive women and their infants.¹¹³ According to many informants of this study, the attention from the highest level not only resonated with the international norms, but also sent strong signal that the government at all levels should embrace the issue of PMTCT of HIV correspondingly. In order to implement the "*Four Free and One Care*" policy comprehensively, AIDS Working Committee was established within each provincial, municipal, and county-level government to coordinate multi-sectoral response to HIV/AIDS at its administrative level.^{98,113} Zhang Dejiang, Secretary of the Communist Party Guangdong Provincial Committee (the highest provincial leader), visited and shook hands with AIDS patients at Guangzhou Eighth People's Hospital on World AIDS Day 2005.³⁵⁹ In some relatively HIV-prevalent areas of the province, a "top leader accountability mechanism" was adopted to assert government leadership in HIV/AIDS control, including provision of PMTCT of HIV services.³⁴⁸ In 2005, the provincial government finance budgeted 8 million yuan per year to support provision of free ARV treatments and tests for people living with HIV including pregnant women and their infants.³⁵⁸

6.3.2 Neglect of PMTCT of syphilis at international and national levels

In contrast to PMTCT of HIV, PMTCT of syphilis enjoyed no such-high commitment from both the international and national levels as well as expectations for local governmental actions in the 2000s. There was neither any central government-led monitoring mechanism established nor sustainable funding plan adopted for PMTCT of syphilis prior to 2010. The result has been that the provincial and most municipal decision-makers in Guangdong were unaware of the urgent need to control MTCT of syphilis.

In summary, the political priorities afforded to PMTCT of syphilis and PMTCT of HIV in Guangdong were more or less responses to the globally and nationally built norms regarding the issues. The high-level national attention paid to PMTCT of HIV pushed the Government of Guangdong Province to embrace the issue correspondingly, and the provincial and municipal governments' accountabilities in providing PMTCT

of HIV services were strengthened by establishment of a State Council-led monitoring mechanism. The lack of an overall positive political environment for PMTCT of syphilis, on the other hand, reflected the relative neglect of the issue on both the global and national agendas.

6.4 Resource provision

6.4.1 Expansion of PMTCT of HIV by integrating with China CARES

In 2004, the high antenatal HIV testing rate and large number of pregnant women tested in Shenzhen attracted attention from the MOH. In addition to Shangcai County in Henan Province,³⁵² the MOH enrolled all the six districts of Shenzhen as pilot areas of the national PMTCT of HIV programme, aiming at exploring feasible work mechanisms and service packages.³⁶⁰ The experience gained from these pilots was later utilised in developing the national *Working Guidelines for Prevention of Mother-to-Child Transmission of HIV*,¹¹⁷ which set targets to screen 85% of pregnant women for HIV and provide comprehensive care for 90% of HIV-positive mothers and their infants. In order to achieve these targets, as presented in Chapter 5, the MOH secured political and financial support from the central government and Global Fund by integrating PMTCT of HIV into China CARES.⁴ It is shown in Table 6-3 that the multiple-round expansion of China CARES in Guangdong Province facilitated rolling out the national PMTCT of HIV programme from 6 pilot districts in 2004 to 31 county-level divisions across the province in 2009. However, as presented early, except Shenzhen where provision of PMTCT of HIV interventions was supported by a local government special fund since 2002, no matching funding was allocated to PMTCT of HIV in the other four study cities. Such variance may be due to the programme-specific resource allocation mechanism, which is discussed in the following section.

Table 6-3: Multi-round expansion of the national PMTCT of HIV programme in Guangdong Province, 2002-2011

Year	Newly enrolled districts/counties	Total number of districts/counties	Programme	Funding body	Guiding institution	Relevant policy & Event
2002	6 districts: Luohu, Futian, Nanshan, Baoan, Longgang, Yantian (Shenzhen)	6	The Shenzhen PMTCT of HIV and syphilis programme	Municipal government finance	Shenzhen CDC & Shenzhen STD Center	Health Department of Shenzhen. <i>Shenzhen Working Guidelines for Prevention of Mother-to-Child Transmission of HIV</i> . 2002 ³⁴⁹
2004	6 pilot districts: Luohu, Futian, Nanshan, Baoan, Longgang, Yantian (Shenzhen)	6	The national PMTCT of HIV pilot programme	Municipal government finance	NCWCH	MOH. <i>Notification to Strengthen the Pilot Programme to Prevent Mother-to-Child Transmission of HIV</i> . 2004 ³⁶⁰
2005	3 newly enrolled counties: Taishan (Jiangmen), Yangdong (Yangjiang), Doumen (Zhuhai)	9	The national PMTCT of HIV programme & China CARES	Central government finance & Global Fund	NCWCH	1st round China CARES (3 counties) ³⁶¹ MOH. <i>Notification to Conduct Prevention of Mother-to-Child Transmission of HIV in "China CARES"</i> . 2004 ¹¹⁷
2008	5 newly enrolled counties: Conghua, Zengcheng (Guangzhou), Gaoyao (Zhaoqing), Qingxin (Qingyuan), Dianbai (Maoming)	14	The national PMTCT of HIV programme	Central government finance & Global Fund	NCWCH	The MOH. <i>Notification to Further Implement the Prevention of Mother-to-Child Transmission of HIV</i> . 2008 ³⁶²
2009	17 newly enrolled districts/counties	31	The national PMTCT of HIV programme & China CARES	Central government finance & Global Fund	NCWCH	2nd round China CARES (12 counties) ³⁴⁸ PMTCT of HIV was included as a Major Program of Public Health Services ⁶
2011	56 newly enrolled districts/counties	87	The national PMTCT of HIV, syphilis and hepatitis B programme	Central government	NCWCH	Health Department of Guangdong Province. <i>Guangdong Province Guidelines for the Prevention of Mother-to-Child Transmissions of HIV, Syphilis and Hepatitis B</i> . 2011

6.4.2 Lack of incentives for the local government to control MTCT of HIV

As presented in Chapter 2, one major issue of China's current health policy system is the lack of incentives for local implementers. Such problem was identified during investigating both the PMTCT of syphilis and PMTCT of HIV cases in Guangdong. In the 2000s, the financial and material resources for PMTCT of HIV were allocated directly from the MOH and Global Fund to local implementing institutions – i.e. municipal and/or county-level WCH Centers.¹¹⁷ Such a programme-specific resource allocation mechanism was efficient and avoided many bureaucratic procedures, however, it also reduced incentives for the provincial and municipal governments to participating in delivering the services. By reviewing related local policy documents, this study found evidence that the health departments of Qingyuan, Maoming, Jiangmen and Zhuhai just simply transmitted the national PMTCT of HIV policies to county-level departments and/or implementing institutions, without monitoring programme implementation. Despite that the national working guidelines required all related municipal and county-level health departments to explore feasible working mechanisms and service packages in order to help achieve the screening and treatment targets, none of the above four cities issued its own PMTCT of HIV policy in the 2000s.

In addition, this study identified a phenomenon that provision of PMTCT of HIV services in Guangdong in the 2000s relied mostly on the international and national funding which were far from sufficient to achieve universal coverage. As a result, the local decision-makers perceived PMTCT of HIV more likely a pilot programme but not a routine task, and the interventions were only provided in areas covered by China CARES and to an extent that the international and national resources were enough for. Despite that the national working guidelines targeted to screen 85% of pregnant women for HIV, the provincial and municipal governments (except Shenzhen) did not allocate any matching funding to scale up antenatal HIV screening.

"It was almost impossible to secure matching fund, especially at city and county levels. When a national policy sets targets for service provision, sufficient funding should be allocated in order to ensure implementation. If the money is not enough, the policy targets are less likely to be achieved. Usually, the share of funding from the central

government accounts for over 80% of the total funding for a particular policy.” (An official at the Health Department of Guangdong Province)

6.4.3 A step-down resource allocation mechanism since 2011

In 2011, the provincial and municipal governments’ interests in PMTCT of syphilis and PMTCT of HIV were eventually boosted by the “3 in 1” programme. The MOH issued the *Implementation Guidelines for Prevention of Mother-to-Child Transmissions of HIV, Syphilis and Hepatitis B*,¹⁰² aiming at screening 80% of all pregnant women for HIV, syphilis, and hepatitis B by 2015. The programme adopted a step-down resource allocation mechanism, requiring the provincial and municipal governments to develop their own implementation guidelines and funding plans, and reallocate the national funding to governments at lower levels according to the local economic and epidemiological conditions. This step-down resource allocation mechanism has proved much more successful in motivating the local government to involve in funding and delivering the integrated interventions, as well as facilitated establishment of strong government accountability at all levels. A comparison of the provincial and municipal governments’ responses to both the national PMTCT of HIV programme in the 2000s and the “3 in 1” programme since 2011 is shown in Table 6-4.

Table 6-4: A comparison of the two major national PMTCT of HIV programmes as well as the levels of compliance from the provincial and municipal governments of Guangdong with both programmes

Programme	The national PMTCT of HIV programme	The “3 in 1” programme
Policy	<i>Working Guidelines for Prevention of Mother-to-Child Transmission of HIV</i>	<i>Implementation Guidelines for Prevention of Mother-to-Child Transmissions of HIV, Syphilis and Hepatitis B</i>
Year	2004	2011
Targets	<ul style="list-style-type: none"> • To screen 85% of pregnant women for HIV • To treat 90% of HIV-positive mothers and their infants 	<ul style="list-style-type: none"> • To screen 80% of pregnant women for HIV, syphilis, and hepatitis B • To treat 90% of the infected mothers and their infants
National funding coverage	6 in 121 counties in 2004 31 in 121 counties in 2009	87 in 121 counties in 2011
Resource allocation mechanism	Programme-specific: from the national government to city- and county-level WCH Centers	Step-down: from the national to provincial to municipal to county-level government
Provincial matching funding	No	Yes
Provincial implementation plan	No	Yes
Municipal matching funding	Only in Shenzhen	In the 34 counties not covered by the national funding
Municipal implementation plans	Only in Shenzhen	In all the 21 cities

To support scaling up the “3 in 1” interventions A total of 114.29 million yuan was allocated from the central government finance to Guangdong,³⁵⁷ which was the largest ever amount of national funding that Guangdong has received for control of particular diseases. In order to maximise the effectiveness of the central government fund, the provincial health department designed specific implementation guidelines and a funding plan to ensure universal coverage. According to the plan, the central government fund is allocated to 87 relatively less development counties (most are outside the Pearl River Delta and consist of 72% of pregnant women in the province), and the municipal and county-level governments of the 34 richer counties are

responsible for funding the “3 in 1” interventions out of their own government finance. In addition, every city issued its own implementation plan as soon as the funding was in place.

“An issue can only be prioritised and the local government’s accountability be ensured when sufficient resources are allocated from national level. Because the provincial and municipal governments need to develop proposals and conduct monitoring activities in order to spend out the national money and to report to the higher levels, they tend to pay more attention to the issue. Otherwise, they just do what the limited funding is enough for without thinking about anything else.”
(An official at the Health Department of Guangdong Province)

6.4.4 External support for PMTCT of syphilis in Shenzhen and Jiangmen

Unlike PMTCT of HIV, PMTCT of syphilis in Guangdong received very little resources from international and national levels prior to the launch of the “3 in 1” programme, let alone a special mechanism for the interventions to be included into government annual budget planning. However, this study still identified some evidence that external financial and technical supports, although limited, have fostered generation of political priorities for the cause in a couple of cities. According to informants from the NCSTD and Shenzhen STD Center, the NCSTD largely contributed to initiation of the PMTCT of syphilis programme in Shenzhen in the early 2000s, through supporting local experts review a large body of international evidence of feasibility and cost-effectiveness of the interventions as well as participating in guidelines development and lobbying activities with local decision-makers. The important role of NCSTD in the policy process of PMTCT of syphilis in Shenzhen has been well documented in programme status reports, meeting and training materials, publications, as well as media coverage. In addition, the NCSTD actively presented Shenzhen’s achievements in PMTCT of syphilis to the MOH and other related sectors, though the efforts were not influential enough, to obtain political attention in the 2000s.

In Jiangmen, as presented early, the political priority of PMTCT of syphilis was enhanced in 2008 by the launch of a WHO-led and Gates Foundation-funded

programme to provide rapid syphilis testing for pregnant women in rural areas. The international cooperation nature of this programme has proved important in obtaining attention from both the provincial and municipal governments. In 2010, the provincial health department allocated a special fund of 3 million yuan per year to support STD control, including 1 million yuan specifically for providing PMTCT of syphilis interventions in rural areas. Although far from enough especially compared to the provincial AIDS fund of 20 million yuan per year,³⁵⁸ this fund was the first of its kind in Guangdong Province.

Observation of several syphilis-related activities at both the provincial and municipal levels revealed that the local health officials valued those comments and suggestions made by international and national experts on the local health achievements, due to their knowledge-based authorities,²⁴³ therefore tended to pay more attention to initiatives led by external experts especially those from international organisations. It was also noticed during the observation that the term of “WHO” has a magic effect that when a programme or study was supported by the WHO, it was more likely to obtain attention from the local decision-makers.

“It is our great pleasure to have experts from the NCSTD participate in this year’s annual monitoring meeting. Thank you for bringing your professional expertise and the newest information to Jiangmen, making Jiangmen a WHO pilot city for the first time in history, and helping Jiangmen strengthening its infectious disease control infrastructure. The municipal health department promise to do its best to coordinate and facilitate implementation of the national syphilis control targets.” (Expressed by a vice director of the Health Department of Jiangmen on the annual monitoring meeting on syphilis control in Jiangmen in October 2011)

In summary, the enticement of external financial and technical assistances helped place PMTCT of syphilis highly on the municipal agendas of Shenzhen and Jiangmen. Beyond this, the provincial and municipal agendas were also shaped by domestic resource allocation mechanisms. This was well illustrated by the fact that although the programme coverage of PMTCT of HIV was enlarged in Guangdong through

integration with China CARES in the 2000s, a lack of incentives for the local government to implement the national programme has resulted in “lower-than-expected” availability of the services. This indicated the importance of adopting a comprehensive policy design to ensure consistent commitments at both national and subnational levels during scaling up the interventions.

