Department of Health Vol.8 No.2 Quarter 2 2002

HONG KONG STD/AIDS Update

a quarterly surveillance report

Contents

Editorial

Sixty-five Human Immunodeficiency Virus (HIV) infection cases were reported to the Hong Kong Department of Health during the second quarter of 2002, making it the highest number of cases ever reported in a quarter since the Voluntary HIV/AIDS Reporting System began its operation in 1984. The observation of a high number of reported cases should not however be viewed as a rising trend of HIV infections.

The pattern of HIV infection in this quarter, in terms of the proportion of male infection and the route of transmission, appeared to be similar to those of the past years. It was characterised by a higher proportion of male infections and the majority of reported cases were related to sexual intercourse. In this quarter, 55 of the 65 reported HIV infections were males and 51 cases contracted the virus through sexual intercourse, of which 39 via heterosexual contact and 12 via homosexual or bisexual contacts. Seasonal variation was believed to be attributable to the higher number of reported cases as there were usually more cases reported in the second quarter when compared with the first quarter. One possible explanation to this observation would be the presence of the Chinese New Year holidays during this period. Over the past few years, the newly reported HIV cases had become stabilised at around 200 per year. During the first six months of this year, there was a total of 108 newly HIV cases reported. Whether there is a real rising trend of reported HIV infection can only be determined after a longer period of monitoring. Therefore, it is too early to interpret one high absolute number of HIV reported as a definitive rising trend.

In addition, since sexual contact is the major route of HIV transmission in Hong Kong, it is not surprising to learn that the majority of our reported HIV infections were aged between 26 and 45. However, when examining the age distribution of the newly reported HIV infections over the past years, it was noted that those who were 55 years or above comprised around 10% of the total reported yearly cases and this figure had remained stable over the past 5 years. Also, it is worrisome to discover that a higher proportion of the older age group had their diagnosis made at the late stage of HIV infection from the reporting as compared to those younger than 55 years of age. This delay in presentation not only curtails the opportunity in providing them with quality care but also theoretically increases the likelihood of spreading the infection especially when they are not aware of their state of infection. The general misconception that older people are less likely to have HIV infection should be changed. Most importantly, testing for HIV antibody should be promoted to people of all ages so long as they had undergone unsafe sex or had ever shared needles before. Only through wider coverage of HIV testing that we can achieve early diagnosis and ensure access to appropriate health care, resulting in effective treatment and management of the virus.

Reported HIV/AIDS Quarterly Statistics

2nd Quarter (April - June) 2002

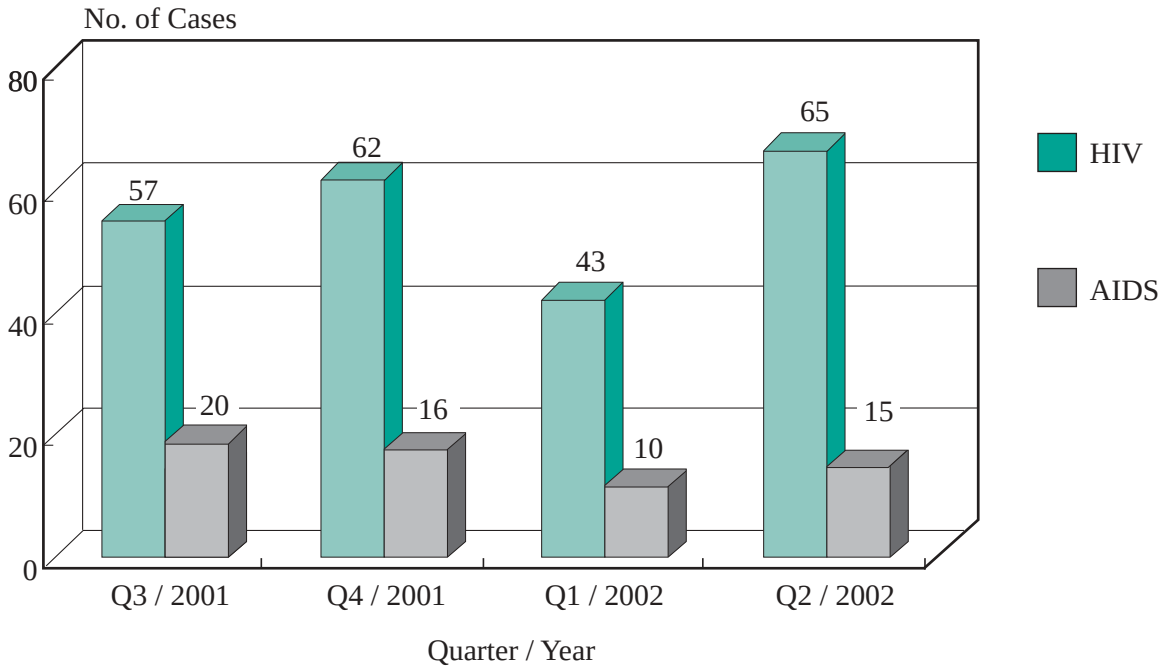
	This Quarter		Cumulative	
	HIV	AIDS	HIV	AIDS
Sex				
Male	55	11	1,524	510
Female	10	4	339	75
Ethnicity / Race				
Chinese	50	13	1,298	459
Non-Chinese	15	2	565	126
Asian	*10*	*2*	*289*	*68*
White	*2*	*0*	*189*	*54*
Black	*1*	*0*	*18*	*2*
Others	*2*	*0*	*69*	*2*
Age at Diagnosis				
Adult	65	15	1,828	575
Child (age 13 or less)	0	0	35	10
Exposure Category				
Heterosexual	39	12	1,067	388
Homosexual	11	3	351	101
Bisexual	1	0	88	29
Injecting drug use	2	0	48	9
Blood / Blood product infusion	0	0	68	19
Perinatal	0	0	14	6
Undetermined	12	0	227	33
Total	**65**	**15**	**1,863**	**585**

