## **PROCEEDINGS**

Hong Kong AIDS Conference 1996

8-9 November 1996 Lam Woo International Conference Centre Hong Kong

## Building New Hope Together

Hosted by the Advisory Council on AIDS, Hong Kong Sponsor: Department of Health, Hong Kong

#### **Foreword**

Hong Kong AIDS Conference 1996, under the theme of **Building New Hope Together** is the first ever local AIDS Conference in Hong Kong. The Conference which is a landmark event in the history of Hong Kong's response to the pandemic turns out to be a very successful event. There were some 330 local registered participants and 60 overseas delegates, the latter mainly came from China and Macau. Over 400 guests and participants had turned up at the Conference.

The programme of the Conference was categorised under the following formats: (I) Plenary session, (II) Symposia with oral presentations of the abstracts, (III) Poster presentations of abstracts, (IV) Exhibits of units and organisations working on HIV/AIDS, (V) Rapporteur/closing session. The presentations of the Symposium and Poster were organised in 6 tracks: Track A: Public Health Aspects of HIV/AIDS, Track B: Clinical Management of HIV Infection, Track C: Social Impacts & Responses, Track D: Prevention & Education, Track E: Psychosocial aspects of HIV Care, and Track F: Role of NGOs in HIV Prevention & Care. There were in total 76 (excluding the 3 plenary speeches) abstracts received for presentations of which 35 went to the 6 Symposia for oral presentation and the rest were put on Poster presentation.

This proceedings collected 3 plenary speeches and 45 full papers covering a wide range of important topics from the 6 tracks. The papers are arranged according to the sequence of Plenary Session and the six Symposia from Track A to F. This may provide a quick reference guide to the readers in selecting papers.

The Editorial Board would like to give thanks to Dr. Joe Thomas, all the supporting organisations and all the members in the Organising Committee for their assistance in editing the proceeding papers. We hope this proceedings can serve as a concise summary of Hong Kong AIDS Conference 1996 and the local efforts towards the prevention, care and control of HIV/AIDS in the past decade.

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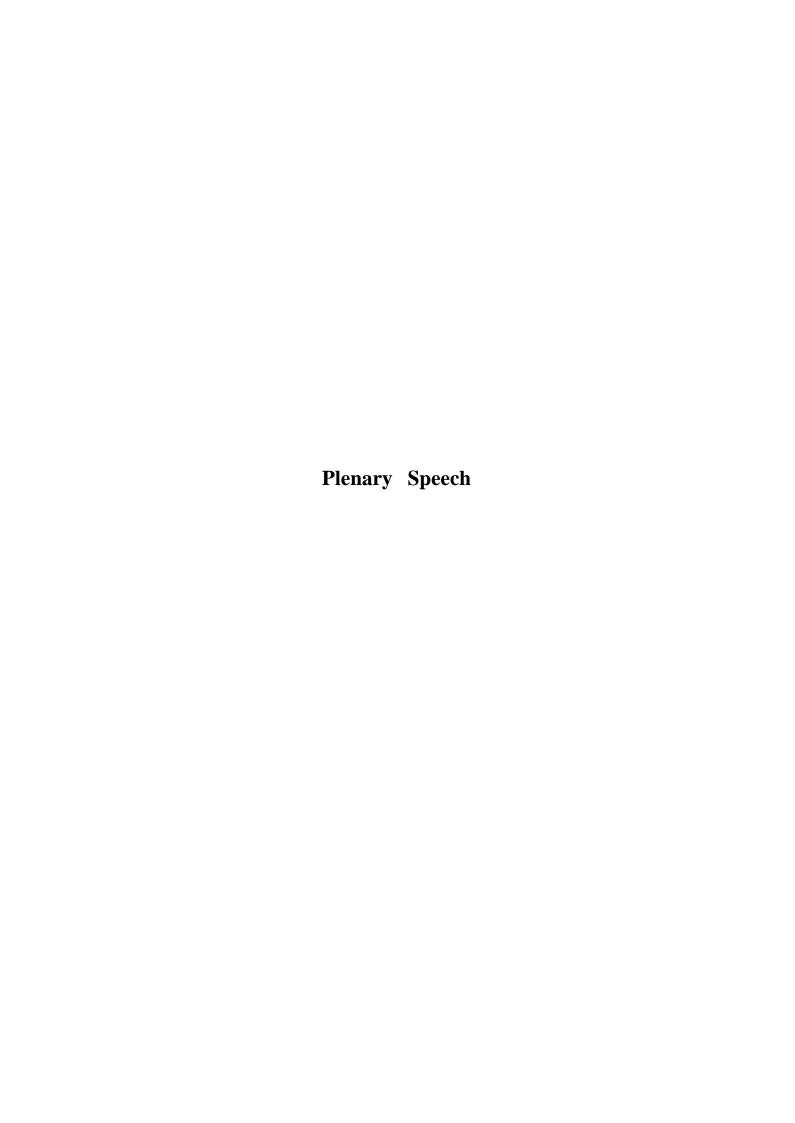
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#### Discrimination and HIV/AIDS - a local perspective

#### Anna Wu

#### History relating to anti-discrimination laws

The International Covenants on Civil and Political Rights and on Economic, Social and Cultural Rights were extended to Hong Kong in 1976.