6.5 Policy community cohesion

6.5.1 Capable PMTCT of syphilis communities in Shenzhen and Jiangmen

In the early 2000s, a group of health officials (from the municipal health department) and professionals (from Shenzhen CDC and Shenzhen STD Center) in Shenzhen were successful in rallying the municipal government to combat MTCT of syphilis and MTCT of HIV dually. These people coalesced tightly into a policy community, reviewed international and national epidemiological and empirical evidence, and organised frequent cross-sectoral discussions. According to an official from the Health Department of Shenzhen, because of the frequent meetings, some members of the policy community even developed personal relationships and became good friends. In 2001, the dual control programme was first piloted in one district, basing on which the feasibility of providing integrated PMTCT of HIV and syphilis services under Shenzhen’s certain circumstances were evaluated, and specific working guidelines were generated. Applying the pilot results, the policy community members actively communicated with the municipal government and, in 2002, successfully promoted for universal coverage of the programme.

A highly united PMTCT of syphilis policy community was also identified in Jiangmen during observation of a few work meetings on syphilis control at both the provincial and municipal levels. Although the professional capacity of the community was relatively weak, it sought for external technical support from Guangdong STD Center, NCSTD, and even the WHO. Members of the community successfully transferred the knowledge-based authorities of international and national experts into political influence on the local health agendas, by participating in cooperative projects and researches and inviting external experts to attend local syphilis-related activities. As informed by a respondent from Jiangmen STD Center, the priority level of PMTCT of syphilis in Jiangmen was significantly enhanced by the frequent communication

between local health officials and external experts during implementing a few cooperative programmes, such as the WHO-led pilot to provide rapid syphilis testing for pregnant women at township hygiene stations in 2008.

Both the PMTCT of syphilis communities in Shenzhen and Jiangmen drew local political attention by organising joint meetings and monitoring activities with health officials and experts from the NCSTD and WHO. For instance, shortly after the dual control programme was initiated in Shenzhen, the large number of pregnant women tested for HIV and syphilis and the high screening rates quickly drew international and national attention. In early 2003, a group of experts from the WHO, MOH and NCSTD visited Shenzhen and, on a meeting with the municipal government officials, highly affirmed the achievements Shenzhen had made in controlling MTCT of HIV and syphilis so far.

“Shenzhen had been acting as China’s test field for new policies (for economy, education and health etc.) since its establishment in 1979, and the Health Department of Shenzhen sought to become a national pioneer in disease control too.” (A programme director at Shenzhen STD Center)

Consequently, the government were pushed by the encouragements from the WHO and MOH to finalise its decision on controlling MTCT of HIV and MTCT of syphilis as routine tasks. Soon after the meeting, a proposal to include PMTCT of HIV and syphilis services into all municipal and district-level government annual budget planning (No. 20030247) was submitted to Shenzhen City People’s Congress, which later generated the *Notification to Allocate Matching Funds for Prevention of Mother-to-Child Transmissions of HIV and Syphilis at Municipal and District Levels* in late 2003.³⁵¹

In contrast, the PMTCT of syphilis communities in the other three studies cities and at the provincial level were loosely structured and there were limited conversations between the local decision-makers and health professionals. For instance, both the provincial STD Center and WCH Center had conducted pilot studies to promote

PMTCT of syphilis in the 2000s, however, a mechanism to unite these efforts to be influential was absent.

6.5.2 An incohesive PMTCT of HIV community at the provincial level

Despite that the national PMTCT of HIV programme step-wisely expanded to 31 counties in Guangdong in the 2000s, an incohesive policy network was identified which may have contributed to the overall “lower-than-expected” availability of PMTCT of HIV services during this period.³⁵⁶ According to Xia et al. from Guangdong WCH Center, implementation of the national PMTCT of HIV targets in Guangdong was negatively affected by an inefficient multi-sectoral cooperation mechanism at the provincial level, which included the implementers’ poor capacity for collaboration, their undefined roles and unmatched demands, as well as a lack of trust between different stakeholders.³⁶³ In addition, strongly unified PMTCT of HIV policy communities were not identified in most of the study cities except Shenzhen, which may help explain the lack of municipal PMTCT of HIV policies in these cities prior to 2011.

To summarise, despite the different levels of political priority enjoyed by the issues at national level, how high they appeared on the municipal agendas were significantly affected by performance of the local policy communities. Consisting mostly of local health officials and STD experts, the PMTCT of syphilis communities in Shenzhen and Jiangmen effectively obtained the decision-makers’ attention by increasing international exposure through organising joint meetings and monitoring activities with the WHO and MOH. This may have relied on the strong capabilities of the community members, as well as the tight networks between them. Such cohesive policy communities may have been cultivated by establishing communication mechanisms between health professionals and policymakers, as well as utilising external support to stimulate local political attention.

6.6 Political entrepreneurship

As discussed in Chapter 5, the national PMTCT of HIV working guidelines clarified the leading role of the women and children’s health hierarchy in scaling up the services nationally, and indicated the responsibilities of provincial, municipal and county-level

WCH centers in coordinating all PMTCT of HIV efforts and promoting integration of the interventions into routine antenatal care at each level.¹¹⁷ Although PMTCT of syphilis did not have such a clear policy structure designed by the national government, this study still found evidence that the policy community in Shenzhen functioned more effectively, compared to other study cities, when a capable political entrepreneurs emerged to lead it. As mentioned earlier, officials and experts from the municipal health department, Shenzhen STD Center, and Shenzhen CDC were active in promoting universal coverage of integrated PMTCT of HIV and syphilis interventions in the early 2000s. Among them the most influential person was the executive director of Shenzhen STD Center who did his PhD in the NCSTD and closely liaised with international and national professionals to obtain their authorities and technical supports during lobbying for PMTCT of syphilis at municipal level.

On the other hand, however, this study neither identified any recognised political entrepreneur in the other four study cities nor any at the provincial level. It was only in Jiangmen that the local STD center was responsible for coordinating a few surveillance and pilot programmes. But in Zhuhai, Maoming and Qingyuan, the locus of control over MTCT of syphilis was fragmented, with both the local STD centers and the WCH centers claiming some responsibilities for the issue but neither of them being recognised as the leading institution. Such fragmentation has largely hampered the priority generating efforts to be united to be influential.

Collectively, promotion of PMTCT of syphilis in most of the study cities were characterised by the lack of capable individuals or even a recognised leading institution, except Shenzhen. The result has been fragmented initiatives which were not politically influential.

6.7 Credible indicators

6.7.1 Data from syphilis and HIV sentinel surveillance programmes

The initiation of a few syphilis and HIV sentinel surveillance programmes among pregnant women in the early 2000s facilitated the identification of credible indicators for promoting PMTCT of syphilis and PMTCT of HIV. In Shenzhen, for instance, the first two MTCT of HIV cases were reported by a local surveillance programme in

2000,³⁶⁴ and a STD sentinel site revealed syphilis prevalence rate among pregnant women as 0.46% and 0.47% in 1999 and 2000, respectively. According to informants from Shenzhen CDC and Shenzhen STD Center, the policy community portrayed these data as signs of the HIV and syphilis epidemics sprawling from high risk groups to the general population, and employed them to convince the local policymakers that the two infections were worthy of equal attention.

A few years later, the policymakers' attention on the risk of MTCT of syphilis in Shenzhen and Jiangmen was further provoked by a maternal syphilis surveillance programme led by Guangdong STD Center. From November 2004 and October 2005, the programme screened a total of 111,75 pregnant women presented at 23 hospitals in 6 cities with different economic development levels. This study was the first to focus on the issue of MTCT of syphilis at the provincial level and revealed an antenatal syphilis prevalence of 0.68%.³⁶⁵ The surveillance results were widely reported by local media^{366,367} and, according to a few respondents, exposed the need for controlling MTCT of syphilis in Guangdong for the first time.

In contrast, no antenatal syphilis surveillance has been conducted in Qingyuan, Maoming and Zhuhai prior to 2010, and this study failed to find any cross-sectional studies on the prevalence of maternal syphilis in the three cities. A lack of credible indicators may help explain the low level of political priority afforded to PMTCT of syphilis in these areas, because the local decision-makers had insufficient understanding of the disease burden and need for governmental attention.

6.7.2 An investigation of antenatal syphilis intervention uptake in rural areas

In 2008, Guangdong STD Center conducted an investigation among 76 health facilities in rural areas of Guangdong (mostly outside the Pearl River Delta) and revealed a disappointingly low antenatal syphilis testing rate of only 11.8%.⁸⁹ This rate was reported to the provincial health department on a few work meetings, during which the low coverage of antenatal syphilis interventions in rural health facilities (where most neonates in China are delivered) was interpreted as a major barrier for achieving the elimination of MTCT of syphilis as well as an important obstacle for improving maternal and child health. According to an informant from Guangdong STD Center, the surveillance data helped make MTCT of syphilis a more visible problem to the

provincial and municipal decision-makers, whilst the intervention coverage investigation established a norm that more attention should be paid to promoting testing and treatment for maternal syphilis in less developed areas.

6.7.3 The PMTCT of HIV online reporting system

Besides the sentinel surveillance data, this study also found evidence that the launch of the “Prevention of Mother-to-Child Transmission Management Online Information Direct Reporting System”⁴ in 2008 provided clear and useful indicators for both monitoring and priority generating for PMTCT of HIV in Guangdong.

“Data reporting facilitates achievement of certain policy targets. In the past, our work mainly focused on how to provide the services, without collecting intervention coverage data systematically. We did not know what proportion of pregnant women actually underwent HIV screening. From 2008 onwards, we have such statistics, and we use the statistics to tell stories.” (A programme director at Guangdong WCH Center)

To summarise, the availability of credible indicators - antenatal syphilis surveillance and intervention uptake data – in some areas helped raise PMTCT of syphilis higher on the local agendas. However, in areas not covered by any surveillance or pilot programme, PMTCT of syphilis remained overlooked, which may be due to the lack of tightly coalesced policy communities and powerful leadership to coordinate efforts to generate indicators in these areas.

6.8 Policy alternatives

6.8.1 Clear policy options for PMTCT of syphilis and HIV in Shenzhen

Based on a large body of evidence on the disease burden and effectiveness of existing interventions for vertically transmitted syphilis and HIV, as well as experience gained from the pilot programme in 2001, experts from Shenzhen CDC and Shenzhen STD Center developed a series of technical guidelines, monitoring methods, and funding plans for offering integrated PMTCT of HIV and syphilis services. Because most HIV and syphilis infections in Shenzhen were reported from the migrant population, a

universal programme was proposed to provide the interventions for all pregnant women during their first visits to antenatal care, regardless of the women's residence status. In addition, in order to ensure high acceptance of the tests, a free and opt-out strategy was suggested. The above options successfully convinced the local decision-makers that, by screening all pregnant women for HIV and syphilis and intervening those who were tested positive, MTCT of HIV and MTCT of syphilis can be avoided simultaneously, and at relatively low costs in Shenzhen. Consequently, in June 2002, the municipal health department approved and issued the working guidelines for control of both infections.^{349,350} One month later, it further allocated 4 million yuan to the dual control programme, basing on which the integrated interventions were scaled up from one district to 61 health facilities providing antenatal care in all the six districts of Shenzhen.⁹² Using the three political prioritisation criteria with adaptations, prioritisation of PMTCT of syphilis in Shenzhen can be validated at this point.

The policy community then sought to enhance the sustainability of the programme by promoting (1) integration of PMTCT of HIV and PMTCT of syphilis into routine antenatal care; (2) inclusion of provision of the interventions into government annual budget planning. Despite some oppositions at the beginning, the Health Department, the Finance Department, and the Commission of Development and Reform of Shenzhen jointly issued the *Notification to Allocate Matching Funds for Prevention of Mother-to-Child Transmissions of HIV and Syphilis at Municipal and District Levels* in October 2003, indicating that:³⁵¹

"The control of HIV/AIDS and syphilis, especially the mother-to-child transmissions, is the responsibility of all-level government, and is an important strategy to improve the population quality, and to protect women and children as well as all people's health." (An official at the Health Department of Shenzhen, 2003)

This document imposed a two-tiered government funding mechanism, according to which provision of PMTCT of HIV and syphilis services were included into government annual budgeting planning and a special fund was allocated to the integrated programme at both the city and district levels.

6.8.2 Barriers to generalise Shenzhen's PMTCT of syphilis model

Despite a huge decrease in the MTCT of syphilis incidence, as well as publication of a number of studies on the effectiveness of the programme,^{3,88,92,315} Shenzhen's experience in PMTCT of syphilis has never been generalised to any other parts of Guangdong. In contrast to its PMTCT of HIV programme, which was utilised by the MOH in guiding the expansion of the national programme, Shenzhen's achievement in controlling MTCT of syphilis was completely overlooked by the provincial and national decision-makers, which may have contributed to the big differences between the municipal, provincial, and national congenital syphilis incidences (Figure 6-1). When being asked why Shenzhen's PMTCT of syphilis model was not scaled up provincially, most local health officials and professionals interviewed in this study shared a view that because Shenzhen is the most economically developed area in Guangdong where financial support from the local government and human resource were relatively sufficient, the interventions were not seen as generalisable and feasible in other (less economically developed) cities.

"Actually Shenzhen's work has been presented and shared on some work meetings at provincial level. Although the programme shows high cost-effectiveness, it does need a big sum of money that the government of many less developed areas cannot afford. Even the health professionals think control of MTCT of syphilis is important, they may not propose it to the local government because they know that the government is poor and is less likely to approve the programme."
(An official at the Health Department of Guangdong Province)

6.8.3 The PMTCT of syphilis pilots in rural areas

The provincial decision-makers' attention on PMTCT of syphilis was eventually stimulated by a few simple and feasible policy options which balanced the public health needs and limited resources, not requiring huge sums of government investment. From 2008 onwards, experts from Guangdong STD Center and Jiangmen STD Center conducted a couple of pilot programmes to promote antenatal syphilis screening in low-resource settings (i.e., rural health facilities) by using point-of-care rapid syphilis tests,

all of which revealed promising results.^{78,280} By applying a big body of international and national technical evidence,^{93,94} as well as Jiangmen's successful experience in providing antenatal syphilis testing in low-resource settings, the PMTCT of syphilis policy community suggested to the provincial and municipal policymakers that point-of-care rapid tests may substantially help expand the scope of routine antenatal syphilis screening in Guangdong, especially in rural areas where financial and human resources are limited.

