

## LETTER

### EPIDEMIOLOGY OF HIV INFECTION AMONG MEN HAVING SEX WITH MEN IN SHANGHAI, CHINA

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Dear Sir,

The rate of homosexual transmission of HIV infection among men having sex with men (MSM) has increased worldwide and is occurring at younger ages (van Griensven *et al*, 2009). Insufficient epidemiological information has been published in this population in China. We performed an epidemiological survey of HIV/AIDS among male patients in Shanghai in order to provide data for AIDS prevention and treatment programs. Data regarding 953 male patients being treated for HIV/AIDS, both heterosexual and MSM, were collected from October 2005 to December 2010. Four hundred

seventy-six (49.95%) were MSM; the percentage increased from 38.7% of male patients testing positive in 2005 to 54.6% of male patients testing positive in 2010 (Fig 1). These results are consistent with the overall data for China, including both treated and untreated cases (UNGASS, 2010). The percentage of MSM may have been higher because the stigma of HIV may have discouraged men from giving accurate histories. The demographics of the study population are shown in Table 1. Forty-three percent of MSM in this study were married with female spouses. HIV infected MSM in this study began treatment with antiretroviral therapy at a younger age (36.05 ±10.89 years) than heterosexual HIV infected patients (45.79 ± 11.15 years) ( $p<0.01$ ). The percentage of unmarried cases among MSM (56.5%) was higher than among the heterosexual group (18.2%); education levels were also higher among MSM. These data suggest that in some more economically developed areas of China, such as Shanghai, the transmission of HIV infection among MSM is increasing rapidly, particularly among the well educated. Effective preventive control strategies need to be developed for MSM to reduce the risk for HIV infection (Chow *et al*, 2010). Active participation of MSM without coercion is necessary to decrease this incidence. There is an urgent need to slow the spread of HIV infection in China (Jin *et al*, 2009). In a country with a population of 1.3 billion people, an HIV prevalence of 1% of the population (a figure exceeded by many countries) would extrapolate to 13 million HIV patients. The current infection rate in China in the general population is believed to be 0.1%, but in certain areas among MSM the HIV

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Table 1  
Comparison of various factors between MSM and heterosexual patients with HIV.

	MSM (N=476)	Heterosexual group (N=477)	<i>t</i>	<i>p</i>
Age at initiation of HIV treatment (years)	36.1±10.9	45.8±11.2	12.796	0.000
Marital status- <i>n</i> (%)				
Unmarried	269 (56.5%)	87 (18.2%)		
Married (including divorced and widowed)	207 (43.5%)	390 (81.8%)		
Infection of spouse	2 (1.0% of married subjects)	42 (10.8% of married subjects)		
Education- <i>n</i> (%)				
College or higher	246 (51.7%)	58 (12.2%)		
Time from diagnosis to onset of antiretroviral therapy (months)	10.2±15.1	9.8±17.0	-0.426	0.670

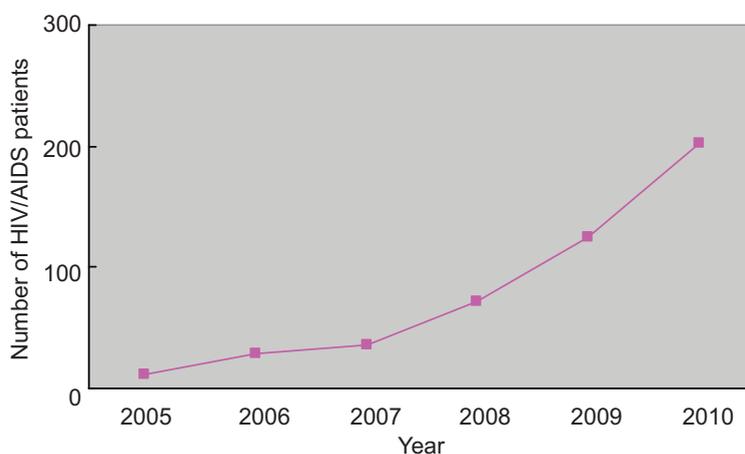


Fig 1—The number of HIV infected patients among MSM by year in Shanghai, China.

prevalence is as high as 21% and increasing by 5% per year (van Griensven and de Lind van Wijngaarden, 2010). New strategies, such as pre-exposure prophylaxis, widespread HIV testing and treatment of all HIV positive patients regardless of CD4 count, should be considered.

Yours faithfully,  
Hongzhou Lu, *et al*

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