# **TOPICAL REVIEW**

# Increasing Epidemic of Sexually Transmitted Diseases in China

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#### **INTRODUCTION**

Sexually Transmitted Diseases (STDs) were virtually eliminated in China in 1964 after Chinese government illegalized commercial sex and implemented active prevention and treatment programs among former sex workers (Chen et al., 2000). However, in the last three decades, the centralized economy in China made a transition to a more market-oriented economy, which brought significant changes in culture and social norms and dramatically influenced sexual attitude and behaviors among Chinese adults. One consequence of those changes is the significantly increasing prevalence of STDs in China (Abrams, 2001). The common STDs in China include gonorrhea, syphilis, AIDS, cervicitis, genital herpes, chancroid, lymphogranuloma venereum, and chlamydial infection.

Although STDs can cause significant morbidity, treatments for STDs in China were often inadequate (Choi et al., 1999). Chinese STD patients often relied on private unlicensed physicians rather than formally trained doctors in public hospitals due to stigma associated with STD at public venues (Lieber et al., 2006). This paper provides a review of the factors contributing to the increasing epidemic of STDs and the needs for effective policies and interventions to control the public health crisis of STDs in China.



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#### GENDER DISPARITY IN INCIDENCE OF STDS

China's incidence of STDs dramatically increased in the last two decades. For example, syphilis incidence increased 100% every two years during the period of 1989 to 1998 (Chen et al., 2000). Gonorrhea incidence increased 260% during the same period. Although newly-diagnosed male patients were still more than newly-diagnosed female patients, the increase in rates was much higher among women than men (420% vs. 379%), which brought the gender ratio (male vs. female) of new cases from 2.0 in 1989 to 1.4 in 1998 (Cohen et al., 2000). To understand the gender disparity in the increasing trend, the background of gender inequality in Chinese society needs to be discussed.

There was a significant gender disparity in traditional Chinese society. The social status of women was generally thought of as inferior when compared to men. Traditional Chinese women's sexual attitude and behavior were conservative and restrictive compared with those in Western standard. The government has implemented a series of policies and actions to promote the equality between genders since 1949. However, the economic reform since 1978 has brought new gender disparity in the social norms in Chinese society. For example, it becomes more acceptable for men to visit night clubs or other venues in the name of conducting business and socializing. The relaxing sexual norms for men have created a large demand for commercial sex workers, who are mostly women. Since commercial sex is still illegal in China, it is difficult to provide an accurate estimate for the population. In 2004, the estimated population of sex workers was in the range of 4 to 10 million (Huang, 2004). Due to the poor protection against unsafe sexual behaviors in those venues, STDs became prevalent among female sex workers. Therefore, the increasing population of female sex

workers contributed to the increasing rate in STDs incidence. Studies suggest that extramarital sex also becomes more wide spread in China (Cohen et al., 2000). However, a recent study suggests that the median number of lifetime sex partners for Chinese women was one and 88.7% of Chinese woman had only one sex partner for their lifetime (Zhang et al., 2009).

## SOCIOECONOMIC DISPARITY IN STDS

In Western countries, STDs are usually called as a disease of poverty, since STDs patients were concentrated in neighborhood with low income and low education. However, the likelihood of having STDs is positively related with socioeconomic status (SES) in China, since the majority of high-risk sexual behaviors occurred in commercial sex venues and only men with higher socioeconomic status (SES) have access to those venues. Moreover, Chinese men with higher SES are more likely to afford stable sexual behaviors with multiple partners. A study of the current population in China disclosed that among men who had unprotected sex with commercial sex workers, prevalence of Chlamydia among men with high income was 14 times greater than that among men with low income (Parish et al., 2003). Interestingly, the same study suggests that women who have a high income husband were 3 times more likely to have Chlamydia than women having a low-income husband. The finding suggests that high income men got infected with STDs while having sex with commercial sex workers and transmitted to their spouse later.