Consequently, in 2010, the provincial health department allocated an STD control fund of 3 million yuan per year, part of which (1 million yuan) was to support provision of PMTCT of syphilis services in 14 less developed counties outside the Pearl River Delta. This fund aimed to explore feasible mechanisms for closing the urban-rural gap of intervention availability, and to provide solutions for achieving the specific benchmarks for congenital syphilis control in rural areas^r set by the national ten-year syphilis control plan.⁷ It was the first time in history when PMTCT of syphilis received financial support from the provincial government. However, due to the very limited funding (compared to 2 million yuan per year for PMTCT of syphilis in Shenzhen only), the programme could only enrol two to five rural health facilities in each county. It stopped in 2011 when most of the rural areas of Guangdong were covered by the national "3 in 1" programme. Comparison of the Shenzhen PMTCT of syphilis model and rural area model suggested that, the local decision-makers may tend to pay more attention on those policy proposals which cost less but are applicable in more areas.

6.9 Focusing events

This study did not identify any specific focusing event happened in Guangdong which was influential on promotion of PMTCT of syphilis and PMTCT of HIV.

6.10 Political transitions

As presented in Chapter 2, since the late 1970s, the transition from a centralised to a decentralised political system in China has empowered the governments at provincial

^r The *China 2010-2020 Plan for Syphilis Control and Prevention* sets stepwise benchmarks for antenatal syphilis screening coverage for urban and rural areas separately. For rural areas, the screening rate should reach 60% by 2015 and 70% by 2020.

level and below to set their own priorities and adapt policies from higher-level governments to the local circumstances.¹²³ Within the health policy system, the MOH's vertical authority has been significantly weakened, whilst each level of the local government is directly responsible for maintaining the health institutions and financing health services at its administrative level.¹⁶⁶ The result has been that health agenda setting and policy making at subnational level of China is largely affected by the local government's financial ability¹⁴² as well as administrative efficiency.²⁰⁷

6.10.1 Variance in the municipal government's financial ability

Although Guangdong is a pioneer of China's economic reform, there is still considerable heterogeneity in economic development across the province, with resources increased more rapidly in the urban areas, especially inside the Pearl River Delta, but remained insufficient in the countryside.¹³³ The per capita GDP in Shenzhen and Zhuhai, two special economic zones, were about three times higher compared to the other three study cities in 2010. The majority of local informants attributed the various levels of political priority afforded to PMTCT of syphilis among the five study cities to the geographical differences in public health financing. For instance, the health officials in Jiangmen, Qingyuan and Maoming shared a view that Shenzhen's dual control model was not generalisable in these cities due to the lack of financial support from the municipal governments. This may have contributed to the imbalanced availability of PMTCT of HIV interventions³⁵⁶ and the huge urban-rural inequality in antenatal syphilis testing rate in Guangdong in the 2000s.⁸⁹

6.10.2 Variance in the municipal governments' human resource capacity

The municipal governments' attention on PMTCT of syphilis and PMTCT of HIV was not only shaped by the government's financial ability, but also by its human resource capacity as well as characteristics of the health governance system. This study found evidence that local policy initiatives were more likely to succeed in areas where health human resource were comparatively sufficient. Interviews with local health officials and observation of a few policy-relevant meetings revealed that only the Health Department of Shenzhen had individual divisions for disease control and women and children's health, and each division contained at least three full-time staffs. In the other four study cities, however, the two divisions were combined into one big department

with usually no more than three staffs. Because such integrated departments were under the authority of several divisions within the provincial health department, the staffs were always overworked and the share of control over PMTCT of syphilis was far from sufficient. Several municipal health officials said that they only had time to transmit the numerous national and provincial policy documents to implementing institutions mechanically, without being able to think of their feasibility and adaptability, let alone employing them to generate local policy plans.

The diversity of local financial and human resource conditions observed in Guangdong Province further suggested that, in order to scale up control of MTCT of syphilis towards the elimination, efforts should be made to generate more feasible policy alternatives which are applicable in various local conditions across the country.

6.11 Competing health priorities

The data provided limited evidence regarding the competing relationships between PMTCT of syphilis and other health issues in Guangdong prior to 2010. Many respondents believed that, the large sum of central government fund for HIV/AIDS control has sent a strong signal to the local government that HIV/AIDS (including PMTCT of HIV) should be prioritised over other infectious diseases, even those with similar disease burden. Consequently, the total annually budgeted funding for HIV/AIDS control at the provincial level of Guangdong reached 20 million yuan in 2005.³⁵⁸

“Local health departments and institutions pursued AIDS money, therefore were more likely to prioritise HIV/AIDS control in order to get more funding.” (An official at the Health Department of Guangdong Province)

On the other hand, however, this study also identified that the existing priority of HIV/AIDS has, to some extent, facilitated but not hampered prioritisation of PMTCT of syphilis in Guangdong Province. For instance, the successful launch of the dual control programme in Shenzhen suggested that integrating PMTCT of syphilis with PMTCT of HIV help ensure equal and long-lasting priorities for both causes. It was also noticed during interviews with provincial health official and professionals that,

although there was no officially budgeted funding for STD control, the Health Department of Guangdong reallocated 3 million yuan of the provincial AIDS fund to support STD control per annual from 2010 onwards.

6.12 Framing of issues

According to Chapter 5, national political attention on PMTCT of HIV and PMTCT of syphilis was shaped by a dynamic beyond Shiffman's framework – i.e. framing of the issues. Similar situation was identified in Guangdong too, that the portrait of HIV/AIDS as a “political disease” and the negative framing of syphilis linking it to immorality and illegality have resulted in significantly different levels of priority afforded to MTCT of HIV and MTCT of syphilis at both the provincial and municipal levels. It was only in Shenzhen that the local policy community successfully promoted the inclusion of PMTCT of syphilis and PMTCT of HIV into government annual budget planning by portraying the infected infants as “innocent” and the interventions as “will contribute to achievement of the goals set by the *One Child Policy*”. As discussed in Chapter 5, the framing of “innocent babies” had also been used to obtain national attention for PMTCT of HIV in the early 2000s, indicating the importance of developing suitable and adaptable frames during generation of political priority for certain health issues.

6.13 Chapter summary and discussion

Based on policy-relevant data collected at both the provincial municipal levels, this chapter illustrated the absence of an overall favourable policy environment for PMTCT of syphilis in Guangdong prior to 2010, which may have contributed to the shockingly high congenital syphilis incidence (twice as the national incidence) and low testing rate among pregnant women (40% in 2008). Despite this, however, PMTCT of syphilis was high on a couple of municipal agendas, indicating variance in the policy responses to the issue between different cities and different levels. Using Shiffman's framework, this chapter identified a set of factors which may have accounted for the variance, including availability of external support, cohesion level of the local policy communities, leadership, clarity of indicators and policy solutions, framing, and local financial and human resource conditions, the majority of which are

consistent with the national level findings. The similarities and differences between the national and subnational level findings are addressed in more detail in Chapter 8.

The facts that PMTCT of syphilis was highly prioritised in Shenzhen long before it went onto the national agenda and a pilot programme to promote antenatal rapid syphilis testing in Jiangmen successfully attracted attention from the provincial government suggest that the level of political priority afforded to PMTCT of syphilis largely depended on the effectiveness of local policy initiatives. The above two effective initiatives were both characterised by the emergence of cohesive policy communities, with capable entrepreneurs and institutions to lead them. Consisting mostly of local STD experts, these policy communities were active in transferring international and national evidence and supports (e.g., from the WHO and NCSTD) into political influence on the local policymakers, conducting researches and pilot programmes to generate credible indicators and policy proposals, gaining international exposure to attract attention, linking PMTCT of syphilis to existing priorities (e.g., PMTCT of HIV, the *One Child Policy* etc.), and reframing the issue (i.e., “innocent babies”) to overcome stigmatisation towards syphilis patients. Although the intense policy and resource attention paid on PMTCT of syphilis in Shenzhen may be due to the government’s relatively strong financial and human resource capacities, the low intervention coverage in other rich areas within the Pearl River Delta (e.g., Zhuhai) suggested that, performance of the local policy communities may be more important in generating political priorities for the issue.

As presented in Chapter 1, the ten-year syphilis control plan has set ambitious targets for antenatal syphilis screening coverage and intervention uptake among syphilis-positive mothers for urban and rural areas respectively,⁷ however, implementation of these targets has been patchy to date. Given China’s vast territory and huge population, as well as imbalanced economic development level across the country, the policy targets can only be achieved when sustainable political attention is paid to PMTCT of syphilis at both national and subnational levels, deploying feasible policy solutions. Herein, a second important finding of this chapter is that the likelihood of a policy proposal being effective in generating local political attention largely depends on its cost-effectiveness and applicability in various local settings. For instance, Shenzhen’s model of screening all pregnant women and treating infected mothers for free was,

although effective, seen as not applicable in other parts of Guangdong Province, particularly in areas where the local governments' financial and human resource capacities were comparatively weak. In contrast, a proposal for providing point-of-care rapid syphilis testing for pregnant women in rural and poor areas successfully attracted attention from the provincial decision-makers on closure of the urban-rural gap of intervention availability, and therefore resulted in allocation of the first provincial STD control fund in 2010. This is consistent with Paolucci and colleagues' findings of Chinese policymakers' specific preferences that priority is always given to those conditions that are most prevalent and cost least per health gain.³⁶⁸

Third, the "lower-than-expected" availability of PMTCT of HIV interventions in Guangdong in the 2000s demonstrated that strong national commitment does not always warrant equal political emphasis at subnational level, but the local government's attention on a national policy priority can be fostered by the establishment of clear accountabilities which is strengthened by regular monitoring, as well as a well-designed domestic resource allocation mechanism providing sufficient incentives for the local government to involve in policy making and implementation. For instance, in the 2000s, because the programme-specific resource allocation mechanism for PMTCT of HIV did not offer enough incentives for the participating local governments in Guangdong, the services were only provided in the 31 programme counties whilst a specific plan for scaling up antenatal HIV testing backing with matching funding was neither available at the provincial level nor in any of the study cities except Shenzhen. Spratt has reported similar problems when studying the effectiveness of a programme to provide antiretroviral therapy (ART) to injecting drug users in Yunnan Province.²⁰⁹ In contrast, the "3 in 1" programme launched in late 2010 adopted a specific step-down resource allocation mechanism, involving all the provincial and municipal governments in delivering the services and allocating the resources, which has proved much more effective in establishing accountabilities and securing consistent political commitment at all levels.

In conclusion, the findings of this chapter showed that the comparative cases were both characterised by a synthesis of both "top-down" and "bottom-up" policy processes. Priority generation for PMTCT of syphilis and PMTCT of HIV at national and subnational levels in China cannot be viewed as separated but rather an iterative

process in which the policies were shaped and re-shaped in line with local pressures and circumstances.³⁶⁹ The provincial and municipal policy agendas of Guangdong were not simple reflections of the values, interests and preferences of the national government,³⁷⁰ although those national decisions were monitored to ensure their stability, but were influenced by a diverse range of operational and contextual factors, especially how members of the local policy communities interacted and negotiated during the policy processes. This finding is consistent with Lipsky's "bottom-up" theory, that policy implementation is influenced by the individuals who carry out and enforce the actions required by the policies – i.e. "street-level bureaucrats".^{371,372} Gathering in the subset of a public agency or government institution – i.e. "street-level bureaucracy", these front-line implementers interact with and have wide discretion over the dispensation of benefits or the allocation of public sanctions, therefore may "make" the policies they are otherwise charged with implementing.³⁷¹

Chapter 7 Framing of mother-to-child transmission of syphilis and HIV in China: how did it affect political prioritisation?

“The variety of frames we suspect to be operational reflects the lack of a single coherent narrative behind calls for action, but also creates a range of competing pathways of response.”^s

7.1 Introduction

As presented in Chapter 5 and Chapter 6, an additional factor beyond Shiffman’s framework – i.e. how the issues of mother-to-child transmission (MTCT) of syphilis and MTCT of HIV were framed - had profound impacts on the political priorities afforded to them at both national and subnational levels of China. According to health policy scholars, framing is the process by which people develop a particular conceptualisation of an issue or reorient their thinking about an issue.³⁷³ It can influence how decision-makers perceive problems and their proposed solutions and is therefore critical in whether or not and how issues fare on policy agendas, and how policies are formulated and implemented.³⁴¹ Drawing on review of policy-relevant documents and interviews with key stakeholders, this chapter explores how MTCT of syphilis and MTCT of HIV as well as the responses to them were framed in different periods of China; what effects these frames had on political priority generation; and what factors made these frames successful (or problematic).

7.2 1949 – 1979: era of planned economy

7.2.1 Framing of syphilis as a social disease

Syphilis was first brought by Portuguese traders to Guangzhou (former official name “Canton”, capital of Guangdong Province) in 1505 and then spread to inner parts of China.⁹¹ By the early 20th century, the country suffered an enormous epidemic of syphilis and other sexually transmitted diseases (STDs) brought by its booming prostitution industry.^{91,143,374} According to Chinese medical documentation and

^s McInnes, C. & Lee, K. Framing and global health governance: key findings. *Glob Public Health* 7, S191-198 (2012).

records from foreign public health authorities during the 1930s and 1940s, 5% among urban citizens, 2-3% among rural peasants, and over 50% among prostitutes across the country were infected with syphilis.^{143,374}

In the 1950s, the communist government conducted surveys for sexually transmitted infections (STIs) immediately after the formation of New China and reported syphilis infection rates as 10% among citizens of major cities and 50% among minority populations living in China's border areas.¹⁴³ Just as land reform and literacy were to be accomplished, preventable diseases were obstacles to be removed.¹⁴⁵ The result has been the alarming syphilis burden being interpreted by the new government as a social disease that worth being targeted for elimination. According to Dr Ma Haide (George Hatem), the famous American-born physician who worked in China for 55 years:¹⁴⁵

"Syphilis is considered a social disease...The new socialist system...was...to end the exploitation of man by man. The new system (would) cut out the social roots of venereal disease."