The Hong Kong Bill of Rights was proposed after the June 4th tragedies in Beijing in 1989. Upon enactment, the Bill's scope was limited to the public sector and excludes the private sector. In the area of discrimination in particular it was felt that detailed laws would be required.

Despite a government commitment given, anti-discrimination laws were only proposed by government under pressure from my Private Member's Bills on Equal Opportunities and for the establishment of a Human Rights and Equal Opportunities Commission.

The Disability Discrimination Bill became law in 1995.

#### Special aspects relating to advocacy

Unlike the area of gender discrimination where women can at least point to the numbers and start using the voting rights to advocate for rights protection, the disabled do no command the same circumstances for advocacy.

There is a lack of anti-discrimination culture in Hong Kong. The disabled are especially vulnerable to isolation and attacks from the public. In the case of the mentally-ill and HIV/AIDS patients, the victims and their families are most vulnerable to public exposure and ridicule. These are also areas where the victims are least able to advocate for their own protection.

Generally victims and their families are cautious advocates, try not to cause additional resentment and attacks from the public. Integration requires acceptance and understanding. Education and public participation are of particular importance.

#### Reasons for anti-discrimination legislation

Laws set benchmarks which reverse the cultural burden of proof in favour of the victims. Laws help the community to learn faster. It is a proactive tool for education. Laws dictate that resources be allocated to deal with these problems. Unless there are laws there simply is no commitment on the part of the private sector or the government to change things.

Those who do not support legislation fear that anti-discrimination measures will be costly to business and taxpayers. Definitely resources will be required but in the long run businesses gain on more efficient and objective use of human resources and the community reduces its welfare budget.

#### The need for a proactive agenda

Employers should be proud of being equal opportunities employers and be encouraged to undertake anti-discrimination programmes and adopt, not just minimal standards, but good practices. It is worth our while to consider providing tax incentive schemes for appropriate programmes such as developing special equipment and job sites for the disabled.

Trade unions should be encouraged to discuss the issues and set up programmes to deal with workplace relationships .

Successful Programme examples else where reflect the need to discuss the issues openly at the workplace. These discussions have led to increased awareness and participation which in turn have led to good practice and active advocacy and volunteer work.

Government should take the lead and be the role model. Comprehensive policy should be developed for the employment of the disabled and those suffering from HIV/AIDS.

## Interrelationship Between Hong Kong and China in AIDS Prevention and Control

KL Zhang, China AIDS Network

More than a decade has passed since the first case of AIDS was reported in China in 1985. During the first several years after its initial recognition. AIDS was regarded by most of Chinese as a foreign disease with homosexuals or drug abusers as it victims. However, the rapid increase of HIV infection soon changed our optimistic view of the situation. Until 1988, only 32 cases had been reported to the Chinese National AIDS Surveillance Centre, yet by the end of 1995 equivocal, the most probable of which would be the transfusion of tainted blood., the publicised cumulative number of HIV infection had reached 3341, more than 100 - fold higher than in 1988. Taking account of the widespread underreporting, it is estimated that presently there are no less than 100,000 HIV carriers within the whole country. According to the recent epidemiological data, there are three main patterns of HIV transmission in China. Transmission through intravenous drug use, which most commonly occurs in Yunnan province in Southwest part of China. Accounts for the majority (70%) of HIV infection. However, the proportion of infection by sexual has been steadily increasing and by now has contributed as much as 20% to the overall infection. The underlying cause of the rest 10% remains Furthermore, vertical transmission from mother to child was also recognised, foreshadowing the spread of the disease among the general population.