Sexually Transmitted Diseases Reporting at Government Social Hygiene Service

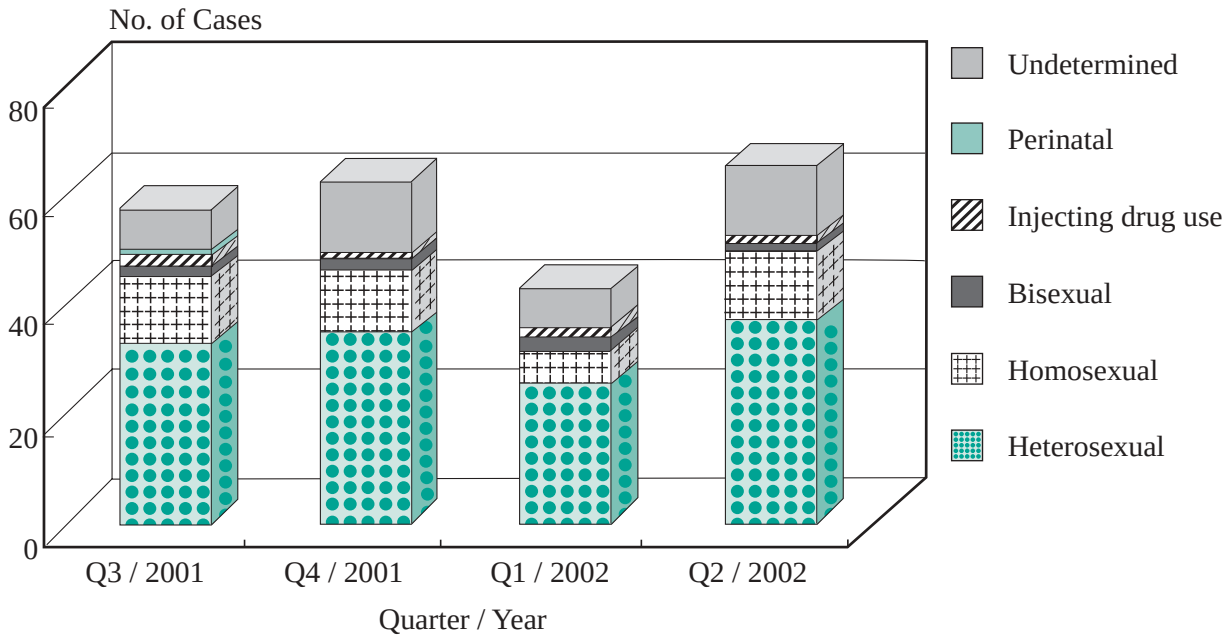
2nd Quarter (April - June) 2002

	This Quarter	Same Quarter Last Year
Syphilis		
Primary	49	60
Secondary	17	18
Early latent	62	81
Late latent	153	124
Late (cardio-vascular/neuro)	1	0
Congenital (early)	0	0
Congenital (late)	0	0
Total	**282**	**283**
Gonorrhoea	857	881
Non-gonococcal Urethritis (Male)	1,816	1,748
Non-specific Genital Infection (Female)	1,734	1,859
Genital Wart	887	863
Herpes Genitalis	375	364
Pediculosis Pubis	85	102
Trichomonas	250	211
Genital Ulcer	122	145
Chancroid / Lymphogranuloma Venereum	1	0
Others	676	782
Total	**7,085**	**7,238**