These social roots were poverty, prostitution, ignorance, and the subordinate status of women, which were eradicated by the communist government in the 1950s.^{145,375} One of the first steps taken to cut the social roots of syphilis was closure of brothels. Sex profiteers were incarcerated, and prostitutes were re-educated and given jobs^{143,145} as shown in Figure 7-1. Women had to be freed from feudal bondage, and this was accomplished by a number of measures including the Marriage Law enacted in 1950 which abolished child marriage and dowries, and ensured women the freedom to marry and divorce.¹⁴⁵ As mentioned in Chapter 2, people's communes were organised to bring the farming population (80% of the total population)¹³⁴ together and make the land productive for all.^{133,145} In the cities, factories became state-owned and jobs were available to all, including women.¹⁴⁵

Another important strategy to address syphilis as a social problem was mass education.^{143,145} Using communist propaganda instruments, the Chinese people were taught how venereal diseases were contracted and how they could be prevented. They were enabled to protect themselves by applying the knowledge through their political consciousness. In 1966, Dr Ma Haide further raised the concept of "immunity through

knowledge” which had the advantage of being acquired by all at no material cost and with little effort or pain.³⁷⁵ In his original words:

“This...can be as efficient as or even more efficient than medically induced immunity. This politically conceived immunity was instrumental in ridding the country of venereal disease.”

Figure 7-1: In early 1949, 316 former prostitutes were educated in politics and disease prevention, and given jobs in Jinan City. Source: Zhu & Hu, 2016³⁷⁶



7.2.2 Framing of syphilis control as patriotic action

As presented in Chapter 2, when the communist party came to power in 1949, control of massive disease burden of the impoverished population and re-establishment of the public health infrastructure were on top of its agenda.^{377,378} The public health accomplishments of the new country in the early years were dramatic. Mao Zedong defined preventable diseases as products of an unhealthy society in his teachings and articulated the *Four Guiding Principles* (including “put prevention first”) to guide health care delivery.^{133,143} A series of mass campaigns were launched to achieve the population health goals, including a national programme to address the country’s shockingly high burden of STIs. This programme included mass STI screenings for

high risk groups and provision of free antibiotics and follow-ups for STI patients, unified traditional and modern medical practices, closure of brothels and re-education of prostitutes, as well as mass propaganda and education for prevention of venereal disease.^{91,143,145,375}

Figure 7-2: Health workers who participated in closing the brothels in Beijing were claiming on a work meeting to fulfil the task of treating the prostitutes for STDs. Source: Zhu & Hu, 2016³⁷⁶



In the 1950s and 1960s, there was very little stigma and discrimination towards people living with syphilis⁹¹ because STIs in general and syphilis in particular were portrayed by the communist government as “chronic illness of the old society” and “products of imperialism and evil western influences” which must be “swept away” from the new socialist country.^{143,379} During this period, China’s national mood was revolutionary and symbolised by the popular slogan “Serve the People”.^{133,145} Therefore, detection and treatment of syphilis were portrayed as patriotic actions, as shown in Figure 7-2. Potential problems of the mass campaign against STIs, such as invasion of privacy, fear of being stigmatised, and compulsion to take treatment, were minimised by

appeals to patriotism.^{143,145} Below is a statement frequently used during implementation of the national STI programme.³⁷⁵

“Comrades, syphilis is a legacy of the old society. We cannot take syphilis with us into socialism.”

Consequently, implementation of syphilis elimination activities proved to be very efficient during this period.

7.2.3 The virtual eradication of syphilis in China in 1964

The national STI campaign was a great accomplishment in the public health history, given the prevalence rates of syphilis and primary syphilis among outpatients dropped to 0.54% and 0.004%, respectively, in 1963.¹⁴³ Although there were arguments that individuals’ rights and privacy were neglected during implementing the preventive activities, the campaign still has been deemed by national and international scholars as an great example of how strong political commitment and government leadership led to elimination of a major disease.^{91,143,378,380} In 1964, China officially announced the virtual elimination of STIs including syphilis³⁷⁹. As Dr Ma Haide reported in 1966:³⁷⁵

“New China in a short period of less than 15 years conquered venereal disease and eradicated it from almost the whole country. This is now well known. What is not so well known is how this was accomplished.”

7.3 The 1980s and 1990s: era of economic reform

7.3.1 Framing of syphilis linking it to immorality and criminality

As presented in Chapter 1, after enjoying almost two decades free of syphilis, China’s first resurgent syphilis case was reported in 1979.¹ The economic and social reforms initiated in late 1970s not only opened China to the western world, but also laid the foundation for resurgence of STDs, including syphilis and HIV/AIDS.^{145,378} Many domestic and international scholars have examined the social phenomena of the post-reform period. A typical observation of theirs is as follows.⁶⁷

“Now, after a decade of exposure to the world, massive economic reforms...are allowing many Chinese to aspire to wealth and the satisfaction of individual wants and needs. These years have been characterised by a resurgence of behaviours and problems only too familiar to pre-revolutionary China: drug trafficking and abuse; armed violence; organised crime groups; prostitution and the trafficking of women; plus the resurgence – with a vengeance – of sexually transmitted diseases.”

Some scholars further attributed the resurgent syphilis epidemic to increased levels of extramarital sex, commercial sex, homosexuality, and drug use.³⁸¹ All of the above behaviours are illegal and/or immoral due to the restrictions of China’s traditional morals, therefore have significantly reduced the likelihood of syphilis control being prioritised.

“Because STIs are closely related to sex work and drug use, which are linked with immorality, self-abuse and illegality due to the restrictions of China’s traditional moral values, serious stigma is attached to STD patients, and government officials tend to think of them as condemnable and punishable and therefore have been reluctant to admit and respond to the epidemic.” (A programme director from Shenzhen STD Center)

Some informants of this study also shared the view that the Chinese Government was unwilling to admit and address the resurgent syphilis epidemic as a result of its previous successful experience with the disease. Because China has officially announced to the world the virtual eradication of syphilis in 1964, it had been assumed that syphilis was no longer existing in the country. This was consistent with Mabey and Peeling’s opinion that the inefficient responses to MTCT of syphilis at international level can be due to the perception among many policymakers and health experts that syphilis is no longer existing.¹²²

In addition, many informants recognised that the Criminal Law Article 360, as discussed in detail in Chapter 5, has established the strong linkage between syphilis

and criminality. Such prevailing negative framing not only created serious social stigmatisation towards syphilis patients, but also largely reduced the policymakers' willingness to act against the resurgent epidemic.

7.3.2 Framing of syphilis as a less urgent problem

Many informants further attributed the low political priority to the popular framing of syphilis among both government officials and health professionals – “a disease without severe symptoms and can be easily cured by cheap drugs.” This consideration apparently made syphilis a less urgent problem for China's decision-makers, especially when compared to AIDS which was portrayed as “incurable” and “leading to death” and therefore deserved highest programmatic and political priorities.

7.4 The late 1990s to present: era of socio-economic equality

7.4.1 Framing of HIV/AIDS as a development and security problem

Globally, HIV and AIDS has been variously framed as a public health problem, a development issue, a humanitarian crisis, a human rights issue and a threat to security.³⁸² International organisations used these frames to build up norms of the seriousness and unacceptability of HIV/AIDS and urged countries to act against the epidemic.

In China, as discussed in Chapter 5, a number of international agencies and donors (especially the UN Theme Group on HIV/AIDS in China) worked closely with the central government and Ministry of Health (MOH) to establish norms of the threats that HIV/AIDS could potentially bring to China, and the need of government leadership at all levels as well as multi-sectoral cooperation in controlling the epidemic.^{111,223} In October 2002, in a speech at Zhejiang University, UN General Secretary Kofi Annan defined AIDS as a problem relating to development and security and called for “strong leadership at all levels” to deal with the epidemic.¹⁸⁵ These efforts significantly contributed to the development of a couple of essential policy planning documents for HIV/AIDS control in China around 2000.^{112,301} One year later, the UN Theme Group on HIV/AIDS and MOH issued the first *Joint Assessment of HIV/AIDS Prevention, Treatment and Care in China*¹¹¹ and stated that:

“The AIDS epidemic will become a serious problem threatening national security and prosperity, social stability and economic development.” (MOH & UN Theme Group on HIV/AIDS in China, 2003)

Such frames have proved effective in obtaining attention from the highest level. The Hu-Wen leadership installed in 2003 adopted the frames and portrayed HIV/AIDS as a potential obstacle in the face of China’s plan to achieve “Xiaokang”, resulting in the launch of a number of initiatives for HIV/AIDS control, such as the “*Four Free and One Care*” policy.¹¹³

7.4.2 Framing of HIV/AIDS as a potential threat to China’s macroeconomy

The national decision-makers’ attention was further intensified by the frame that HIV/AIDS was going to destroy China’s economic development.^{185,319,383} In July 2002, an editorial of *People’s Daily*, an official newspaper which provides direct information on the politics and viewpoints of the government, warned that if measures were not taken by all levels of the Chinese society, the number of HIV cases could hit 10 million, causing shocking economic losses as US\$ 7 trillion.¹⁸⁵ One month later, a report entitled “The Socioeconomic Impact of HIV/AIDS in China”³⁸³ was jointly published by the National Center for AIDS Control and Prevention (NCAIDS), the National Health Economics Institute, and other related national institutions, with external support from UN Theme Group on HIV/AIDS, UNICEF, and the Department for International Development, UK. This report presented an alarming estimation of the AIDS-related decrease in China’s GDP in the next decade, stating that:

“Currently, AIDS has not yet produced a palpable impact on China’s macroeconomy and society; however, it is not to be neglected. In the next decade, in the low level projection, China’s GDP would record a decrease of 22.5 billion yuan compared with a no-AIDS scenario; in the high-level scenario, the reduction in GDP would amount to 40 billion yuan.” (“The Socioeconomic Impact of HIV/AIDS” Research Team, 2002)

In November 2003, former president of the United States, Bill Clinton, made a speech in Tsinghua University, stating that:³¹⁹

“If 15 to 30 million people are infected with HIV in China, all your economic gains will be destroyed.”

According to a feature of *Oriental Outlook*,³¹⁹ an official newsweekly under the Xinhua News Agency, “development was the key task of the Chinese national leaders”. They perceived “economic stagnation as the biggest political crisis”, therefore thought anything affecting China’s economic growth, such as the HIV/AIDS epidemic, should be prioritised on top of the agenda.

7.4.3 The “blood selling” scandal and introduction of “AIDS politics”

As discussed in Chapter 5, the national decision-makers’ attention around the HIV/AIDS epidemic in China, including the problem of prevention of mother-to-child transmission (PMTCT) of HIV, was first stimulated by the shame brought by the “blood selling” scandal in the 1990s. In 2001, the concept of “AIDS politics” was introduced during the first national conference on AIDS control and prevention. On this conference, HIV was described as an epidemic with severe impacts on public health, economic development, social stability and national security, and thus could only be solved “politically”.³¹⁹

In June 2002, the UN Theme Group on HIV/AIDS released a report entitled “HIV/AIDS: China’s Titanic Peril”, which criticised China for the “low AIDS awareness among the public and decision-makers” and the national AIDS response being “far too medical within a health care system in crisis”.³¹⁷ As the report stated:

“Many factors remain that hinder an effective AIDS response in China. These factors are often closely inter-related. They include insufficient political commitment and leadership at many levels of government, insufficient openness when dealing with the epidemic, insufficient resources both human and financial, scarcity of effective policies, lack of an enabling policy environment, and poor governance.” (The UN Theme Group on HIV/AIDS in China, 2002)

The report also noted that without more concerted government action, HIV/AIDS could potentially affect 10 million people by 2010. While the Chinese Government

rejected the report, it became clear by the end of 2002 that the epidemic was not just a public health problem, but also one that has significant social, economic, political, and security implications, and therefore demands the highest level of attention.¹⁸⁵ Such frame was further strengthened by Premier Wen Jiabao's visit to AIDS patients on World AIDS Day 2003 (details presented in Chapter 5).

In addition, one informant from the National Center for Women and Children's Health (NCWCH) expressed the view that, in the early 2000s, the central government started to shift its attention to AIDS because a large proportion of people infected, although seriously stigmatised, were deemed "innocent" - especially the women and infants who were "victims of the 'blood selling' scandal". Consequently, most of the AIDS policies issued around that time were patient focused, especially the "*Four Free and One Care*".¹¹³

7.4.4 Two successful frames of MTCT of syphilis

In contrast to HIV, in the 2000s, the negative framing of syphilis leading to serious stigmatisation was still prevailing among the national and subnational decision-makers of China. The result has been that little political attention was paid to control of syphilis, including MTCT of syphilis, during this period regardless of a rapid increase in the reported incidence. This study only identified two cases of successful framing which facilitated priority generation for PMTCT of syphilis.

As discussed in Chapter 5, the shame brought by the two publications of China's MTCT of syphilis incidence in world's leading medical journals,^{1,2} especially the second one stating that "in 2008, an average of more than one baby per hour was born with congenital syphilis in China, for a total of 9,480 cases", pushed the MOH to act against MTCT of syphilis, eventually. One American author of the paper, more than forty years after Dr Ma Haide, again framed syphilis as "a disease with social roots...lurking in the shadow". Although building on a large body of evidence, this single paper proved mostly effective in harnessing national political attention. The author's specific descriptions of the MTCT of syphilis burden in China was widely cited by domestic and international mainstream media.³²²⁻³²⁴ The MOH felt extremely ashamed and worried about China's international image being affected during Shanghai Expo, therefore quickly issued the ten-year syphilis control plan⁷ and

indicated its commitment to control of syphilis for the first time. In August 2011, in the Report on Women and Children's Health Development in China,¹¹⁶ the MOH further defined syphilis as a disease which "threatens the physical and mental health of the large number of women".

Another case was identified at municipal level. In Shenzhen, from 2002 to 2003, the efforts to promote inclusion of PMTCT of syphilis and PMTCT of HIV into government annual budget planning brought many oppositions, particularly from the local finance department, on whether the government should pay for control of infections which are closely related to immorality and illegality - i.e. HIV/AIDS and STDs. In order to overcome the policymakers' negative perception of the two infections, the local policy community (including health professionals and officials) coalesced tightly and reframed the issue as following:

"HIV and syphilis infections in 'innocent' children would adversely influence the population quality, especially of the younger generations, and therefore would negatively affect Shenzhen in its achievement of the goals set by the One Child Policy." (A programme director at Shenzhen STD Center)

According to a programme director of the integrated PMTCT of HIV and syphilis programme in Shenzhen, the frame of "innocent" children stood in the core of the priority generating process, which successfully inspired the local decision-makers' attention in the early 2000s.