Indeed, we have been in the era of AIDS. In China, it is also an era of Change, The economic reform since 1979 not only brought forth radical improvement of the material life of Chinese people, but also had considerable impact on their attitudes toward life and their norms of behaviour, with sex in particular. Within this social context, multiple factors facilitating the spread of HIV are emerging making Chinese more susceptible to this devastating disease. Data gathered from both government and NGO have revealed that attitudes toward sexuality among Chinese have become more and more open and liberal. An increasing proportion of people regard sex out of wedlock as 'acceptable'. In campuses, 70% of college students show their approval of premarital sex. 18% of male senior undergraduates and 17% of female in Shanghai admitted having experienced sex. Prostitution, though illegal, together with sexually transmitted diseases, are on the rapid rise. In 1995, 40,000 cases of STD were reported, but this only stands a small proportion of the real figure. Furthermore, situation is complicated by the massive migrating population (8 to 10 million) within the country with most people being unemployed, sexually active and quite liable to have 'casual'. Unless forceful measures are implemented timely and effectively, sexual contacts especially heterosexuality will soon eclipse intravenous drug use to become the predominant mode of HIV transmission, as what is miserably occurring in numbers of countries in the developing world. Another important risk factor is that there is a enlarging population of drug abusers in China with more and more people beginning to adopt intravenous drug injection. On the other hand, the vast majority of Chinese lack basic knowledge about HIV/AIDS and still show great ignorance about how to prevent HIV infection. Considering China's huge population, with its medical care facilities far from being sufficient, it is very probable that, in the foreseeable future, a HIV epidemic is to occur within the country.

In response to this imminent threat of HIV, both Chinese government and community organisations have made painstaking efforts to prevent the nightmare some nations are suffering from becoming ours. Laws and regulations have been enacted, varieties of preventive programs implemented, surveillance centres established all over the country, and multiple campaigns aimed

at behaviour change have been launched extensively through mass media as well as traditional measures such as posters, pamphlets and lectures. In spite of all these approaches and endeavours, however, we have no leisure to be satisfied with the modest progress we have made, if any. AIDS, a disease of infectivity, is by no means a mere health problem of one government, but a shared social issue of whole mankind which only through collaboration internationally, across regions or cultures, can be expected ultimately conquered. It is of prior importance, therefore, that China and Hong Kong build up a strong relationship in AIDS prevention and control, not only because of our closeness both geographically and culturally, of more and more intimate relationship socially and economically, but also because of the massive migrating population we share to and from across the border, and of Hong Kong's abundant experiences in AIDS prevention that has preceded China in her own cause. As director of China AIDS Network (CAN), an NGO dealing with social and behavioural dimensions of AIDS research, I am pleased to notice that our collaboration has already had its roots in multiple co-operative activities we had in the past few years. Started from medium-term plan (MTP) which has been successfully running for several years, through governmental visits, study tours, workshops and seminars, and co-operative research projects, there has been a rich array of exchange and collaboration of government officials, public health workers and AIDS specialists between Hong Kong and China. It is thus of utmost significance that here today upon the opening of Hong Kong AIDS Conference we take this opportunity to further improve and reinforce our working relationship in our quest for a better world. Only together can we look forward to building new hope for the future -- for tomorrow.

#### Global and Regional Response to HIV/AIDS

#### Emile Fox, UNAIDS

Fifteen years after the first AIDS cases were recognised, the HIV/AIDS epidemic continues to progress fast. The focus of the epidemic is currently shifting from Sub-Saharan Africa to South and South-East Asia. In mid-1996, cumulative HIV infections reached 28 million world-wide, more than 5 million of them in Asia.

Nearly ten years after the initial world response was established, a major reform of the global response to AIDS became imperative, in order to meet the complex long-term challenge of HIV/AIDS world-wide. In fact, during the mid-nineties it became crucial to expand the response. While direct health interventions and actions to influence the immediate aspects of AIDS prevention and care still need to be continued and intensified, innovative action will become imperative to address the broader context of the epidemic, including its manifold socioeconomic aspects.

It is before this evolving background that the Joint United Nations Programme on HIV/AIDS (UNAIDS) was established in January 1996 as a co-sponsored programme bringing together 6 UN agencies (UNICEF, UNDP, UNESCO, UNFPA, WHO and World Bank). UNAIDS is a novel joint UN programme, but not a new UN agency. It can be considered as a fore-runner of the profound reforms that the entire UN system is expected to go through over the next couple of years.

At the level of the individual countries, the international response to AIDS is managed through UN Theme Groups on HIV/AIDS, established under the aegis of the country's UN Resident Co-ordinator. Members of the Theme Groups comprise Representatives of the 6 cosponsoring agencies. Theme Group meeting are held regularly under the chairmanship of one of the UN agency Representatives, who by consensus is elected on a rotational basis. So far, 31 Theme Groups have been established in Asia and the Pacific. The terms of reference of these Theme Groups accord with the focus of UNAIDS, which is to strengthen national capacities and to ensure a long-term sustainable response.