Hong Kong HIV / AIDS Voluntary Reporting
in recent 4 Quarters

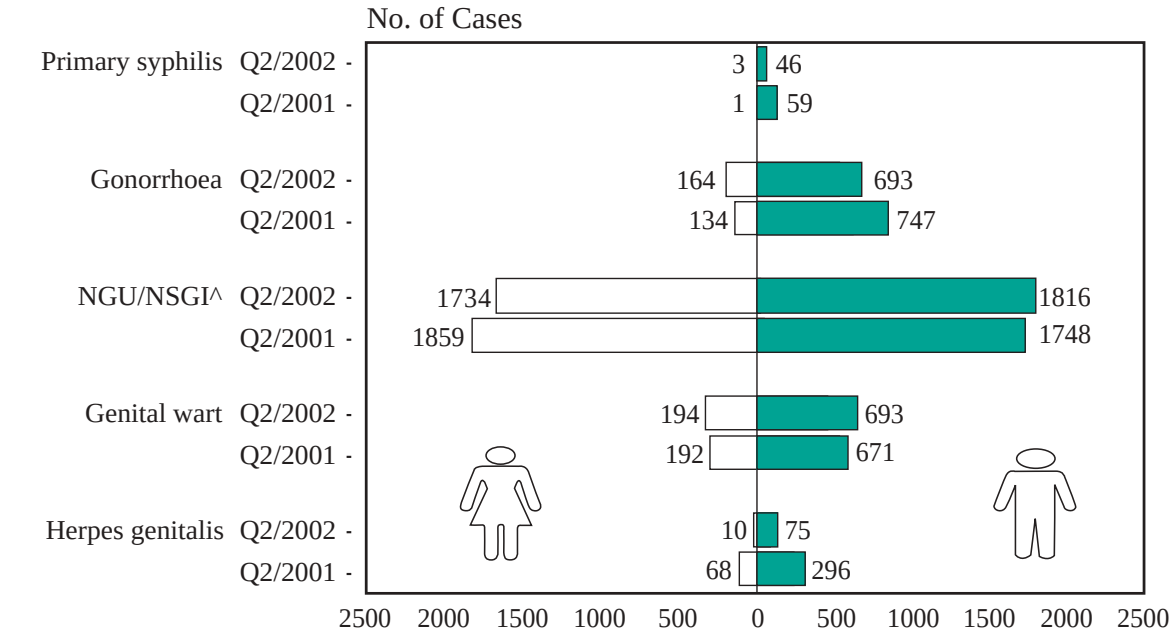


Hong Kong HIV Voluntary Reporting
By Exposure Category in recent 4 Quarters



Sexually Transmitted Diseases Reporting at GSHS*

By sex (2nd Quarter, 2001 & 2002) Hong Kong

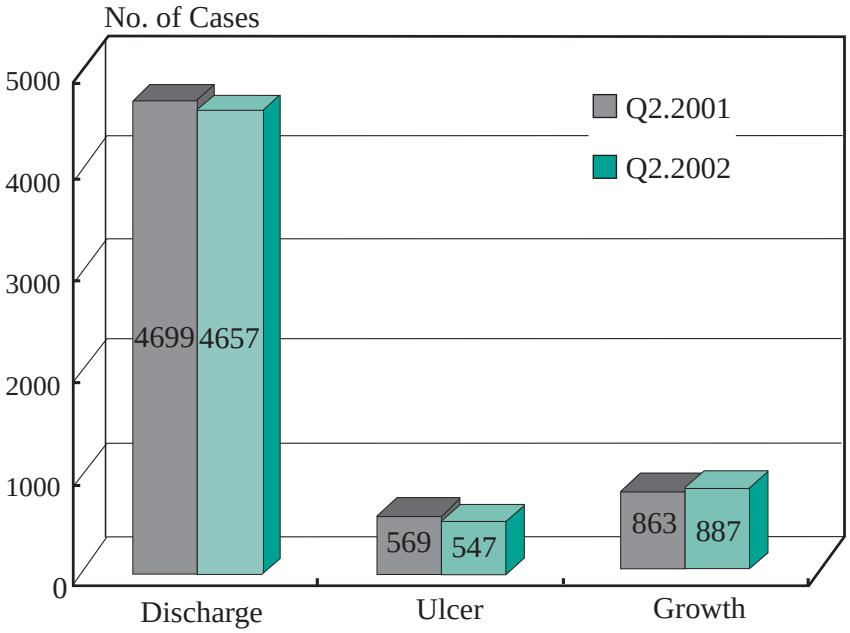


* GSHS: Government Social Hygiene Service

^ NGU/NSGI: Non-gonococcal urethritis/Non-specific genital infection

Syndrome Presentations of STD in GSHS*

(2nd Quarter, 2001 & 2002) Hong Kong



Diseases included under the various syndrome :