7.5 Chapter summary and discussion

7.5.1 The effects of the framings on generation of political priority

Health policy scholars have suggested that frames are not natural, but rather deployed by policy communities deliberately in order to stimulate attention to a specific health problem – either to introduce, reject or change a policy, or to create or maintain higher level political priority.³⁴¹ Because multiple frames function simultaneously, they may lead to different and/or competing policy decisions. During the process, media plays

an important role shaping and reflecting societal discourse, as well as shifting the decision-makers' portrayal of the issues and their solutions.

The findings in this Chapter demonstrated that the different frames of syphilis created by the national policy community in different periods of China have led to divergent levels of political priority afforded to the disease. In the 1950s and 1960s, syphilis was framed by the newly installed communist government as a social disease and “legacy of the old society” caused particularly by the vulnerable status of women. Such frames reaffirmed the dominant communist ideology at the time and stimulated a number of national responses to the epidemic, including empowerment of women, mass education, and a national campaign to eliminate STIs. These activities were portrayed as patriotic and later proved effective in achieving the syphilis elimination goal, though always at the expenses of individuals' rights and privacy being neglected.

From the late 1970s onwards, the return of syphilis was associated, mostly by health professionals and scholars, with behaviours linked with immorality and criminality. Such negative framing created serious stigmatisation, from both the decision-makers and the public, towards “punishable” syphilis patients. In addition, political priority generation for syphilis control was hampered by the popular perception of syphilis as a less urgent problem among the decision-makers. Consequently, syphilis control, including PMTCT of syphilis, languished on China's national health policy agenda despite the existence of a successful framing case leading to high-level priority at local level. It was not until the late 2000s when the shame brought by the academic and media exposure of China's resurgent syphilis epidemic to the international society eventually pushed the MOH to target the issue for the first time.

In contrast to syphilis, the framing of HIV/AIDS in China demonstrated the operation of multiple frames leading to overlapping policy responses. These frames included security, development, economics, and image of the Chinese Government. From the late 1990s, China's international development partners, particularly UN agencies, were active in shaping the country's response to HIV/AIDS through framing it as a development and security problem which could potentially destroy macroeconomy if left neglected. These frames were created through speeches by politically influential persons, joint reports, and mainstream media coverage etc.

From 2000 onwards, the “blood selling” scandal in central provinces not only exposed China’s “low AIDS awareness among the public and decision-makers” to the world but also brought huge shame to the Chinese Government. The result has been that HIV/AIDS was deemed by the decision-makers as a disease which could only be addressed “politically”, and victims of the scandal, particularly HIV-positive women and infants, were deemed “innocent”. This may have contributed to the greater political attention focused on PMTCT of HIV compared to PMTCT of syphilis prior to 2010.

7.5.2 Factors making the syphilis and HIV framings successful

The findings in this chapter suggested several factors which made the frames of syphilis and HIV successful, or problematic, in China. As presented earlier, the primary methods used to create the frames were mostly speech acts, including speeches, reports, articles and other oral and written statements. Therefore, the first factor facilitating framing is the power of the people making the speech act. The findings showed that the syphilis and HIV frames in China were more likely to generate political attention when they were made by politically influential people, as seen in Mao Zedong’s definition of preventable diseases (including STIs), Kofi Annan and Bill Clinton’s speeches on China’s AIDS epidemic, and Wen Jiabao’s visit to AIDS patients. In other cases, power was also expressed in the form of social capital either through institutional authority (e.g., the Joint Assessments issued by the UN Theme Group on HIV/AIDS and MOH) or professional expertise (e.g., the two publications of China’s syphilis incidence), while international organisations (particularly UN agencies) and foreign experts were more likely to make successful frames. These findings demonstrated the need for the national policy community to engage external support during developing the frames and to invite politically influential people to introduce them. In addition, the successful frames associating syphilis- and HIV-positive infants with “innocence” in Shenzhen also emphasised the role of a cohesive policy community in the framing process.

Second, frames resonating with dominant ideologies are more likely to generate political attention. For instance, in the early 2000s, the frame of HIV as a potential threat to China’s social security and economic development successfully sparked

attention from the highest level because it was closely related to the top priority of the newly installed Hu-Wen administration – i.e. to achieve social-economic equality (details presented in Chapter 2). For syphilis, the frame of it as a social disease and “legacy of the old society” effectively prevented stigmatisation towards the large infected population in the early years of New China, contributing directly to its virtual eradication in 1964. However, these frames were abandoned after 1979 when the national attention was shifted from industrialisation to marketisation. One big mistake the syphilis control promoters made during the economic reform is that they did not create any appropriate frame to associate the issue to the renewed mainstream ideology and, therefore failed to overcome the serious stigmatisation attached to people infected. It was only until 2010 that a group of researchers again used the social disease frame to obtain attention from the national government.

Related to this, a third factor leading to the continued success of a frame is its ability to adapt to the changing political environment. As McInnes and Lee have argued, framing and the material world are constitutive, that the receptive audience for a frame appears or disappears when context changes.³⁴¹ The incoherent framing of syphilis and the resultant huge difference in the levels of priority afforded to it in different periods of China demonstrated the importance of framing malleability, which allows various aspects or interpretations of the frame to be foregrounded as contexts shift.

Fourth, a good entry point may help make the frame more acceptable. As the findings suggested, such entry points can be reached during political transitions or focusing events. The best example is the introduction of “AIDS politics” after the “blood selling” scandal, which ensured sustainable political attention on provision of health care to HIV-positive women and children – the scandal victims. For syphilis control, however, the entry point was not reached until 2010 when China’s alarming syphilis and MTCT of syphilis incidences were published in a high profile journal on the eve of opening of Shanghai Expo.

Finally, this chapter also revealed the Chinese Government’s frequent highlighting of a positive image, especially in the international society, in dealing with illness and providing social care. The facts that PMTCT of HIV and PMTCT of syphilis went highly onto the national health agenda after the “blood selling” scandal and the

publication of China's MTCT of syphilis incidence in influential journals, respectively, suggested the potential of shaming, which may be used strategically by the policy communities in pushing the decision-makers to take action. During this process, media can play a significant role creating and distributing the frames, suggesting the need to establish cooperation mechanisms between health professionals and media.

Chapter 8 Conclusion and implications

8.1 Introduction

This chapter starts with a recapitulation of the background, objectives and process of this PhD study. It then summarises the major findings with reference to the objectives set in Chapter 3, and compare the findings between cases as well as between different administrative levels to explore key lessons of this study - the most influential factors on the level of political priority afforded to prevention of mother-to-child transmission (PMTCT) of syphilis in China. Drawing on the lessons, implications for promoting political prioritisation for PMTCT of syphilis in China, particularly in relation to effective implementation of the policy goal of congenital syphilis elimination, as well as other neglected health issues are provided. Thereafter, the limitations of the conceptual framework adopted are reviewed with the aim of suggesting refinements and adaptations. An adapted framework is then presented. Finally, this chapter ends with discussions on this study's contribution to knowledge as well as its limitations and directions for future research.

8.2 Study objectives and process

Mother-to-child transmission (MTCT) of syphilis can result in a spectrum of adverse outcomes of pregnancy in 80% of cases, but these adverse outcomes can be simply avoided by screening all pregnant women with a blood test and treating those found to be infected and their infants. The review of literature, epidemiological reports, and policy documents for this PhD study suggested that, despite available evidence of the shockingly high incidence and promising pilot programmes at local levels, MTCT of syphilis remained low on the China's health policy agenda with no policy action taken and resource allocated to tackle the epidemic prior to 2010. In contrast, MTCT of HIV, despite lower burden of disease and less cost-effective interventions, occupied a prominent position on the agenda that growing political attention has been paid to the issue since 2001 and provision of the interventions was included in government annual budget planning in 2003. It was not until 2010 that the Ministry of Health (MOH) issued the *China 2010-2020 Plan for Syphilis Control and Prevention*, indicating the beginning of the national government's commitment to combating MTCT of syphilis.

This plan set an overall target to eliminate congenital syphilis (i.e. to reduce the reported incidence to below 15 per 100 000 live births) through the dual control with MTCT of HIV by 2020, as well as several stepwise but ambitious benchmarks for antenatal syphilis screening coverage (80% by 2015 and 90% by 2020) and treatment uptake among syphilis-positive mothers and their infants (90% by 2015 and 95% by 2020). Although whether the elimination goal is going to be achieved is currently unknown, the significantly improved antenatal syphilis screening rate since the launch of the plan has demonstrated the importance of establishing strong political commitment to controlling major infectious diseases in China.

There remained, however, a puzzle of why China responded differently to MTCT of syphilis and MTCT of HIV, particularly given the strong social and epidemiological links between the two issues such as their similar risks and vulnerabilities, ease and feasibility of available solutions and potential of these solutions being integrated during health care delivery. In order to resolve the puzzle, this PhD study was conducted to explore the reasons for China's contrasting policy responses to MTCT of syphilis and MTCT of HIV which have resulted in the huge difference in the intervention coverage. Given the relative lack of evidence on how and why some health issues are prioritised higher than others by the decision-makers in China, this study sought to contribute to knowledge by identifying the factors driving or hampering (independent variables) political prioritisation (dependent variable) within the health policy arena, with the hope that the findings would inform effective implementation of the goal of eliminating MTCT of syphilis by 2020.

Political prioritisation of PMTCT of syphilis and PMTCT of HIV in China was identified in 2010 and 2003, respectively, by using three criteria including national leaders' sustained attention, an overall planning document followed by a series of policies and initiatives, and resource allocation. In order to identify the underlying causes of the far slower policy response to MTCT of syphilis compared to the response to MTCT of HIV, this study decided to adopt a comparative policy analysis approach with explicit focus on the agenda setting and policy formulation stages of the two policy processes. Based on review and comparison of commonly used analytical approaches in published health policy studies, Shiffman's nine-factor framework was selected for assessing the factors shaping promotion of political prioritisation in both

policy cases, providing a starting point for a more critical investigation of the processes at play. This framework was chosen due to a specific focus on health, clearness of what to explore during analysis, as well as its applicability in China. The in-depth comparisons between two very similar policy issues, applying the same set of measures, not only helped overcome subjectivity of the qualitative research design but also strengthened causality of the findings, particularly given the significance of context in China's health policy system characterised by fragmented authority and unclear accountability.

Given that PMTCT of syphilis was high on a couple of municipal health agendas many years before it received national political attention, in addition to investigation at national level, this study further conducted investigations at the provincial level and municipal levels of Guangdong Province of which the findings were compared to national level findings. Guangdong was considered a representative sample for research because (1) it is one of the most populous and syphilis prevalent provinces in China, and (2) various economic development levels, reported congenital syphilis incidences, and status of local health policies and programmes have been reported between different areas within the province. Following a background justification section, five cities were selected to represent different economic, epidemiological, and political and programmatic conditions in relation to PMTCT of syphilis and PMTCT of HIV. Despite difficulties in data collection in some of the study cities, the subnational analysis and cross-level comparisons added valuable evidence to the national level comparison regarding more general patterns of political prioritisation therefore helped achieve a more comprehensive understanding of the Chinese health policy process.

The cooperation between University College London (UCL), World Health Organization (WHO), and National Center for Sexually Transmitted Disease Control (NCSTD), on which this PhD study was based, has proved effective in facilitating data collection, as well as overcoming the author's "insider" limitations. From September 2011 to September 2014, policy-relevant data were collected in two rounds, adopting a historical perspective, to avoid temporality. Data were collected from multiple sources - documentation review, in-depth stakeholder interviews, and nonparticipant observation of relevant events - and triangulated to minimise bias. Reliability and

validity of the findings were advanced by not only triangulation but also the broad range of insights and balanced views from most of the key stakeholders who deeply involved in agenda setting and policy formulation for control of the two infections and initiation of pilot programmes in China. In Addition, a framework synthesis approach has proved useful to focus analysis of the qualitative data on outputs which were relevant to the study objectives, based on which the original framework was tested and refined.

8.3 A synthesis of the major findings

8.3.1 Reasons for the neglect of PMTCT of syphilis at national level

The findings of this PhD study indicated that a group of factors may have contributed to the serious neglect of PMTCT of syphilis at national level prior to 2010. These factors include (1) relative neglect of the cause at global level, (2) dearth of international financial and technical support; (3) a poorly unified national policy community with weak accountability mechanisms; (4) the absence of capable political entrepreneurs or leading institution; (5) insufficient understanding of the epidemic and policy options among the decision-makers; (6) missed opportunities of the SARS crisis and changing of national government to promote control of MTCT of syphilis; (7) legal and constitutional elements preventing PMTCT of syphilis being prioritised; and (8) a prevailing framing of syphilis leading to significant stigmatisation. In contrast, national action on PMTCT of HIV was spurred by a combination of successful political framing at both global and national levels; a strong policy network led by politically influential entrepreneurs and a recognised leading institution; credible epidemiological indicators; integration of PMTCT of HIV with national priorities; clear policy proposals; establishment of global norms as well as monitoring and accountability mechanisms for implementation of the norms; and an institutional framework with resources for country support. It was not until the late 2010s that the decision-makers' attention was eventually concentrated on PMTCT of syphilis due to publication of China's shockingly high congenital syphilis incidence in high-profile journals, as well as the emerging opportunity of scaling up PMTCT of syphilis through integrating with PMTCT of HIV and the new health system reform targets.

8.3.2 Determinants of prioritisation of PMTCT of syphilis and PMTCT of HIV at subnational level

Despite the lack of an overall positive political environment for PMTCT of syphilis in Guangdong prior to 2010, this study still identified a couple of initiatives at municipal level which successfully placed the issue onto the local agendas many years before it first attracted national political attention. These initiatives were characterised by cohesive policy communities; powerful leadership; effective utilisation of external support; credible indicators; feasible policy proposals; international exposure; PMTCT of syphilis being linked to existing policy priorities (e.g., the goals of *One Child Policy*); and reframing of the infection (e.g., associating with “innocent babies”) to avoid stigmatisation. In addition, a policy proposal being cost-effective and generalisable in areas with various local financial and human resource conditions has proved more effective in generating local political attention.