UN Theme Groups are supported by Country Programme Advisers (CPA) stationed in 9 Asia/Pacific countries. CPA also provide technical, policy and management advice to the various partners and promote international best practice in the different intervention fields. In addition, an inter-country technical collaboration team stationed in Bangkok supports AIDS prevention activities in the Asia-Pacific region.

UNAIDS in countries has an overall co-ordination and facilitating role, but does not implement or fund any particular projects. Moreover, while UNAIDS supports and strengthens national co-ordination in countries, it does not substitute for it, since the national authorities remain responsible for the co-ordination of national AIDS activities at all levels and also for external assistance, including that from UNAIDS itself.

The global funds spent on HIV prevention world-wide were estimated some years ago by GPA to exceed 1 billion USD yearly, excluding costs for treatment. During the bi-annum 93/94, the UN system as a whole spent an estimated 350 million USD on HIV prevention activities, while bilateral donors spent an additional estimated 350-400 million.

The UNAIDS bi-annual budget for 96/97 amounts to 120 million USD, of which 67 million had been secured by August 1996. In addition to the traditional donors (led by the United States with 18 Million USD), non-traditional donors have joined UNAIDS funding, like Russia and China, which has pledged a yearly 100,000 USD to the UNAIDS core budget.

Finally, the efficiency of the global HIV/AIDS action will be evaluated in the future against the 4 major objectives of UNAIDS, which are [1] the extend of the expanded national response, [2] the achievement of strong commitment by governments to an expanded response, [3] the strengthening of a co-ordinated UN action at the global and national levels and [4] the development in countries of international best practices.

# Symposium A:

# Public Health Aspects of HIV/AIDS

#### AIDS Surveillance For The Selected Traveller Entry From Baiyun Airport, Guangzhou, 1990~1995

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#### **Abstract**

AIDS surveillance to the selected entry travellers is one of the important programs of AIDS control in China. Sero-antibodies of HIV of the selected Chinese population travelling at least for 3 months in the AIDS reported countries and areas entry from Baiyun Airport of Guangzhou during 1990-1995 were detected. ELISA and PA were selected as the screening methods and the screened positives were determined by West Blot method (WB). 47,490 of the selected people were detected during the 6 years, 35 of whom were determined as HIV-seropositive and the positive rate was 0.074%. Among whom, 29 were male (82.9%) and the sex ratio was 4.8:1. The average age was 33.9 and 70.0% of whom distributed at the 20-40 years group. The major professions of the positives were businessmen (31.0%), professionals (17.1%), workers (14.3%) and farmers (14.3%). The 35 HIV-positives travelled in 9 countries and areas respectively. But the travelling sites focused at Thailand (25/35,71.4%). The majority of the 25 cases travelled in Thailand for short periods. The risk factors of AIDS were explored, out of the 35 positives, 58.2% (21/35) of whom had the history of blood transfusion and injection, and 57.1% had wild sex experiences. The results of the 6 years' investigation show that the surveillance to the selected population for AIDS control is important significantly and suggest that the selection for the risk population and the detected methods should be improved further by the principles of social and economic effects.

#### Introduction

AIDS surveillance to the selected entry traveller is one of the important program of AIDS control in China. It's also one of the diseases control by the Quarantine Service. This paper reported the AIDS surveillance for the selected traveller entry from Baiyun Airport Guangzhou during 1990-1995.

#### Target population and methods

#### Target population:

The selected Chinese people travelling at least 3 months in the AIDS reported countries and areas, including businessmen, labourer, government functionary, tourists etc.

#### Methods:

ELISA, PA, QT etc. were used for primary screening, the positive samples should be tested again, if the results of the two tests were all positive, the sample should be sent to the national level laboratories for AIDS confirmation which were determined by the Ministry of Public Health.

#### Results

47,190 of the selected people were detected from 1990-1995, 35 of whom were determined as HIV-seropositives and the positive rate was 0.074% (Table 1). Every year the HIV positives were much more from 1990, in 1992 the positive rate was 1.62.

Table 1 The results of HIV antibody tests from 1990-1995

Year	Persons Tested	Positive Cases	Positive Rate %
1000	2712		0.000
1990	3512	1	0.028
1991	4790	3	0.063
1992	8006	13	0.162
1993	8999	4	0.044
1994	9181	3	0.033
1995	13003	3	0.023
Total	47490	35	0.074

The sex distribution of the 35 HIV positive people is shown in Table 2. The sex ratio was 4.8:1. The reason why the male positives were more than females was that more males travelled aboard and they had sexual contacts with prostitutes in some countries or areas.

