

Social Networks and HIV/Syphilis Infections among Men Who Have Sex with Men, Shanghai

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BACKGROUND

- As of July 2004, 89,097 known HIV infections in China
- 840,000 believed to have HIV
- According to the United Nations, the number of infections could reach 10 million by 2010 without drastic preventive measures
- Men who have sex with men (MSM) believed to be at high risk for HIV
- Little known about the influence of social networks on HIV risk

RESEARCH OBJECTIVES

- To describe HIV-related knowledge, perceived risk for HIV, and sexual risk behaviors
- To assess prevalence of HIV and syphilis
- To examine characteristics of social networks

RESEARCH METHODS

- Recruited study participants from 9/2004 to 6/2005
- Used a respondent-driven sampling method
- Eligible if: (1) 18 years old or older, (2) lived in Shanghai, and (3) ever had sex with a man
- Completed a face-to-face interviewer-administered standardized questionnaire
- Received HIV counseling
- Provided blood samples for HIV and syphilis testing

RESULTS

Sample Characteristics (N=300)

	%		%
Age (mean, 29)		Had a Shanghai Residence Card	
18-29	58	Yes	23
30-39	24	No	74
40-51	8	Marital Status	
Education		Never married	78
< High school	38	Currently married	16
High school	29	Separated/divorced/widowed	6
Some college	21	Sexual Orientation	
Currently Employed		Gay	56
Yes	75	Bisexual	37
No	25	Straight	1
		Undecided	6

Correct HIV Transmission Knowledge (%)

	%
Sexual intercourse without using a condom	94
Sharing needles used by someone with AIDS	94
HIV transmission from a pregnant woman with AIDS to her baby	92
Sex with foreigners	91
Sex with someone who looks clean and healthy	89
No HIV infection if the rectum and genitalia cleaned before and after sex	82
No transmission of HIV from someone with AIDS but no symptoms	79
Sex with someone one can trust	75

Perceived Risk for HIV Infection

	%
None	40
Low	50
Somewhat high	8
Very high	2

Sexual Behaviors, Past Six Months

	%
Number of male sex partners (median=2)	
0	13
1 - 2	49
3 - 5	22
6 - 10	8
11 - 150	8
Had sex with women	23
Had sex with both men and women	19
Unsafe sexual practices	
Unprotected sex with men	47
Unprotected sex with women	14
Unprotected sex with either men or women	54
Unprotected sex with both men and women	8

Prevalence of HIV and Syphilis

- 1.7% tested positive for HIV (95% CI: 0.5%-3.9%)
- 12.5% tested positive for syphilis (95% CI: 8.9%-15.7%)

Characteristics of Contact Network Members (N=763)*

Median number of network members	3
Median age	27
% male	86
% family member	10
% gay/lesbian/bisexual	54
% knowing respondent's MSM activities	61
% supportive of respondent's homosexuality	56
% ever having had sex with respondent	28

Characteristics of Conversational Network Members (N=503)*

Median number of network members	1
Median age	27
% male	89
% family member	2
% gay/lesbian/bisexual	69
% knowing respondent's MSM activities	77
% supportive of respondent's homosexuality	71
% ever having had sex with respondent	35

CONCLUSIONS

- HIV prevalence is low among Shanghai MSM.
- However, almost half engaged in unprotected anal intercourse with men and close to 10% had unprotected sex with both men and women in recent months; only 9% perceived they are at high risk for HIV.
- Family members constitute only 10% and 2% of MSM's contact and conversational network members, respectively.
- A significant proportion of MSM engage in sex with members of their contact (28%) and conversational networks (35%).
- Findings suggest the urgent need to target MSM and their social networks to prevent further spread of HIV in Shanghai.

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