For PMTCT of HIV, on the other hand, evidence from Guangdong suggested that the high-level national priority did not lead to equal emphases of the issue at subnational level. The provincial and municipal governments’ motivation to implement the national PMTCT of HIV programme was largely reduced by a lack of incentives, resulting in significantly lower coverages of the interventions compared to the standards required by the national working guidelines. Learning from the newly launched “3 in 1” programme to control MTCT of HIV, syphilis and hepatitis B jointly, this study suggested that political prioritisation of a health issue on subnational agendas can be significantly enhanced by a comprehensive policy design consisting of emphases on government leadership, clear accountability and monitoring mechanisms, as well as sufficient incentives for the local government to adopt the national priority.

8.3.3 Framing of issues

Beyond Shiffman’s framework, the findings of this study further revealed that how the issues and their solutions were framed by the decision-makers was critical in whether or not and how they fare on the national and subnational agendas, during which processes media played a significant role. The successful framing of syphilis as a social disease and “legacy of the old society”, and syphilis control as patriotic activities largely contributed to the virtual elimination of syphilis in China in 1964. However,

the return of syphilis since 1979 received little political attention due to the Chinese traditional ideas and Criminal Law Article 360, associating the infection to immorality and criminality. Consequently, the serious stigmatisation towards syphilis patients, together with a popular perception of the disease as a less urgent problem, reduced the decision-makers' willingness to take up the cause. It was not until 2010 that a publication succeeded in obtaining national attention on syphilis by using, again, the social disease frame. In contrast, the degree of political priority which HIV/AIDS has enjoyed over the last 15 years can be attributable to a number of successful frames created by international and national policy communities, including a development and security issue, a potential threat to macroeconomy, and an incurable disease "leading to death" etc. The shame brought by the "blood selling" scandal in the 1990s further pushed the Chinese Government to adopt "AIDS politics" and view infected women and infants as "innocent" victims of the scandal, therefore worthy of attention.

The findings demonstrated that the frames of the issues were more likely to succeed in generation of political attention when they were created by politically influential people and introduced at certain time points (e.g., political transitions, crises etc.), resonating with dominant ideologies, and malleable when contexts change. Additionally, because the Chinese Government preserves its positive image in the international society in dealing with illness, sometimes national attention was stimulated by the shame brought by particular frames exposing the country's deficient responses to the epidemics.

8.4 Key lessons learned from the comparative analysis

The in-depth comparisons of the policy processes of two similar issues at multiple levels, applying the same validated set of measures, has not only enhanced generalisability of the qualitative research methods, but also helped improve understanding of the determinants of political prioritisation. Comparing to published Chinese health policy analyses which offer limited explanation of the policy processes, this study provided a more realistic and comprehensive assessment of the Chinese health policy process, identifying a total of eleven (nine in Shiffman's framework and two emerging during data analysis) factors which, either individually or jointly, affected whether or not a problem occupied a dominant position on the national or

subnational health policy agendas. Political prioritisation can be clearly identified in three cases including PMTCT of syphilis and PMTCT of HIV at national level, and PMTCT of syphilis at the municipal level of Shenzhen. In order to arrive at the most influential factors on political priority generation, it is useful to summarise the findings of this study – i.e. whether or not and to what extent each factor was present in each of the above three cases – in a table (Table 8-1).

Table 8-1: Comparisonⁱ of the factors affecting political priority generation for PMTCT of syphilis and PMTCT of HIV at national level, and PMTCT of syphilis in Shenzhen

Factor	PMTCT of HIV at national level	PMTCT of syphilis at national level	PMTCT of syphilis in Shenzhen
Strong norm promotion at global level	Yes (p.148, 149)	Some (p.154)	No
Sufficient external resources	Yes (p.155, 157)	Some (p.158)	No
Cohesive policy community	Yes (p.159)	No (p.160)	Yes (p.204)
Capable political entrepreneurship	Yes (p.162)	No (p.163)	Yes (p.206)
Credible indicators	Yes (p.165)	Some (p.166)	Some (p.207)
Focusing events	Yes (p.167, 168)	Yes (p.170)	No
Clear policy alternatives	Yes (p.172)	No (p.172)	Yes (p.209)
Political transitions	Changing (p.175)	Changing (p.176)	Changing (p.213)
Existing health priorities	Inherited (p.177)	Inherited (p.177)	Inherited (p.214)
Legal and constitutional systems (additional)	Changing (p.179)	Changing (p.179)	Changing (p.179)
Framing of issues (additional)	“Threat” (p.225); “political” (p.227); “urgent” (p.180); “innocent” (p.228)	Before 1964: “social” (p.220); “political” (p.221) After 1964: “immoral” (p.223); “simple” (p.225); “social” (p.228)	“Innocent” (p.215)

- i. This table summarises the main results of Chapter 5, 6 & 7, with the page numbers referring to their exact location in the text.

Table 8-1 demonstrated that China's contrasting policy responses to MTCT of syphilis and MTCT of HIV do not need to ascribe to all Shiffman's factors given that some factors are excluded from an explanatory role since they do not change values across the three cases. Focusing on only those factors of which the values change, it is suggested that the significant slowness in the national response to MTCT of syphilis can be explained by seven factors, including (1) relative neglect of the issue at global level; (2) dearth of international financial and technical assistances; (3) a poorly unified national policy community, (4) absence of capability political entrepreneurs to lead the initiative; (5) policymakers' insufficient understanding of the problem; (6) unclear policy alternatives; as well as (7) a prevailing negative framing of syphilis that resulted in serious stigmatisation.

In contrast to the national level, political prioritisation of PMTCT of syphilis was achieved within a relatively shorter period in Shenzhen. The successful local initiative was characterised by (1) a cohesive local policy community; (2) capable political entrepreneurs; (3) strategic deployment of evidence; (4) feasible policy proposals; and (5) attractive framing. Most of these factors are consistent with the national level findings despite that the impact of international influence is not significant in the Shenzhen case. On the other hand, as presented in Chapter 6, the PMTCT of syphilis community in Shenzhen successfully obtained the local decision-makers' attention by increasing international exposure. All these indicate that the factors identified in this PhD study did not affect political priority generation for PMTCT of syphilis individually, but were highly interrelated at both national and subnational levels and their interrelations were significantly influential on the policy process.

In conclusion, the contrasting levels of policy responses to MTCT of syphilis and MTCT of HIV in China prior to 2010 were predominantly shaped by performance of the policy communities which consisted mostly of domestic health professionals. Although the policy communities might be unable to control all aspects of the health policy processes, they could enhance the likelihood of certain health issues being prioritised if they acted strategically and cohesively to provoke political attention. Led by political entrepreneurs, the policy communities interacted with policymakers and had wide discretion over norm establishment, resource allocation, indicator and proposal generation, as well as issue framing, therefore had huge impacts on whether

or not and when the issues went on the national and subnational agendas. In addition, the different levels of political priority afforded to PMTCT of syphilis at national and local levels demonstrated the importance of viewing China's health policy system as a mixture of both "top-down" and "bottom-up" patterns during both research and practice related to political prioritisation of health issues. Because local health policy priorities do not always resonate with the values, interests and preferences of upper levels, special attention should be given to how to maintain consistent political commitment at multiple levels in order to facilitate achievement of the policy goals. Based on the lessons learned from the comparisons, implications for promoting political prioritisation of PMTCT of syphilis as well as other neglected health issues in China are presented in the following section.

8.5 Implications

8.5.1 Implications for promoting prioritisation of PMTCT of syphilis

Integrating syphilis screening into an existing antenatal HIV screening programme in China can be substantially more cost-effective than conducting antenatal HIV screening alone.⁹⁷ In a review on overcoming the constraints within health systems to achieve the Millennium Development Goals, Travis et al. identified the integration of vertical programmes for specific diseases as a solution to strengthening health systems to achieve favourable health outcomes.³⁸⁴

In 2010, China made a commitment to reduce the congenital syphilis incidence to below 15 per 100,000 live births, through the dual elimination with MTCT of HIV, by 2020. This target is less than one-third of the WHO criteria for validation of MTCT of syphilis elimination (≤ 50 cases per 100,000 live births),⁴⁷ providing an important opportunity for PMTCT of syphilis to be prioritised in policy making and resource allocation at national level. However, despite the ambitious policy goals set and innovative control plans launched, implementation of the national policies is patchy that there are still large proportions of syphilis-positive women who are not detected and treated at an early stage of pregnancy.⁵⁵ Elimination of congenital syphilis will only be achieved when growing political attention is paid to the infection at all levels, and decision-makers and health professionals are convinced not only of the risks of the surmountable problem, but also of the need to control the infection immediately.

This PhD study demonstrated the importance of understanding the political and policy contexts in moving toward the goal of eliminating congenital syphilis in China and identified a number of factors influencing the degree to which PMTCT of syphilis appeared on the national and local agendas. Based on the findings, a series of implications for the policy community to generate and maintain high-level political priority for the cause, which may facilitate achievement of the elimination goal, are presented. These implications include:

1. To transfer the most updated international norms and evidence into political influence on the policymakers;
2. To unite more closely around powerful entrepreneurs and establish clear accountability and communication mechanisms and;
3. To reframe congenital syphilis to overcome stigmatisation and establish malleable frames of the severity and unacceptability of the epidemic;
4. To deploy credible indicators, updating them constantly according to implementation results;
5. To develop feasible policy proposals which are generalisable in various settings and comprise mechanisms (e.g., accountabilities, incentives) which maintain political attention at all levels during scaling up the interventions.
6. To take the opportunities of focusing events, ideally those on which national leaders are presenting, to promote prioritisation of PMTCT of syphilis;
7. To promote PMTCT of syphilis through integrating it with existing health priorities, especially in relation to the target of the new health system reform – to achieve equal access to basic public health service;
8. To work more closely with the PMTCT of HIV policy community, and to establish cross-sectoral communication and cooperation mechanisms, at both national and local levels.

8.5.2 Implications for generating political priority for other neglected issues

This study may also provide implications for promoting other neglected health issues in China. First, the policy communities should coalesce and unite tightly around capable political entrepreneurs or leading institutions to be influential. If such cohesive networks do not exist, they may be cultivated by development of clear accountability

and cross-sectoral cooperation mechanisms. Accountability of each entrepreneur and political sector should be clearly assigned to ensure motivation.

Second, it is particularly important for the policy communities to transfer related global norms, especially those established at the UN level, to the national decision-makers, as they usually perceive the global expectations as legitimate and comply with them seriously. Strong networks with international partners, initiation of collaborative activities against the health problems, and introduction of international and bilateral funding and technical assistance can significantly boost national political attention on the issues.

Third, the policy communities should support efforts to generate credible indicators which help demonstrate the severity and tractability of the problems as well as feasibility of solutions. Publication of national evidence in influential international journals should be encouraged as it can obtain international attention quickly and therefore place pressure on the domestic policymakers.

Fourth, because the government is more willing to invest in health issues that are likely to be solved, the policy communities should develop feasible policy alternatives. During cultivating the local government's attention, the policy communities need to confront obstacles connected with local politics and health governance. This requires the policy proposals be generalisable to various financial and human resource conditions as well as comprise comprehensive policy designs, including monitoring mechanisms and incentives for local governments, to ensure consistent commitment at all levels.

Fifth, health policy scholars have suggested that first hand observations and participation in health interventions may exert stronger influence on policymakers' attention than simply reading or being told about the information.³⁸⁵ Therefore, the policy communities should facilitate such observations, such as through organisation of high profile forums and joint monitoring activities and invite the policymakers to participate in these activities. It will be mostly useful if any national leader can present at the events because their presence can send strong signals to all-level government and the public that the highest level of government is committed to the cause.

Sixth, the policy communities should contextualise their priority generating efforts into China's specific political environment, linking the issues to existing political priorities (such as the new health system reform targets) and avoiding conflicts with constitutional and legal elements (such as human rights issues).

Finally, the policy communities should associate the issues with the dominant ideology and frame and reframe them at various times and in various ways to maintain high-level political attention. The frames should be able to avoid stigmatisation towards those affected by the problems, and malleable over time. The likelihood of the frames to be successful in generating political attention can be significantly increased if they are created and presented by politically influential people and at important events. In addition, because the Chinese Government preserves a positive image to the world in dealing with illness, sometimes shaming strategies may be useful during which the media's participation is important.

8.6 Conclusion on the conceptual framework

Shiffman's framework offered a useful guide to what to explore in analysis of political prioritisation – a field that had been neglected and under-developed due to insufficient use of theoretical and conceptual frameworks.^{216,229} In this particular study, the framework provided significant insights into how the health agendas were set and what stimulated political priorities for particular health issues at both national and subnational levels of China. The original framework is reviewed iteratively during data analysis and assessed for how far the component parts helped identify factors shaping the policy processes - whether the data fitted well against the framework, and whether there were any other important dynamics facilitating political priority generation. Drawing on the review, this study revealed some limitations and suggested a few refinements and adaptations of the framework that may help advance its applicability in studying the health policy process in China.

8.6.1 Limitations of Shiffman's framework

First, although most of Shiffman's nine factors were easy to identify from the policy data, it was not always clear what data should be categorised under each factor. For instance, it was not easy to differentiate between norm promotion and international

resource provision. In the case of PMTCT of HIV, a group of UN agencies were active in promoting government leadership and multi-sectoral cooperation in China's response to the epidemic. However, it was unclear whether their efforts should be regarded as global norms or international technical support. Another example is that the UNGASS Declaration could be identified as either international shaping of norms or as a global focusing event or both for PMTCT of HIV. Similar ambiguity was recognised in a recently published study which assessed a specific framework for analysis of health priority setting at global level. In this publication, Walt and Gilson described the difficulties in categorising the data as "boundary confusion" which is "endemic in policy literature".¹²⁵

Second, because the framework was generated from replicative case studies on same health issue (i.e., maternal mortality reduction), it has the problems of confounder controlling as well as presenting causality. Shiffman himself has suggested the need for more research applying the framework in cross-issue comparisons so as to explore what factors are most and least influential on the policy processes.¹²⁴ In this PhD study, although the comparative policy analysis design may have helped establish relatively stronger propositions regarding the Chinese health policy process, the causal weight of each factor identified was still unclear.

Third, there were difficulties in identifying political entrepreneurs in both policy cases and at national and subnational levels. This study found evidence that most informants avoid describing the initiatives as "championed" by particular persons, even when themselves were the "champions", but rather as group achievements. This may be due to the Chinese culture pursuing collectivism. Comparatively, it was much easier to identify institutional leadership in the sense of recognised organisations being able to unite the policy communities, though sometimes interpretation of leading institution effectiveness varied with policy community cohesion.