Table 2 The sex and age distribution of the 35 HIV antibody positive cases

Age	Male Positives	Female Positives	Cases	Rates (%)
~20	0	0	0	0
21~30	11	2	13	37.1
31~40	11	4	15	42.9
41~50	5	0	5	14.3
51~60	2	0	2	5.7
Total	29	6	35	100.0

From Table 2, it is known that the positives were 28 of age 21 to 40; average 33.9 years old. It account for 70 per cent of the total. It was noted that all the female HIV positives were among this age group. According to the epidemic surveillance, 90 per cent of the positives had the experience of unsafe sexual contact history.

The occupation distribution of the 35 HIV antibody positive cases is shown in Table 3. The major profession of the positives were businessmen (31.4%), professionals (17.1%), workers and farmers (28.6%). Those people were in rich and floating population, they were short of health knowledge and didn't know how to protect themselves from STD/HIV. When they lived in high AIDS morbidity areas, the chance and risk of infected with HIV were increasing and they were the target population of AIDS surveillance.

Table 3 The occupation distribution of the 35 HIV positive cases

	Business	Clerk	Worker	Farmer	Unemployed	Seamen	Uncertain	Total
Cases	11	6	5	5	4	1	3	35
Rate (%)	31.4	17.1	14.3	14.3	11.4	2.9	8.6	100

The region distribution of the 35 HIV antibody positive is depicted in Table 3. The 35 HIV-positives travelled in 9 countries and areas respectively. But the travelling sites focused at Thailand (25/35,71.4%). The majority of the 25 cases travelled in Thailand for short time. Duration of travel was between 3 months to one year for 32% of cases. Thailand is one of the high AIDS morbidity countries in south-east Asia, we should pay more attention to those people from high AIDS morbidity area such as Thailand, Africa.

Table 4 The region distribution of the 35 HIV antibody positive cases\*

	Thai	Kampuchea	Malay	Indone	Philip	Kenya	Ghana	Curacao	HK	Total
Cases Rate (%)	25 71.4	2 5.7	2 5.7	_	_	_	_	1 5.7	1 5.7	

<sup>\*</sup> Thai=Thailand Malay=Malaysia Indone=Indonesia Philip=Philippines

The risk factor of the 35 HIV antibody positive cases is listed in Table 5. The risk factor of AIDS were explored, out of the 35 positives, 58.2% (21/35) of whom had the history of blood transfusion and injection, and 57.1% had wild sex experience. So it was mainly transmitted by unsafe sex behaviours and blood transfusion.

Table 5 The risk factor of the 35 HIV antibody positive cases

		Injection	Blood Transfusion	Uncertain	Total
Cases	20	12	9	4	35
Rate	51.1%	34.3%	25.7%	11.4%	100

#### Conclusions

The results of the 6 years' investigation show that the surveillance to the selected population for AIDS control is important significantly and suggest that the selection for the risk population and the detected methods should be improved further by the principles of social and economic effects. Strengthening surveillance of AIDS at port is an effective way to prevent it from introducing and spreading. Meanwhile we should provide some information for international travellers regarding HIV transmission and how HIV infection can be prevented.

#### References

Li, Z.C. (1993). AIDS Surveillance at the Frontier of Baiyun, Guangzhou. *Chinese Journal of Frontier Health and Quarantine* 116:4, 205-206. (Chinese)

Zhong, Zhenqiang (1996). The surveillance on AIDS among key population Guangdong Frontier Port in 1986 -1995. *Science of Travel Medicine* 12:3, 101-104.

#### Behavioural Surveillance for AIDS Prevention in Hong Kong - A Pilot Study

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#### **Abstract**

The main objectives of this study are to assess AIDS related behaviours in various local communities, and to develop a protocol of behavioural surveillance for long term monitoring and evaluation of AIDS programme in Hong Kong. Existing routine data from methadone clinics of Department of Health and Shek Kwu Chau Treatment and Rehabilitation Centre (SKCTRC) collected from 1990 to 1994, and existing data of Street Addicts Surveys conducted in 1992 to 1994 were reviewed and analysed. Surveys by face to face interview using a specially designed questionnaire were carried out in the Special Medical Clinic (SMC) of AIDS Unit of Department of Health and Social Hygiene Clinics (SHC) of Department of Health between November 1994 and June 1996. Analysis of data in drug users revealed that the proportion of injecting drug users (IDU) was decreasing in all 3 groups - clients of SKCTRC, methadone clinics and street addicts. The proportion of needle sharing was decreasing in IDU attending methadone clinics and SKCTRC but remained steady in street addicts. Male attendees of SMC and SHC had more sexual partners, especially those attending SHC, than the female attendees. The overall condom usage rate varied from about 30% to 60%. Condom use was commoner when the attendees had commercial sex. About one third of them had never used condom when they had sex with regular partners or other non-commercial partners. The data on drug taking practice show improving trend with regard to AIDS prevention. Although the primary aim of data collection in different groups of drug users is not for AIDS related behaviour monitoring, they provide useful information for such purpose. Moreover, as the system has been established for a number of years and has the benefit of continuing trend monitoring, it should therefore be continued while the possibility of modification can be further explored. On the other hand, behavioural surveillance for high risk sexual behaviour has just started. The feasibility of incorporating it into the existing service and for other target groups needs to be further examined. The data collected in SMC and SHC provide very useful baseline and they show that high risk sexual practice still warrant attention.