Discharge :
- Gonorrhoea
- Non-gonococcal urethritis
- Non-specific genital infection
- Trichomonas

Ulcer:
- Chancroid
- Primary syphilis
- Herpes genitalis
- Non-specific genital ulcer

Growth: Genital wart

* GSHS: Government Social Hygiene Service

An Update on the Epidemiology of STI in Hong Kong

Introduction

Sexually Transmitted Infections (STIs) are important disease for both public health doctors and clinicians worldwide. STIs and its complications like infertility, pelvic inflammatory disease, ectopic pregnancy rank among the top 5 disease categories for which adults seek health care according to the Joint United Nation Programme on HIV/AIDS (UNAIDS). STIs facilitate the transmission of HIV infection which impact further economic and social burden to the society. Most STIs occurred in the sexually active age group who constitutes the major workforce of our community. Hence, public health control strategy based on a good understanding of the epidemiology of STI locally in Hong Kong is absolutely essential and should be of high priority. Currently, Social Hygiene Service (SHS) and the Special Preventive Programme (SPP) of Hong Kong Department of Health are carrying out systematic, ongoing surveillance programs on the trend and patterns of STIs in Hong Kong. The following is an update report of the recent findings.

Epidemiology of STIs

Although no data are available on the patterns of STIs in the general population of Hong Kong as a whole, good and reliable inference may be drawn from the disease statistics on STIs at the Social Hygiene Clinics (SHC or STD clinics) in SHS as it was estimated that 20% of all STIs were seen by the SHC. The SHS in collaboration with the SPP has been collecting background epidemiological information on STIs since 1995. This consistent ongoing activity enables a comparison of the collected data over time.

The total number of clients who attended SHC for STI treatments were increased from 27,764 in 1996 to 40,008 in 2001 (Table1). There was a 44% increase in the total number of patients consulting the SHC during this period of time. The number of attendance decreased during the year 2000 and 2001. This fall in attendance may be due to several reasons: the economic down turn of the society which may impact on the sexual behaviour pattern of the STD clinic clients especially in having commercial sex ; migration of the sexually active labour force to neighboring China to look for jobs; a change in the health seeking behaviour of the population e.g. more patients are using over the counter remedies for self- treatment of STIs and visiting the Traditional Chinese Practitioners (TCP). More male clients attend the STD clinics than female and it was estimated that up to 75% of the attendees belonged to the

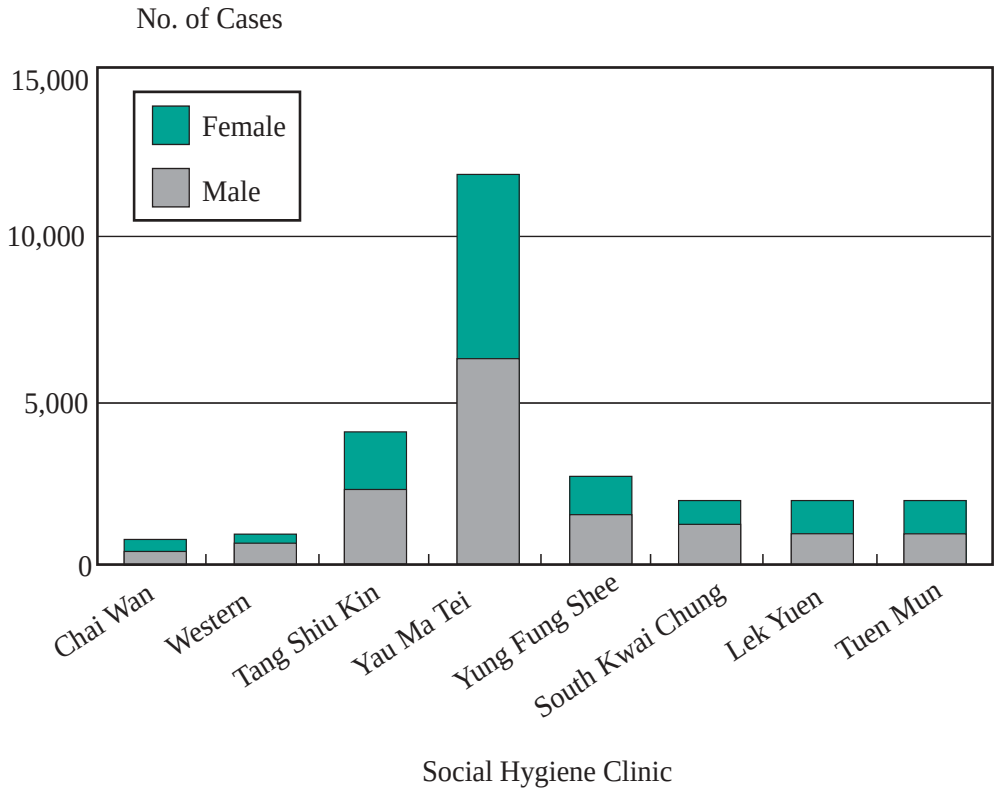
male gender (Figure 1). Most of the clients of SHC are in the age group of 20-40 and the adults constitute the majority of patients infected with STI.

