

extent of syphilis observed in a population most closely indicates the degree of herd immunity. In their analysis of changes in syphilis incidence in the USA over the past 50 years, they concluded that 10-year cycles of disease resurgence could result from depletion of individuals with immunity resulting from natural infection.<sup>27</sup> In view of the virtual absence of syphilis in China for 20 years, the general population of young, sexually active individuals would be completely susceptible to this infection.

Social forces could be of even greater importance. Although prostitution in China has an extensive history,<sup>28</sup> strict governmental intervention restricted such practices for nearly 40 years.<sup>29</sup> However, economic reforms (so obvious in China's growth and globalisation) have led to income gaps and a cultural climate that favours re-emergence of sex work.<sup>31</sup> A substantial majority of men and a huge migrant population of male workers have created an increasing demand for sex work.<sup>32</sup> It is not a surprise that a high prevalence of syphilis in sex workers has been well documented.<sup>33</sup>

Sexual practices are also changing. Young Chinese people are increasingly likely to experiment with sex at earlier ages and before marriage.<sup>34</sup> Additionally, reduced governmental emphasis on public-health services, increasing costs of individual health care, and reduced availability of health insurance<sup>35</sup> might have contributed to reduced recognition and treatment of syphilis.

Clearly, China must attack the spread of STD and especially syphilis. One key component of this intervention is affordable syphilis screening, the tool that proved so powerful in the earliest days of Mao's government.<sup>4</sup> The southern city of Shenzhen has pioneered free syphilis screening for all pregnant women, a programme that has been shown to be cost effective and sustainable.<sup>32</sup> Further efforts should also be directed at groups in which high syphilis prevalence has been documented, such as men who have sex with men<sup>36</sup> and female sex workers.<sup>37</sup> Thousands of health centres in China already offer free voluntary counselling and testing for HIV, and additional testing for syphilis in these centres would expand coverage of syphilis screening and help to integrate STD and HIV prevention efforts. However, these strategies will need much support from local and national leaders, as part of the overall urban and rural health reforms.<sup>38</sup>

STD prevention programmes need to be scaled-up for a mass audience. Preliminary results from the 100% condom use programmes for sex workers promoted in Jiangsu, Hubei, Hunan, Guangxi, and Hainan provinces are favourable, with sharp drops in the prevalence of syphilis in female sex workers.<sup>39</sup> These targeted interventions have been complemented by mass education campaigns directed at younger people.

China has recently shown a great interest in the control of infectious diseases. Although the country was perhaps slow to recognise the threat of HIV, this infection is now a key governmental focus for which many active programmes are being developed, including needle

exchange and methadone schemes for intravenous drug users, and free medical care for those who are infected with HIV. The resources put into place to control severe acute respiratory syndrome (SARS)<sup>40</sup> and avian influenza<sup>41</sup> are also impressive.

The spread of syphilis in China has been insidious, and has only recently attracted the attention it deserves. Initial efforts to respond to this epidemic include the pilot screening and prevention programmes and national consultative meetings in 2005 and 2006 that have generated a response strategy and helped to place syphilis on the national agenda. China has shown once before that the control of syphilis is possible,<sup>9</sup> and we expect that a new national campaign, although challenging, will show benefit.

#### Contributors

This project was designed and planned by X-S Chen and M S Cohen. Z-Q Chen and G-C Zhang coordinated data collection and manuscript preparation. Data were collected by X-D Gong, C Lin, X Gao, G-J Liang, and X-L Yue, and analysed by X-D Gong, C Lin, X Gao, X-S Chen, and M S Cohen. C Lin, X Gao, X-S Chen, and M S Cohen drafted and edited the manuscript.

#### Conflict of interest statement

We declare that we have no conflict of interest.

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## B 個別症例報告概要

- 総括一覧表
- 報告リスト

### 個別症例報告のまとめ方について

個別症例報告が添付されているもののうち、個別症例報告の重複を除いたものを一覧表の後に添付した（国内症例については、資料Eにおいて集積報告を行っているため、添付していない）。