#### Introduction

The current surveillance system on HIV/AIDS in Hong Kong includes voluntary reporting, serosurveillance of selected groups and unlinked anonymous screening (UAS). However, this system only monitors the occurrence of HIV/AIDS which is already the end result of a variety of risk behaviours. As the infection transmitted mainly through high risk behaviours, namely unsafe sex and needle sharing, close monitoring of these behaviours would be crucial before the disease actually occurs.

A pilot study of behavioural surveillance for AIDS prevention was commenced in late 1994 with a view to assess AIDS related behaviours in various local communities, and to develop a protocol of behavioural surveillance for long term monitoring and evaluation of AIDS programme in Hong Kong. This paper summarises the experience in the last 2 years.

#### **Methods**

The study consisted of two parts: analysis of the existing data on AIDS related behavioural surveillance and analysis of data collected in different sites using a newly designed questionnaire.

#### **Existing Data**

Existing surveillance activities for monitoring high risk behaviours, namely unsafe sex and needle sharing, were assessed and reviewed. Possible contact points for research e.g. Social Hygiene Clinics, methadone clinics, etc. were approached to review for any existing data on

AIDS related behavioural data. Raw data as well as summarised data were collected for further analysis.

After communicating with some institutions and organisations, it was found that behavioural data on illicit drug use were routinely collected from drug users attending methadone clinics and Shek Kwu Chau Treatment and Rehabilitation Centre (SKCTRC). Methadone clinics are out-patients clinics operative under the Department of Health. They mainly provide a maintenance programme, although detoxification programme is also possible. Every newly registered drug user attending any methadone clinic is interviewed and examined by a physician. Risk assessment including behaviours relating to drug taking is made. Routine data collected in 1990 to 1994 in all 25 methadone clinics were retrieved for analysis. SKCTRC, on the other hand, is an inpatient centre operated by the Society for the AIDS and Rehabilitation of Drug Abusers (SARDA), the largest provider of voluntary in-patient treatment and rehabilitation services in Hong Kong. The Centre has been collecting behavioural data from all inmates in the past few years. Relevant AIDS-related behavioural information collected from 1990 to 1994 were analysed.

Another data source was through the Street Addicts Survey. The Survey was commenced by the Working Group on Drug Abuse and AIDS of the Committee on Education and Publicity on AIDS, one of the three Committees of the Advisory Council on AIDS. It had been carried out annually since 1991 by trained volunteer. Data on AIDS-related behaviour collected from 1992 to 1994 were reviewed and analysed.

#### **Novel Behavioural Surveillance**

A specially designed questionnaire was used to collect data in different high risk communities. The questionnaires consists of three parts: (1) personal particulars; (2) sexual practice including number of partners, sex network, condom use, source of condom and perceived risk; (3) drug using behaviours including injecting drug use, needle sharing practice, number of partners sharing the needles and frequency of needle sharing.

Subjective and objective estimation of condom use were assessed. For subjective assessment, clients were asked to estimate the frequency of condom use in their usual sexual practice with different kinds of partners. For objective assessment, clients were asked to recall whether condom was used in the last 3 intercourse. Similar questionnaires consisting of same core questions with slight modifications were used in different target groups.

Two data sources were reviewed in the study - Special Medical Clinic (SMC) of AIDS Unit of Department of Health and Social Hygiene Clinics (SHC) of Department of Health. Two rounds of survey were carried out in SMC, from November 94 to August 95 and from September 95 to April 96. All clients attending the clinics for blood screening of HIV infection were interviewed. Interviews were also conducted in 2 SHC in November 94, in 7 SHC from July 95 to September 95 and in 8 SHC from March 96 to June 96. All patients with newly diagnosed sexually transmitted disease were invited for an interview. The data were collected by interviewer, usually a nurse of the same clinic or staff from the AIDS Unit.

As the project is still going on, only preliminary results on part of the data would be presented in this paper.