Table 1. The number of STIs diagnosed in SHC from 1996 to 2001.

Year / STI	1996	1997	1998	1999	2000	2001
Syphilis						
Primary	*151*	*228*	*293*	*289*	*271*	*221*
Secondary	*44*	*66*	*69*	*75*	*87*	*60*
Early latent	*113*	*186*	*314*	*321*	*278*	*295*
Late latent	*289*	*249*	*372*	*419*	*354*	*528*
Late (cardiovascular/neuro)	*2*	*15*	*4*	*1*	*0*	*3*
Congenital (early)	*0*	*1*	*1*	*0*	*0*	*0*
Congenital (late)	*1*	*2*	*0*	*5*	*3*	*1*
Syphilis Total	**600**	**747**	**1,053**	**1,110**	**993**	**1,108**
Gonorrhoea	*2,342*	*2,412*	*2,775*	*3,204*	*3,518*	*3,406*
Non-gonococcai urethritis	*5,899*	*6,262*	*7,247*	*7,903*	*7,490*	*6,659*
Chancroid	*2*	*4*	*10*	*1*	*0*	*0*
Lymphogranuloma venereum	*3*	*1*	*9*	*5*	*3*	*1*
Genital Wart	*3,168*	*3,124*	*3,641*	*3,889*	*3,485*	*3,316*
Herpes genitalis	*997*	*1,113*	*1,343*	*1,398*	*1,325*	*1,472*
Pediculosis pubis	*456*	*454*	*493*	*465*	*429*	*381*
Non-specific genital infection	*3,464*	*3,492*	*5,549*	*6,882*	*6,686*	*7,025*
Scabies	*246*	*278*	*327*	*203*	*0*	*0*
Trichomonas	*460*	*533*	*686*	*809*	*943*	*936*
Moniliasis	*2,016*	*2,008*	*2,561*	*2,631*	*0*	*0*
Molluscum Contagiosum	*182*	*189*	*242*	*291*	*0*	*0*
Genital Ulcer	*48*	*58*	*644*	*607*	*812*	*513*
Others	*55*	*49*	*185*	*200*	*2,857*	*2,760*
Total STI	**19,938**	**20,724**	**26,765**	**29,598**	**28,541**	**27,577**
Total attendance*	**27,764**	**29,008**	**37,322**	**40,688**	**39,631**	**40,008**

* Total attendance is tabulated based on the number of clients consulting Social Hygiene Service for STI during that year

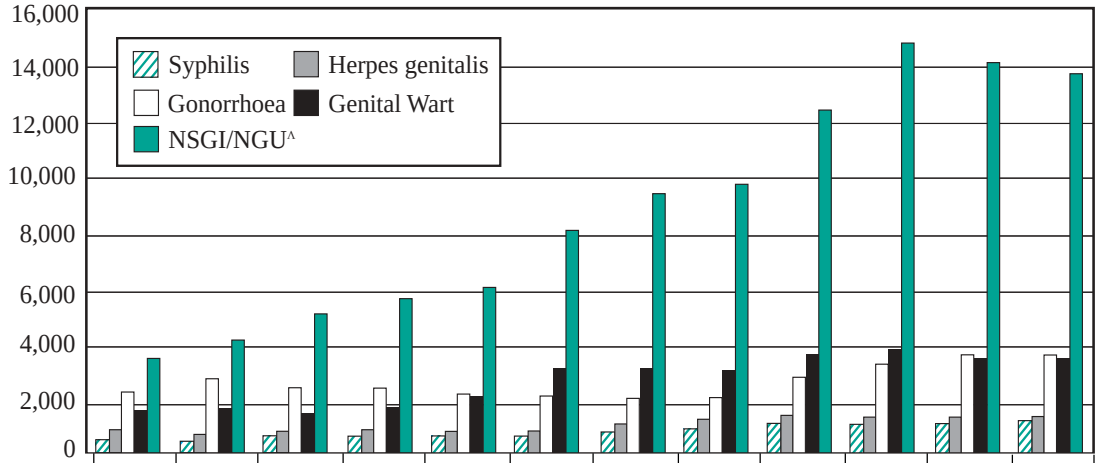
Figure 1. Sexually Transmitted Diseases Reporting at Government Social Hygiene Service By Clinic (2001), Hong Kong



