## Sexual Behavior and Condom Use Among Patients With Sexually Transmitted Diseases in Jinan, China

China has witnessed an explosion of sexually transmitted diseases (STDs) in recent years.<sup>1–3</sup> However, little is known about the sex and condom use practices of the patients attending STD clinics in China. To learn more about this population, we carried out a collaborative STD/HIV research study at the Center for Prevention and Treatment of STD and Skin Disease in Jinan, Shandong, China.

From April to October 1998, a random sample was drawn from patients with a diagnosed STD who visited the center. Clinic physicians interviewed 498 patients, 98% of those who were asked to participate. The Sex Risk Behavior Assessment Questionnaire, developed especially for the project, was used for the interviews. To assess the reliability of the instrument, we conducted test–retest interviews within a 1-week period with 50 randomly selected patients. The reliability for demographic and diagnosed STD measures was perfect ( $\kappa$ =1 for categorical measures, r=1 for continuous measures); reliabilities for measures focusing on number of sex partners, commercial sex, and condom use were acceptable ( $\kappa$ >0.70, r>0.90).

Men constituted the majority of the sample (69.9%). Most of the patients were residents of urban areas (83.5%). Mean ages were 33 years for men and 27 years for women. A substantial proportion of the sample had never been married (30.3%). Patients in the sample held a variety of jobs ranging from taxi drivers to military officers. Among the sample, the most commonly diagnosed STDs were gonorrhea (33.1%), chlamydia (33.5%), and genital warts (21.9%).

The earliest ages at first intercourse were 12.3 years for men and 13.6 years for women; however, the mean age at first intercourse was older than 20 years for both men (22.7 years) and women (21.2 years). Same-sex encounters were reported by 3.2% of the men and none of the women. Most of the patients had had multiple sex partners in the 12 months before the interview. Mean numbers of sex partners were 6.2 for men and 7.2 for women.

Two thirds of the men reported having paid for sex with a woman, and about 24% of the women reported having provided sex in exchange for money. Condom use was uncommon. Very few men and none of the women reported always using condoms; 68.5% of the men and 26.0% of the women reported never using condoms even when hav-

# TABLE 1—Sexual Behavior and Condom Use Among the Sample in the 12 Months Before the Interview: Jinan, Shandong, China, 1998

	Male (n=348), No. (%)	Female (n=150), No. (%
Had multiple sex partners		
No	45 (12.9)	69 (49.0)
Yes	303 (87.1)	81 (54.0)
Exchanged sex for money	× ,	. ,
No	345 (99.1)	114 (76.0)
Yes	3 (0.9)	36 (24.0)
Exchanged money for sex	, , , , , , , , , , , , , , , , , , ,	
No	110 (31.6)	149 (99.3)
Yes	238 (68.4)	1 (0.7)
Condom use <sup>a</sup>		
Sex with spouse		
Never use condoms	131 (63.3)	50 (62.5)
Sometimes use condoms	66 (31.9)	30 (37.5)
Always use condoms	10 (4.8)	0 (0.0)
Sex with boyfriend/girlfriend	, , , , , , , , , , , , , , , , , , ,	
Never use condoms	48 (40.3)	36 (48.0)
Sometimes use condoms	71 (59.7)	39 (52.0)
Always use condoms	0 (0.0)	0 (0.0)
Sex with others	( ),	· · · · ·
Never use condoms	213 (68.5)	13 (26.0)
Sometimes use condoms	89 (28.6)	37 (74.0)
Always use condoms	9 (2.9)	0 (0.0)

ing sex with a person other than a spouse or boyfriend/girlfriend (Table 1).

In China, condoms are readily available in pharmacies, at places of employment, and through government family planning programs. Even so, the majority of the sample did not use condoms consistently and engaged in high-risk sexual behaviors. These findings are consistent with the results from studies of patients visiting STD clinics in other countries.<sup>4,5</sup> Our results suggest that prevention programs focusing on STDs, including HIV/ AIDS, are urgently needed for patients visiting STD clinics in China.

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#### Contributors

J. Wang, B. Jiang, R. Falck, and R. Carlson were all involved in planning and implementing the study. J. Wang prepared the research letter. H. Siegal was the principal investigator for the project.

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