#### Results

#### **High-Risk Drug Taking Behaviours (Table 1)**

Analysis of the existing data from the drug users showed that the proportion of injecting drug users (IDU) in street addicts was high, ranging from 69.6% to 82.6%. The figure was greater than that in the newly registered clients of methadone clinics (19% to 30.3%) and SKCTRC (55.1% to 82%). The proportion of the injecting drug users, however, was decreasing in all 3 groups.

About 70% of IDU of the street addicts had shared needle. This proportion was very much greater than that of IDU attending methadone clinics and SKCTRC, with figures ranging about 5% to 10% and 8% to 40% respectively. The proportion sharing needle was decreasing in IDU attending methadone clinics and SKCTRC while remained steady among street injecting users.

#### **High Risk Sexual Behaviour (Table 2)**

As the sexual practice of commercial sex workers (CSW) would be very much different than that of non-CSW, the data collected in SMC and SHC were analysed separately in this regard. It was found that CSW especially female CSW obviously had more sexual partners than non-CSW. For non-CSW, male clients had a mean of 4 to 12.6 sex partners in the year before the interview, which was greater than that of the female clients which ranged from 1.2 to 2.9. Male clients attending SHC had more partners than those attending SMC while the number of partners for female clients attending both clinics was similar.

Condom use was commoner when clients were having commercial sex in which less than 10% of client claimed that they never use condom. However, about one third of them had never used condom when they had sex with regular partners or other non-commercial partners. The overall objective condom usage rate vary between 30% and 60%. CSW had higher condom usage rate than non-CSW.

Table 1 Analysis of high risk drug taking behaviour

			Injecting drug users (IDU)		Ever shar	red needle
	Target	Total no. of	No. of	% among all	No. of	% among
Year	groups*	respondents	Persons	respondents	Persons	IDU
90	MC	941	285	30.4%	30	10.5%
	SKC	50	41	82.0%	16	39.0%
91	MC	1126	258	22.9%	28	10.9%
	SKC	426	315	73.9%	66	21.0%
92	MC	1080	238	22.0%	13	5.5%
	SKC	432	311	72.0%	64	20.6%
	SA	314	258	82.3%	183	70.9%
93	MC	1193	232	19.6%	17	7.3%
	SKC	709	416	58.8%	48	11.5%
	SA	496	345	69.6%	243	70.4%
94	MC	1870	355	19.0%	24	6.8%
	SKC	661	364	55.2%	30	8.2%
	SA	404	285	70.5%	210	73.7%

<sup>\*</sup> MC - Newly registered drug users attending methadone clinics

SKC - Drug users newly admitted to Shek Kwu Chau Treatment and Rehabilitation Centre

SA - Street addicts

Table 2 Analysis of high risk sexual behaviour

			N	ever use condo	om	
		Total no. of partners	with	with	with	overall
	Total no. of	in past 1 year	regular	commercial	other	condom
Target groups *	respondents	[median (mean)]	partners	partners	partners	usage rate
Non-CSW <sup>Ψ</sup>						
SMC I M	418	2 (4.0)	29.1%	9.0%	37.3%	53.3%
F	110	1 (2.5)	20.9%		25.9%	46.2%
SMC II M	410	2 (4.7)	29.4%	6.9%	27.8%	55.8%
F	103	1 (1.9)	32.4%	0%	33.3%	42.5%
SHC I M	193	5 (7.5)	38.1%		39.5%	29.2%
F	46	1 (1.2)	30.2%		20.0%	29.9%
SHC II M	1021	3 (12.6)	37.6%	8.6%	23.7%	56.0%
F	365	1 (2.9)	40.3%	0%	55.6%	51.4%
SHC III M	1120	4 (8.5)	34.6%	9.4%	21.9%	58.0%
F	327	1 (1.7)	35.6%	0%	50.0%	47.4%
$\mathbf{CSW}^{\ \Psi}$						
SHC I F	59	58 (101)	27.1%	1.8%	0%	63.2%
SHC II F	49	102 (388)	42.9%	0%	0%	67.0%
SHC III F	63	271 (689)	58.6%	1.7%	20.0%	5.3%
SMC & SHC M	6	4.5 (12.5)	50%	20%	100%	62.5%

Target groups \*

SMC I: clients attending Special Medical Clinic from November 94 to August 95

SMC II: clients attending Special Medical Clinic from August 95 to April 96

SHC I: clients attending Social Hygiene Clinics in November 94

SHC II: clients attending Social Hygiene Clinics from July 95 to September 95

SHC III: clients attending Social Hygiene Clinics from March 96 to June 96

M: male

F: female

Non-CSW  $^{\Psi}$ : non - commercial sex workers

 $\text{CSW}^{\ \Psi}$  : commercial sex workers

#### Discussion

Behaviour surveillance on illicit drug use has been established in some sentinel sites. However, as the primary aim of data collection in different groups of drug users is not for AIDS related behaviour monitoring, some important data, e.g. high risk sexual behaviour among drug users, are missing. Moreover, the formats of data collection are different in different sites, making it difficult to compare the results. In addition, the Street Addicts Survey is conducted with the help of the volunteers in an ad hoc basis, long term monitoring may be difficult because of inconsistency in the approach and methodology.