There is one social movement that might change the positive relationship between SES and STDs in China. One of the engines for Chinese economic development is the low-cost human capital that flows from less developed areas to developed areas. In 2006, approximately 131 million migrant workers moved from rural areas to urban areas for employment (State Council, 2006). Majority of those migrant workers were sexually active young men. Due to the long working hours and semi-military management in workplaces, it is difficult for them to develop healthy sexual relationship. Instead, they are looking for fast relationship with low cost. To meet the increasing demand from those migrant workers, more fast-food style sex venues were set up around factories and those venues charged lower fees with the economies of scale. Both the customers and the sex workers in those venues are less educated and less protected due to the cost constraint. Potentially they can be the time bomb of STDs in China in the new era with more and more factories rely on migrant workers for production (Yang, 2005).

#### PROGRESS AND CHALLENGS TO PREVENT AND CONTAIN STDS IN CHINA

For a long time, systematic prevention and interventions of STDS were missing in China, partially due to the government neglecting the fact that STDs have returned to China after almost twenty years. Due to the increasing severity of health outcomes associated with STDs, especially HIV, Chinese government has started to take more pragmatic approaches to actively prevent and contain STDs.

As early as in 1990, the Chinese Ministry of Education has implemented the basic requirement for sexual morality in health education. In 2004, the State Council ordered all levels of local government to "integrate HIV/AIDS into the routine government agenda...., which is a priority linked to the interest and benefit of China and its people" (State Council, 2004). Although commercial sex activities are still illegal in China, local governments adopted more practical interventions in those venues, such as distributing condoms, regularly screening sex workers, and educating sex workers about protection against unsafe sex.

The focus in the movement is to promote condom use in China. In 2002, the Ministry of Health reclassified the condoms from "sexual commodity" to "medical device". The Chinese name of condoms also changed from "birth planning sheath" to "safety sheath". Local governments adopted more targeted distributions among high-risk areas, such as night clubs, salons, college campus, and hotels. Vending machines of condoms were set up in those venues and free

condoms are more frequently distributed to those groups. All those actions promoted the positive experience of using condoms in sex, which is a cost-effective way to reduce transmission of STDs.

Although China has invested significant resources and made steady progress in STDs containment, there are a few challenges to be addressed.

Education is the primary challenge to prevent STDs. In the regular school system, sex education has very limited hours in middle schools and become optional in college. Therefore, most of the sex education obtained was from non-school environment, such as private conversations or the Internet, which may not correctly present the information about sexual attitude or sexual behavior. Lack of knowledge about sex has been a significant risk factor for STD infection and prevented right treatment (Zhang et al., 2009). Targeted sex education among sex workers is only pilot-tested in some developed cities and in some upscale venues. However, those sex venues serving migrant workers may not be covered by the existing sex education. A more systematic approach to cover all sexually active populations needs to be adopted.

Legalization of sex industry is always a controversial topic in any society, including China. Sex industry is still treated as "underground" in mainstream media and social norms. However, the booming sex industry in the last three decades presents huge business interests for stakeholders, including related organizations and agencies. Therefore, the current practice is to illegalize it on papers while regulating it as other entertainment business. This reflects a compromise between different parties in the society and the balance is difficult to maintain. The dilemma between legalization and illegalization may take long time to be resolved and may be motivated by another social movement in China.

It is still a long way to go for the society to reduce the stigma associated with STDs, STD patients, and their treatments. Patients with STD can be discriminated by their family members, friends, and employers, which push them to seek unlicensed care or self-care. For example, Zhang et al. (2009) found that college-educated Chinese women with STD symptoms were more likely to seek private, unlicensed care than those STD-symptomatic women with less education. Although college-educated women were more likely to have better knowledge about sex, stigma and fear of social pressure prevent them from seeking right treatment once the STD symptoms developed. The society should not encourage extramarital sex or promote commercial sex consumptions, but neither should it discriminate STDs patients.

#### CONCLUSIONS

China has become the second largest economy while being the most populated in the world. The public health crisis of STDs in China not only directly hit the Chinese, but the shock can be felt at every corner of the world. The increasing incidence of STDs and growing STD patient populations requires more thorough and open research, which will lead to more effective public health policy and interventions in China.

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