The annual reported cases of diagnosed STI in the SHC were increased since 1990 and slightly decreased in 2000 and 2001 (Figure 2). This drop in the total number of STI cases diagnosed in recent years may partly be due to a decrease in the number of SHC attendance as mentioned earlier or an actual decrease in the incidence of STI in the population during this period of time. For individual STI, non-specific genital infection together with non gonococcal infection (NSGI/NGU) is still the most frequently diagnosed STI in the Social Hygiene Clinics followed by gonorrhoea, genital wart, genital herpes and syphilis in decreasing order of frequency. This frequency order has been the same since 1990. The only exception is that between the period of 1995 to 1999, there were more cases of genital warts diagnosed in the SHC compared with gonorrhoea but this situation reversed again since year 2000. Neisseria gonorrhoea is a readily treatable bacterial STI and a resurgence in importance as exemplified by a higher incidence than other viral STI may mean that there is a change in the biology, transmission pattern and clinical manifestations of the organism. Although NSGI/NGU may be caused by a number of etiological pathogens but chlamydia trachomatis is the most common sexually transmitted organism implicated. It was interesting to note that early infectious syphilis which included primary, secondary and early latent syphilis has increased in number of cases diagnosed from year 1996 to 1999 but begin to decrease in year 2000 and 2001 (Table 1). This decreasing incidence of early syphilis

was also found in the general population. The pattern and trend of the annual reported STIs in the SHC were illustrated in Figure 2.

Figure 2. Annual Reported STIs in Social Hygiene Clinics, Hong Kong SAR



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Syphilis	366	310	421	459	384	382	600	747	1,053	1,110	993	1,108
Herpes genitalis	762	584	719	779	766	796	997	1,113	1,343	1,398	1,325	1,472
Gonorrhoea	2,487	2,996	2,825	2,754	2,521	2,300	2,342	2,412	2,775	3,204	3,518	3,406
Genital Wart	1,727	1,810	1,666	1,898	2,418	2,955	3,168	3,124	3,641	3,889	3,485	3,316
NSGI/NGU ^	3,434	4,330	5,293	5,675	6,190	8,281	9,363	9,754	12,796	14,785	14,176	13,684
Chancroid/LGV*	40	56	57	28	13	9	5	5	19	6	3	1
Pediculosis pubis	304	314	309	298	357	408	456	454	493	465	429	381
Others	1,333	2,046	1,867	1,895	2,199	984	3,007	3,115	4,645	4,741	4,612	4,209
Total	10,453	12,446	13,157	13,786	14,848	16,115	19,938	20,724	26,765	29,598	28,541	27,577

Year

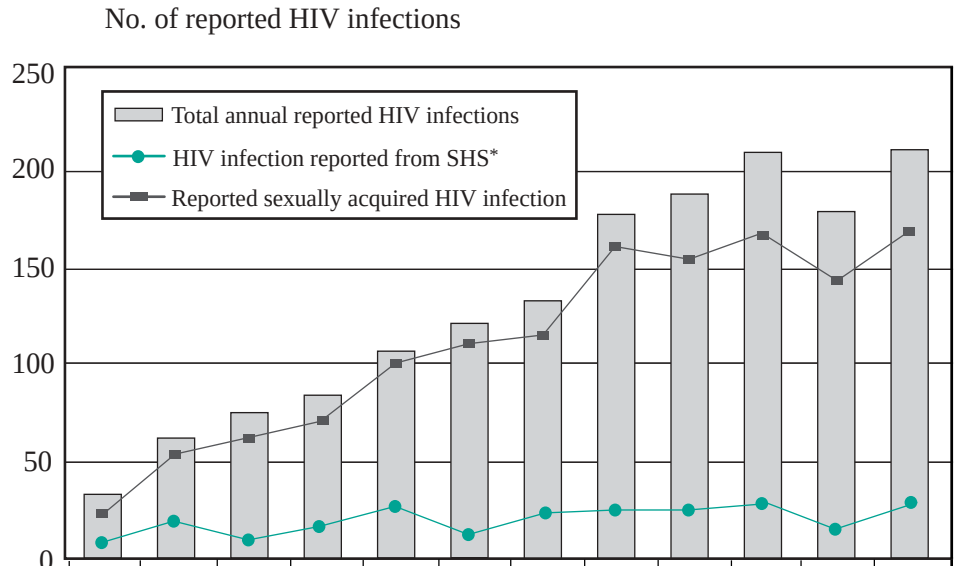
Λ NSGI/NGU : Non-specific Genital Infection/Non-gonococcal Urethritis.