Fourth, the framework does not consider the ways in which those involved with the issues, particularly political elites who control resources, understand and portray it. The findings of this study suggested that framing of the issues and their solutions can largely affect political priority generation, during which international and national media played a critical role in shaping and reflecting societal discourse. Similar

findings are noted in a few analyses on sexual and reproductive health policies in other countries. For instance, Caceres et al. recognised that priority generation for sexual and reproductive health in Peru was restricted by the negative framing of the issue controlled by a conservative church.³⁸⁶ In Ghana, Reichenbach described that promotion of cervical cancer interventions was much more difficult than promotion of breast cancer interventions due to the media framing that linked cervical cancer with illicit sexual behaviours and poor genital hygiene.³⁸⁷ In addition, issue framing is a core component of a few influential theories of public policy process, such as the *multiple streams theory* and *punctuated equilibrium theory*, therefore should be incorporated into the framework.

Fifth, the framework missed the role of national legal and constitutional systems. This study illustrated how the 2004 Constitution Amendments facilitated the abolition of compulsory premarital check-ups in China, as well as how related content in the Criminal Law (1997) resulted in strong linkage between syphilis and criminality. The two elements were also found to be particularly important in the policy processes in some other countries. For instance, the new South African Constitution recognised all citizens' right to health services³⁴⁰ and the Thai Constitution (1997) explicitly acknowledged the right of citizens to participate in public policy making.²³⁷

Sixth, the framework does not include civil society mobilisation – the extent to which grass-roots organisations are mobilised to support action - as a factor. This may not have affected this PhD study much because the policy processes of PMTCT of syphilis and PMTCT of HIV have been mostly centralised with policies made by the MOH and implemented vertically within the country's health system particularly through the women and children's health hierarchy. However, for syphilis and HIV control in general,^{98,185} as well as some other health issues (e.g., maternal health),²³³ civil society did significantly contribute to promotion of the causes. This presents the need for refining the original framework in future research on health issues other than PMTCT, of which the policy processes may be affected to a larger extent by the involvement of grass-roots organisations and individuals.

Finally, Shiffman himself expressed concerns about the generalisability of his framework as it was drawn from existing case studies in 5 developing countries, each

of which has unique political and socioeconomic circumstances.¹²⁴ In order to improve the framework's applicability in organising and analysing policy-relevant data of this study, as well as in future research on other health issues in China, some refinements and adaptations are suggested as shown in the following section.

8.6.2 Needs for refinement and adaptation

The first and most fundamental modification is to add the two factors emerged during synthesis of the study results – “framing of issues” and “legal and constitutional systems” - into the framework. The current eleven factors are then suggested to be regrouped into four categories - international influence; domestic advocacy; epistemic factors; and national political environment – in order for them to fit better under the framework and facilitated assessment of political prioritisation in China.

The second suggested modification is to modify the description of “focusing events”. In the original framework, Shiffman described this factor as “the organisation of forums to generate national attention for the cause”. However, this study revealed that, beyond their ability to arrange new activities, how the policy communities utilised the policy windows opened after major crises (such as the “blood selling” scandal and the SARS outbreak) and high profile international events (such as the UNGASS Declaration) had even greater impact on generating political priority for health issues. Thus, the description of “focusing events” should be replaced by “the utilisation of policy windows presented by major crises and high profile forums to generate national attention for the cause”.

Third, as mentioned early, it is not always clear who the political entrepreneurs are due to the prevailing idea preventing individualism in China, therefore it is suggested to change the factor “political entrepreneurship” to “leadership” so as to cover both individual and institution champions emerging to unite and lead the policy communities.

Finally, although the intense political attention and donor prioritisation being paid to HIV/AIDS since the late 1990s may have diverted the attention to syphilis away, this study also provided evidence of how prioritisation of PMTCT of syphilis was enhanced through integrating with existing political priorities, e.g., PMTCT of HIV.

Rather than talk about competing health priorities, it may be more appropriate to term this factor as “existing health priorities”, as these priorities may in some cases hinder political priority setting for other issues by holding scarce resources and in other cases facilitate attention, especially if the new issues can be linked with existent priorities. Similar modification was also suggested in a recent study applying the framework to exploring the policy process of neonatal mortality reduction in Bangladesh,²²⁸ which demonstrated that the ongoing priority of child survival had helped shifting the national attention to newborn survival. Table 8-2 presented an adapted version of the framework which is proposed as a potential approach for studying political prioritisation of health issues in China and will be presumably utilised, tested, and revised in the future.

Table 8-2: Factors influencing generation of political priority for health issues in China

Category	Factor	Description
International influence	1. Norm promotion	Efforts by international agencies to establish a global norm concerning the unacceptability of the problem
	2. Resource provision	The offer of financial and technical resources by international agencies to address the issue
Domestic advocacy	3. Policy community cohesion	The degree to which national promoters coalesced as a political force pushing the government to act
	4. Leadership	The presence of respected and capable national political champions or leading institutions willing to promote the cause
Epistemic factors	5. Credible indicators	The availability and strategic deployment of evidence to demonstrate the presence of the problem
	6. Focusing events	The utilisation of policy windows presented by major crises and high profile forums to generate national attention for the cause
	7. Clear policy alternatives	The availability of clear policy alternatives to demonstrate to political leaders that the problem is surmountable
	8. Issue framing	The ways in which those involved with the issue understand and portray it as well as its solutions
National political environment	9. Political transitions	Political changes, such as democratisation, that positively or adversely affect prospects for promotion of the cause
	10. Existing health priorities	Priority for other health causes that hamper or facilitate attention generation for the cause
	11. Legal and constitutional systems	Constitutional rights and legal elements that shape the policy process

8.7 The study's contribution to knowledge and practice

This PhD study has contributed to knowledge and practice in many ways. First, it contributed to knowledge by identifying a specific group of factors influencing the degree to which China responded to the epidemic of MTCT of syphilis politically. Because this study was partly funded by the WHO, the main results have been used by the WHO to inform the MOH of China in developing its proposals to scale up control of MTCT of syphilis nationally. Second, this study made the first contribution to

published literature on the determinants of political prioritisation of particular health issues in China,³⁸⁸ while other related studies are more commonly focused on the content of the policies and implementation.¹²³ Third, compared to published health policy literature, it made a more significant contribution to understanding of the Chinese health policy process, given the depth (exploring multiple administrative levels) and breadth (comparing the policy processes of two similar issues adopting a historical perspective) of the study and a diversity of sources. At practice level, the findings are not only useful to inform effective implementation of the goal of eliminating congenital syphilis by 2020, but also offers implications for promotion of political prioritisation for other neglected health issues in China. Finally, this study contributed to methodology by testing a pre-existing conceptual framework at both national and subnational levels of China and providing an adapted version of the framework for assessing political prioritisation within the Chinese health policy arena.

8.8 Limitations and future research directions

This study has some limitations. First, it failed to access any informant at the MOH, who had the closest proximity to the policy processes. In addition, no official from the State Council or other non-health ministries and departments were interviewed. As Lilleker has argued,²⁸⁶ interviewing political elites allows the research to illuminate activities that go on behind closed doors or out of public media gaze but which shape policy processes and outcomes. The result has been that the study tended to focus on disease-specific priorities with less consideration of wider fundamental issues and values such as equity and social determinants of health.^{229,230}

Second, despite that the comparative case study design has helped enhanced causality of the study results, it is still unclear which factors identified are most and least influential and how the factors interact with others in shaping political prioritisation. This study revealed the necessity of continual research into the Chinese health policy process, including assessment of the relative causal weights of influential factors, their interactive effects, and whether different combinations of factors can raise the issue higher on the agenda. More comparative case studies should be conducted in order to expand generalisability of the results and develop greater certainty concerning

causality, for example, which explicit combination of factors is most influential on the national health agenda.³⁸⁹

Third, there were difficulties distinguishing between PMTCT of syphilis/HIV specifically with syphilis/HIV control generally, particularly during assessing issue framing. As mentioned earlier, China's PMTCT of syphilis/HIV and syphilis/HIV control policies are made and implemented in relatively separated hierarchies, making it possible for the author to identify those policy and project documents specifically targeting PMTCT. In addition, during stakeholder interviews, restrictions were kept that the interviewees talked about PMTCT only but not control in general population. When necessary, the interviewees were invited to distinguish what they had said about PMTCT themselves. The biggest problem may have occurred during reviewing relevant literature and media coverage that many describe the policy processes generally without clarifying whether or not PMTCT is also taken into account. Such unclarity was addressed by data triangulation though at the expense of time.

Finally, due to China's uniquely distinct health policy environment and the controversial nature of PMTCT of syphilis and PMTCT of HIV, not all the factors shaping political prioritisation of the two issues identified in this study, such as the framing of syphilis associating it with stigmatisation, are applicable to other health issues or other countries. Also, as discussed early, the roles of media and civil society mobilisation were not fully explored in this study, which should be addressed in more detail in future research. This study drew out these dimensions in the hope that greater knowledge surrounding how political priority is generated at different levels of China can help improve the policy solutions for some neglected health problems, in order for the country to move towards achievement of equal access to basic public health services.

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APPENDIX 1. Agreement for Performance of Work with the WHO

Annex 1: 05 August 2011

Department of Reproductive Health and Research (RHR) Controlling Sexually Transmitted and Reproductive Tract Infections Team

Agreement for Performance of Work (APW) with Flora Dadong Wu

Purpose

To gather evidence which will guide the Ministry of Health (MOH) in China in its proposals to scale up congenital syphilis nationally.

Initiated by

- WHO/Geneva, Department of Reproductive Health and Research (RHR)
- WHO Representative Office, China
- National Centre for STD Control, China CDC
- Institute of Global Health, University College London

Responsible staff members

Dr Lori Newman; Dr Nathalie Broutet - WHO/Geneva

Background

Syphilis infection in the mother, when untreated, can result in adverse outcomes of pregnancy in approximately 69% of cases. WHO estimates that annually syphilis in pregnancy contributes to 650,000 foetal and neonatal deaths in developing countries. Prevention of congenital syphilis, including screening of all pregnant women and treatment of those found to be infected, is simple and inexpensive (less than US\$1.50 for testing and treatment per person), feasible in even low resource settings, and will help achieve progress towards United Nations' Millennium Development Goals (MDGs) 4, 5 and 6.

In China, congenital syphilis has been a growing public health problem since the early 1990s. Incidence continues to rise - according to the National Centre for STD Control in Nanjing, a total of 9,480 cases of congenital syphilis were reported in 2008 (57 cases per 100,000 live births). These rates of congenital syphilis are higher than the currently reported rates of mother-to-child transmission of HIV in China.

In 2010, the Ministry of Health (MoH) issued *China 2010-2020 Plan for Syphilis Control and Prevention* and indicated national government commitment to congenital syphilis control. In

September 2010, the MoH issued *2010 Management Guidelines for HIV Prevention Programmes*, which proposes integrated control of HIV, syphilis, and hepatitis B. However, at the present time, implementation of national policies is patchy across the country. Only a few provinces have their own plans for controlling congenital syphilis. Compared to other infections transmitted from mother-to-child (particularly HIV), congenital syphilis is not highly prioritized on local health care agendas, and may well lack associated resource allocation and policy implementation. Understanding why some issues rise to the top of the policy agenda while others lack policy attention is crucial to ensuring implementation of policy goals. Comparing congenital syphilis control (currently still relatively low on policy agendas) with a more high profile health issue (such as PMTCT-HIV) will help to identify those features which engender policy salience and may lead to policy success.

Based on ongoing collaboration between RHR, the National Centre for STD Control in China, and University College London, this work will identify the key features and components of policy success (and, conversely, low policy salience) in China across three mother-to-child transmitted infections currently targeted for control: HIV, syphilis and hepatitis B.

Activities

1. Evaluate the processes of policy making for congenital syphilis prevention

- Trace the processes of policy making and implementation for prevention of congenital syphilis and other mother-to-child transmitted infections (HIV, hepatitis B) in China.
- Map key stakeholders involved in policy making and implementation processes for congenital syphilis elimination in China.
- Understand policy salience of various policy initiatives, and key features associated with policy salience.
- Liaison with WHO and the Chinese MOH for technical advice on issues relating to congenital syphilis control and implementation of the ten-year syphilis control plan.

2. Communicate project results

- Organize, and participate in, five meetings with key stakeholders in China to communicate project results at a national and provincial level.

Expected outputs/products

1. Draft manuscript identifying

- the context and process of health policy implementation - particularly how political prioritization is generated for a key health issue in China;
- key areas of the policy cycle (at both national and provincial levels) which should be targeted in order for China to scale up congenital syphilis control and operationalize the goals set by the ten-year syphilis control plan.

2. Summary report of the five national and provincial meetings

The report will reflect discussions and outcomes of the meetings and will offer a clarified record of the responses of the key stakeholders in China.

The documents will be submitted in electronic format (Word 6.0 and Excel or compatible). Copyright in all materials produced under this APW shall be vested in WHO for

the use of WHO. WHO shall have a right to revise and publish the work, to use the work in a different way from that originally envisaged, or not to publish or use the work.

Timeframe and budget/costing

50 working days during the period 1 September 2011 to 31 August 2012.

50 days @ US\$160 = US\$8,000

Payment schedule

US\$6,400 (80%) To be paid on submission of countersigned contract.

US\$1,600 (20%) To be paid on satisfactory completion of work and submission of
satisfactory finalized summary report by date by 31 August 2012

APPENDIX 2. List of documents reviewed

National laws & regulations:

- The Chinese people's Political Consultative Conference. The Common Program of the Chinese people's Political Consultative Conference. (1949).
- The National People's Congress of the People's Republic of China. Constitution of the People's Republic of China. (1954, amended in 2004).
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APPENDIX 3. Stakeholder interview guide

1. Provide the information sheet to each interviewee, ask for their participation through oral consent.
2. Briefly introduce the study and let interviewees know what they will be asked.
3. Set aside at least 45 minutes for each interview.
4. Record each interview with permission; if not permitted, take detailed notes.
5. Leave at least 30 minutes between interviews for: making any additional notes, and, clearing mind before next interview.
6. Limit an interview to just three or four major topics according to interviewees' position and power, these might be topics like the following:
 - What is your position within the policy process to scale up control of congenital syphilis?
 - Comparing to other issues targeted for control (especially PMTCT of HIV), is congenital syphilis control prioritised high enough on the national/local health agenda, and what accounts for policy salience?
 - How the national policies are interpreted and to what extent the set goals are achieved at local levels?
 - Is there any variance in prioritising congenital syphilis control among different cities, if yes, what are the determinants of the variance?
 - How do the departments, institutions and organisation involved with the issue interact and work together to affect the decision-making process?
7. Talk about actor power, ideas, political contexts, issue characteristics and policy outcomes, not statistics.
8. If necessary, ask one interviewee to comment on something another interviewee said (without releasing the identity of the former interviewee).
9. Ask interviewees to recommend other stakeholders who should be interviewed.
10. Take detailed notes of any important document, official speech, meeting content, and key event mentioned by the interviewees.