∗ LGV : Lymphogranuloma Venereum.

HIV infection in SHC

Social Hygiene Clinics are important source of diagnosing sexually transmitted HIV infection. As up to 85% of all HIV infection in Hong Kong is sexually acquired, those patients who know they are vulnerable to the HIV virus may well have attended the Social Hygiene Clinics for counseling and treatment of their co-infected STIs. This made SHC an ideal sentinel site for monitoring the HIV epidemic especially in a place like Hong Kong. The yearly trend of the percentage of HIV infection reported from SHS is shown in Figure 3. In year 2001, up to 14.1% of the 213 annual reported cases of HIV infection are from the SHC. The pattern and trend of the HIV diagnosed in SHC may reflect the epidemiology of HIV infection in the population. For example, the figure showed that most of the HIV infection diagnosed in the SHC belonged to the adult category. Further analysis and stratifications of these HIV cases into age groups, gender and ethnicity and follow this over time may give us insight into the future trend and pattern of the local HIV epidemic.

Figure 3. Sexually acquired HIV infection in Hong Kong



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total annual reported HIV infections	34	60	71	79	104	122	134	181	189	213	183	213
Reported sexually acacquired HIV infection	25	55	61	69	99	111	116	160	154	169	141	168
% of reported sexually acquired HIV infection	73.5	91.7	85.9	87.3	95.2	91	86.6	88.4	81.5	79.3	77	78.9
HIV infection reported from SHS*	9	19	12	17	29	14	25	27	27	29	19	30
% of HIV infection reported from SHS*	26.5	31.7	16.9	21.5	27.9	18.7	18.7	14.9	14.3	13.6	10.4	14.1

Year

* SHS : Social Hygiene Service

Conclusion

In summary, despite an increasing trend of STIs diagnosed in SHC since 1990, we observed a decrease in the number of STIs diagnosed in the SHC in year 2000 and 2001 especially in NGU/NSGI, genital warts, genital herpes and infectious syphilis. There is an increase in the reported diagnosed cases of gonorrhoea in 2000 and 2001 compared with previously. We have to monitor the trend for a few more years before coming to the conclusion whether the decreasing trend is persistent or only fluctuating. The reasons for the decrease are probably multi-factorial and may well have reflected a change in the biological, epidemiological, social status and health seeking behavior of the STI clients. SHC remains as a major source of referrals of sexually transmitted HIV infection.

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A Study on the Demographic and Behavioural Characteristics of the Clients at the Social Hygiene Clinics in Hong Kong in 2001*

Objective:

To assess the current situation in sexually transmitted infections among clients attending the Social Hygiene clinics in Hong Kong.

Design:

A cross-sectional study on the socio-demographic and behaviour risk factors of the clients attending the Social Hygiene Clinics in Hong Kong. The data was obtained from an interviewer-administered questionnaire.

Setting:

Ten public Social Hygiene Clinics in Hong Kong.

Participants:

A study population of 1,736 subjects who attended the 10 Social Hygiene Clinics in Hong Kong during a one-month period from 1st to 30th November 2001.

Main outcome measures:

The outcome measures include variables relating to sociodemographic status, STI diagnoses and clinical presentation, sexual behaviour including the frequency of self-reported condom use with regular and casual sex partners and the number of sex partners.

Results:

In this survey of 1,736 subjects, the participation rate is 100%. The age range of the study population was 15-93 years old. (Median age = 38 years). Sixty-eight percent (1,184/1736) of the subjects were males and thirty-two percent (552/1736) of the subjects were females. Ninety-one percent (1,580/1731) of the subjects reported first attendance to the SHS. Seventy-seven percent (1,334/1736) of the subjects were symptomatic on presentation.