APPENDIX 4. Oral consent information sheet (EN & CN)

Oral consent information sheet

As a PhD student in Institute for Global Health, University College London, I am conducting a research project about the policy process to scale up congenital syphilis control in China. I would like to ask you a few questions to obtain your views on:

1. processes of policy formulation and implementation to prevent congenital syphilis and other mother-to-child transmitted infections in China (at either national or local levels)
2. key features and components of policy success (and, conversely, low policy salience) across the vertically transmitted infections currently targeted for control: HIV, syphilis and hepatitis B
3. possible explanation of variance in interpretation and implementation of the national policies among different areas

You have no obligation to participate and you may discontinue your involvement at any time. Participation in the interview indicates your willingness to take part in this study and that you are at least 18 years old. All data collected from you will be kept confidential and used for research purposes only. The identities of the study participants will not be shared with anyone else.

Should you have any questions about this project or your participation in it you may ask me or my faculty supervisor, Dr Sarah Hawkes at Institute for Global Health, University College London.

Thank you very much for your time.

口头知情同意书

作为一名伦敦大学学院（University College London）全球健康研究所的博士生，我正在开展一个有关在中国扩大先天梅毒控制的政策制定过程的研究项目。我想问您几个问题，以获得您就以下几个问题的意见：

- 1、在中国预防先天梅毒和其他母婴传播感染的政策制定和执行流程（在国家或地方层面）；
- 2、就目前针对控制的垂直传播感染，如 HIV、梅毒和乙肝，谈谈导致政策成功（反之，低政策显著性）的关键因素和组成部分；
- 3、对不同地区之间理解和执行国家政策的差异的可能的解释。

您有没有义务参与本次访谈，因此您有权在任何时候终止访谈。接受访谈意味着您愿意参与这项研究且您已年满 18 岁。从您处收集的所有数据将被严格保密并只用于研究目的。这项研究参与者的身份不会与他人分享。

如果您有任何有关这个项目或参与方式的疑问，可以询问我或我的导师，伦敦大学学院（University College London）全球健康研究所的 Sarah Hawkes 博士。

非常感谢您的宝贵时间。

APPENDIX 5. Coding frames

National level

Tier one themes (in accordance to Shiffman's nine factors)	Tier two themes (emerging during coding)	Sources		References	
		N of informants	N of documents	N of times mentioned by the informants	N of times mentioned in the documents
Category 1. Transnational influence					
Norm promotion	Commitment established at the UN level to PMTCT of HIV (e.g., MDG 6, UNGASS Declaration etc.)	10	7	16	12
	International expectations for the national government's action against MTCT of HIV (e.g., government leadership, multi-sectoral cooperation)	41	19	67	45
	China's Five Commitments for HIV/AIDS Control	2	3	2	3
	Neglect of PMTCT of syphilis at global level	24		30	
	No global reporting instrument	5		5	
Resource provision	International financial and technical supports for PMTCT of HIV	17	11	46	31
	PMTCT of HIV integrated with China CARES	2	10	2	10

	Dearth of external assistance for PMTCT of syphilis	8	2	13	2
Category 2: Domestic advocacy					
Policy community cohesion	A cohesive PMTCT of HIV policy community	13	2	17	2
	Clear accountabilities for PMTCT of HIV	4	3	11	3
	Unclear accountabilities within the PMTCT of syphilis policy community	11	3	29	3
	Lack of a multi-sectoral cooperation mechanism	16	3	24	3
	Fragmented PMTCT of syphilis initiatives	9		21	
Political entrepreneurship	Capable individuals leading PMTCT of HIV	7		13	
	Leading role of the NCWCH in PMTCT of HIV	9	7	9	7
	Absence of “champions” for PMTCT of syphilis	9		11	
	Lack of power of the NCSTD	6		10	
Credible indicators	Sentinel surveillance data of MTCT of HIV	2	5	2	5
	Deployment of the MTCT of HIV indicators	2	7	2	19
	Unawareness of the MTCT of syphilis burden	5	2	7	2
	Lack of a recognised definition of congenital syphilis	3	5	3	8
Focusing events	The “blood selling” scandal	5	7	6	17

	The UNGASS Declaration		3		3
	China's Five Commitments for HIV/AIDS Control	2	3	2	3
	SARS and HIV/AIDS control	11	8	18	23
	Establishment of the CDC hierarchy	7	5	7	5
	The Lancet publication on MTCT of syphilis	8		11	
	The NEJM publication on MTCT of syphilis	5	4	5	4
	Expo 2010 in Shanghai	1		1	
Clear policy alternatives	Feasible policy alternatives for PMTCT of HIV	7	6	16	6
	Unclear policy options for PMTCT of syphilis	4		4	
	The abolition of compulsory premarital check-ups	7	8	10	12
Category 3. National political environment					
Political transitions	The "Hu-Wen" administration	6	4	6	13
	"Xiaokang" society	1	2	1	2
	Wen Jiabao's visit to AIDS patients in 2003	6	9	6	17
	The new health system reform	9	10	12	23
Competing health priorities	MTCT of syphilis overshadowed by MTCT of HIV	2		2	

	PMTCT of syphilis integrated with existing health priorities (e.g., the new health system reform targets)	3	6	4	6
Category 4. Emerging new themes					
Legal and constitutional systems	Criminal Law Article 360	4		4	
	Constitution (2004) recognising human rights	2	2	2	2
Framing of issues	Syphilis as a social disease	4	3	4	10
	Syphilis control as patriotic action	4	8	4	19
	Syphilis linking to immorality and criminality	23	5	27	7
	Syphilis as a less urgent problem	28		32	
	HIV/AIDS as a development and security problem	3	7	3	10
	HIV/AIDS as a potential threat to macroeconomy	2	3	2	14
	HIV/AIDS as a political disease, “AIDS politics”	10	4	13	9
	Women and infants infected with HIV as “innocent” and “victims of the ‘blood selling’ scandal”	3	4	3	4
	“In 2008, an average of more than one baby per hour was born with congenital syphilis in China, for a total of 9,480 cases.” (Tucker et al., 2010)	5	4	5	4
	Infants infected with syphilis as “innocent”	1		3	

Subnational level

Tier one themes (in accordance to Shiffman's nine factors)	Tier two themes (emerging during coding)	Sources			References		
		N of informants	N of documents	N of observations	N of times mentioned by the informants	N of times mentioned in the documents	N of times identified during the observations
Category 1. Transnational influence							
Norm promotion	Commitment established at the UN and level to PMTCT of HIV (e.g., MDG 6, UNGASS Declaration etc.)	5			6		
	Central government's commitment to PMTCT of HIV	13	4		23	6	
	A State Council-led monitoring mechanism for PMTCT of HIV	6	2		6	3	
	A "top leader accountability mechanism" in Guangdong	29	1		29	1	
	Neglect of PMTCT of syphilis at global level	12			12		
	No State Council-led monitoring mechanism	4			4		

Resource provision	International financial and technical supports for PMTCT of HIV in Guangdong	2	1		2	1	
	Expansion of PMTCT of HIV in Guangdong through integrating with China CARES	2	10		2	10	
	Lack of incentives for the local government during scaling up PMTCT of syphilis	7	1		7	1	
	External assistance for PMTCT of syphilis in two cities	9	2		21	2	
	A step-down resource allocation mechanism since 2011	3	2		3	2	
Category 2: Domestic advocacy							
Policy community cohesion	Capable PMTCT of syphilis policy communities in Shenzhen and Jiangmen	8		4	29		4
	Loosely structured PMTCT of syphilis communities in Zhuhai, Maoming, and Qingyuan	11		2	20		2
	An incohesive PMTCT of HIV policy community in Guangdong	4	2		5	5	

Political entrepreneurship	Capable individuals leading PMTCT of syphilis in Shenzhen	5		2	12		2
	Recognised leading institutions for PMTCT of syphilis in Shenzhen and Jiangmen	8		4	27		11
	Fragmented leadership for PMTCT of syphilis in Zhuhai, Maoming and Qingyuan	11			14		
Credible indicators	Sentinel surveillance data of MTCT of syphilis and MTCT of HIV in Shenzhen	3	1		3	1	
	A maternal syphilis surveillance programme (covering Shenzhen and Jiangmen)	4	3		4	5	
	Data on antenatal syphilis intervention uptake in rural areas	5	2		9	9	
	The PMTCT of HIV online reporting system	1			1		
Focusing events	Joint meetings and monitoring activities related to PMTCT of syphilis in Shenzhen and Jiangmen	7		3	7		3
Clear policy alternatives	Clear policy options for PMTCT of syphilis and HIV in Shenzhen	5	4		8	4	

	Barriers to generalise Shenzhen's model	9			17		
	A cost-effective PMTCT of syphilis model in Jiangmen	5	4		11	4	
Category 3. National political environment							
Political transitions	The local government's financial ability	33	3		48	3	
	The local government's human resource capacity	27		2	42		4
Competing health priorities	MTCT of syphilis overshadowed by MTCT of HIV	4			4		
	PMTCT of syphilis integrated with existing health priorities (e.g., the new health system reform targets)	2			2		
Category 4. Emerging new themes							
Framing of issues	HIV/AIDS as a political disease	14			17		
	Women and infants infected with HIV as "innocent"	1			1		

APPENDIX 6. Ethical approval from UCL



Sarah Hawkes
Centre for International Health and Development
Institute of Child Health
30 Guilford Street
UCL

26 September 2012

Dear Dr Hawkes

Notification of Ethical Approval

Project ID: 4033/001: What accounts for policy salience? A study on the policy process to scale up congenital syphilis control in China

I am pleased to confirm that your study has been approved by the UCL Research Ethics Committee for the duration of the project i.e. until September 2014.

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form'.

The form identified above can be accessed by logging on to the ethics website homepage: <http://www.grad.ucl.ac.uk/ethics/> and clicking on the button marked 'Key Responsibilities of the Researcher Following Approval'.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

Reporting Non-Serious Adverse Events

For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator (ethics@ucl.ac.uk), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Reporting Serious Adverse Events

The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

With best wishes for the research.

Yours sincerely

Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc: Dadong Wu

UCL Research Ethics Committee, c/o The Graduate School, North Cloisters, Wilkins Building
University College London Gower Street London WC1E 6BT
Tel: +44 (0)20 7679 7844 Fax: +44 (0)20 7679 7043
ethics@ucl.ac.uk
www.ucl.ac.uk/gradschool


APPENDIX 7. Ethical approval from the NCSTD, China

中国医学科学院皮肤病医院（研究所）

受理编号：2012—KY—040

中国医学科学院皮肤病医院伦理委员会审批件

批件号：（2012）临审第（18）号

试验项目名称	在中国推广控制先天性梅毒的政策过程中什么导致政策显著？				
试验项目分类	科研课题	临床分期		申报项目来源编号	研究生课题
申办者					
审查文件	1、伦理审查申请表 <input checked="" type="checkbox"/> 2、研究方案【版本号及日期：01版，2012年10月22日】 <input checked="" type="checkbox"/> 3、知情同意书【版本号及日期：01版，2012年10月22日】 <input checked="" type="checkbox"/> 4、研究病历、病例报告表 <input type="checkbox"/> 5、主要研究者简历、参加人员简介 <input checked="" type="checkbox"/> 6、招募受试者材料 <input type="checkbox"/> 7、国家食品药品监督管理局批件、药检报告、研究者手册 <input type="checkbox"/> 8、其他伦理委员会对申请研究项目的重要决定复印件 <input type="checkbox"/> 9、企业资质/CRO <input type="checkbox"/> 10、其他资料 <input type="checkbox"/>				
申请科室	中心办公室	项目负责人	陈祥生	职务/职称	副主任/研究员
伦理审查方式	<input type="checkbox"/> 会议审查 <input checked="" type="checkbox"/> 快速审查				
会议地点			会议时间		
是否需要持续审查	<input checked="" type="checkbox"/> 否 <input type="checkbox"/> 是，持续审查时间： <input type="checkbox"/> 3个月 <input type="checkbox"/> 6个月 <input type="checkbox"/> 12个月				
审查委员	张烈（主任） 林麟（副主任） 申国庆（委员） 尹跃平（委员） 王伟民（委员） 吴晓初（委员） 苏晓红（委员） 杨雪源（委员） 李岷（委员） 徐国林（委员） 倪坤仪（委员） 王洪生（委员） 杜宏宇（委员兼秘书）				
审查意见：	经伦理委员会采用快速审查方式，审查委员一致认为： 关于“在中国推广控制先天性梅毒的政策过程中什么导致政策显著？”为研究生论文课题，研究者具备指导完成本课题的资格和能力。知情同意书中已告知研究目的，并阐明研究过程及自愿原则，其文字通俗易懂，符合知情信息充分告知要求。				
注意事项（请仔细阅读）：	1、所有资料未经本委员会批准，不得做任何修改；若需修改，须及时通知伦理委员会，获得批准后执行； 2、试验中发生严重不良事件应24小时内通知本伦理委员会； 3、发现违反方案情况及暂停/提前终止研究请及时报告伦理委员会； 4、研究超过1年，需要向本伦理委员会提交年度报告。				
<h2>同意</h2> <p>主任委员/副主任签名： </p> <p>中国医学科学院皮肤病医院（研究所）医学伦理委员会（盖章）</p> <p>日期：2012年11月1日</p>					

申明：本伦理委员会按照中国GCP和有关法规组成和工作，其审查和工作过程不受伦理委员会以外任何组织和个人的影响。

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