* This is an abstract of a dissertation on a yearly survey carrried out by the Social Hygiene Service

There was a higher proportion of male subjects than female subjects who reported 'always using condoms' during sexual contact with regular sex partners over a 3-month period (21.2% vs. 12.9%). Additionally, 32.2% of the male subjects reported using condoms at last sexual contact with regular sex partners compared with 28.5% of the female subjects. There was a higher proportion of male subjects than female subjects who reported 'always using condoms' during sexual contact with casual sex partners over a 3-month period (41.5% vs. 36.2%). Moreover, 52.2% of the male subjects used condom at last sexual contact with casual sex partners compared with 48.9% of the female subjects. Over half of the participants (excluding CSWs) reported one sex partner within the past 3 months. Nearly forty percent of the sex workers reported two to five partners within the past week. In the case control analysis using the 'non-cases' as the comparison group, inconsistent condom users are 1.9 times (OR= 1.9; 95% CI= 1.3-2.6) more likely in acquiring 'curable STIs' and 2.1 times (OR= 2.1; 95% CI= 1.0-4.4) more likely in acquiring gonorrhoea with regular sex partners than consistent condom users. Furthermore, inconsistent condom users are 1.6 times (OR= 1.6; 95% CI= 1.2-2.2) more likely in acquiring 'curable STIs' and 1.3 times (OR= 1.3; 95% CI= 0.8-2.1) more likely in acquiring gonorrhoea with casual sex partners than consistent condom users. Irregular condom users are 1.4 times (OR= 1.4; 95% CI= 1.1-1.9) more likely in acquiring 'curable STIs' and 1.9 times (OR= 1.9; 95% CI= 1.1-3.4) more likely in acquiring gonorrhoea with regular sex partners than regular condom users. Furthermore, irregular condom users are 1.3 times (OR= 1.3; 95% CI= 1.0-1.8) more likely in acquiring 'curable STIs' with casual sex partners than regular condom users. However, we cannot demonstrate the same protective effect of condom usage in the comparison between regular and irregular condom use with causal sex partners in reducing the risk of acquiring gonorrhoea.

Conclusions:

Our survey provides us with a better understanding on some of the socio-demographic and behavioural factors associated with clients attending the Social Hygiene clinics. Consistent use of condoms in sexual contacts with regular and casual sex partners are recommended to reduce the risk of sexually transmitted infections.

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China's Titanic Peril

The UNAIDS second report on HIV/AIDS situation and needs assessment report was released recently. The high-spirited title 5 years ago, *迎戰艾滋病 (China Responds to AIDS)* has now become a disastrous time bomb - HIV/AIDS: *China' s Titanic Peril.*

Astonishing scenes and figures keep emerging through the pages. The followings are some of the highlights: The Ministry of Health estimated the total number of HIV infection in China was 850,000 in 2002 and stipulated that the number could escalate to 10 million by the year 2010 if no countermeasures are taken. The epidemic spreads from the Golden Triangle to Yunnan, Sichuan, Guangxi and Guangdong while the main route of transmission remains the sharing of needles among injecting drug users (IDU). In many parts of China, the rates of sharing needles and HIV infection among IDU were climbing up. A case in point was the situation in Jiangxi. The reported rates of sharing needles among IDU reached 74% and 93% in 1998 and 1999 respectively. In 2000, the reported rate of HIV infection among IDU in selected sentinel sites was 17% and JiangXi became the sixth province where the epidemic among IDU began. On the other hand, the economic reform in the last decade has brought not only the money but also problems derived from large migrant population, sexually transmitted infection (STI), its management and its economic impact on the health care system as a whole. The total reported STI cases were around 800,000 in 2001 while that in 1991 was just less than 20,000. Moreover, a report in Gansu showed that only one fifth of all the STI cases were reported. In Yunnan, HIV positivity among male STI patients ranged from 1.8% to 8.1%. And in Guangxi, HIV positivity among prostitutes in the sentinel sites was around 10%. Last but not least, the 'plasma selling' in Henan, the general lack of knowledge among many risk groups, the lack of confidentiality, anonymity and care to the infected are indicating the Chinese population is on the verge of a catastrophe.

In a nutshell, the report pointed out that the deep rooted *ignorance, poverty, discrimination, the lack of political commitment in many levels of the governments* and good *governance* are the HIV/AIDS vulnerabilities in the Chinese context. It is therefore of utmost importance that all levels of the government acknowledge the crudely reported figures and take immediate action. Be determined to take up the commitment, develop strategy and policy based on available analyses and international consensus and carry them out. The current STI care system has to be addressed and improved. Finally, indiscriminate care and treatment should be made accessible to those unfortunately infected ones, possibly a million already.

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Erratum

There is an error in the Table 8. HIV seroprevalence among patients attending government TB & Chest Clinics, from unlinked anonymous screening of urine samples (1990 - 2001) of the Hong Kong STD/AIDS update, Vol. 8, No. 1, Quarter 1 2002. At column 2 (from the left), "No. of blood samples" should be "No. of urine samples".

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