Having said that, the existing data on illicit drug taking behaviour, however, do provide some useful information on the surveillance of AIDS related behaviour. This monitoring system should be continued at the moment while possibility of collecting more AIDS related data should be sought. Preliminary findings show that the proportion of injecting drug users and those who have ever shared needle are decreasing. More analysis is needed to assess the actual trend and the current situation.

On the other hand, apart from some ad hoc studies on the knowledge, attitude and practice on sexual behavioural, there has not been any systematic surveillance programme for the monitoring of high risk sexual behaviour in Hong Kong.

The preliminary results in SMC and SHC show that most clients would use condom when having commercial sex. It may be due to their perceived risk of such sexual activity. However, the condom usage rate in other sexual activities is low even most of the respondents have multiple sex partners. While these findings provide useful baseline information on high risk sexual behaviour, further analysis and more data collection would be needed for better understanding of the situation.

Ideally, a behavioural surveillance system should involve collecting data in different high risk and low risk population using the same instrument on a long term basis. However, there are a lot of limitations and constraints for the establishment of such system.

Manpower and resource limitations are the major obstacles. Although research fund is available for this pilot study, additional resource is needed for the implementation of the surveillance on a long term basis. In order to reduce the additional resources burden, it would be ideal to establish a system so that it could be incorporated into the existing services. The feasibility of absorbing the surveillance system into the existing services would very much depend on the manpower of that service. Sometimes, a modified format of data collection is indicated so that there is minimum disturbance to the daily routine. For example, Social Hygiene Service has begun developing its own version of questionnaire which could be eventually be incorporated into its regular activities.

The validity of the data on sensitive topics like sex and drug is often arguable. In addition, the representativeness of the data is also subject to challenge because of the difficulty in the control of the sampling methods in some of the target groups. Nevertheless, it is important to have a balance between the validity and reliability of the data collected on one hand, and the resource and workload implications of the surveillance system on the other. Moreover, the purpose of a surveillance system is actually to monitor the trend instead of aiming at complete accuracy.

More sentinel sites are being identified and data collection is still in progress. With the frequent monitoring, feedback and refining of the project, it is hoped that a practicable system of AIDS related behavioural surveillance could be implemented in the near future.

#### Surveillance of HIV Infection in Hong Kong

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#### **Abstract**

Since the report of the first local case of AIDS in 1985, a surveillance system has been established to monitor the situation of HIV infection and AIDS in Hong Kong. To date, the system includes 3 methods of data collection: voluntary reporting, serosurveillance and unlinked anonymous screening (UAS). HIV infection and AIDS are not statutory notifiable in Hong Kong. Voluntary reporting of such conditions is encouraged and the co-operation of medical practitioners working in the public and private sectors have been forthcoming. As at the end of September 1996, a cumulative 738 cases of HIV infection were reported. Among them, 228 have developed AIDS. Of the HIV-infected cases, 80% were in the age range of 20-49 years and the male-to-female ratio was about 8:1. Sexual transmission accounted for 81% of all reported infection. There was an increasing trend for female as well as for heterosexual transmission. HIV antibody test has been offered to different target groups since 1985. Currently, 3 public hospitals (Queen Mary Hospital, Prince of Wales Hospital and Queen Elizabeth Hospital) are offering confirmatory HIV antibody test for all blood samples referred from different sources including government Social Hygiene Clinics (SHC), methadone clinics and private sectors. By the end of September 1996, 399,884 blood samples had been tested and 738 (0.18%) were found positive. The prevalence in attendees of SHC and drug users has remained low (<0.1%). The Hong Kong Red Cross Blood Transfusion Service has also screened all donated blood regularly since 1985. Of the more than 1.8 million units of blood screened, only 42 (0.002%) were found positive. As a supplement to the other 2 programmes, UAS was introduced in November 1990. Blood, urine and saliva samples are periodically collected from various groups for testing. By the end of June 1996, 57,396 tests had been carried out on 37,877 blood, 17,924 urine and 1,595 saliva samples. Only 22 (0.037%) were found positive. A surveillance system consisting of different methods of data collection has been established to monitor the situation of HIV infection and AIDS in Hong Kong. It is noted that the prevalence of the disease is low in the general community as well as in communities which had practised high risk behaviour. However, a changing pattern of more female and heterosexual transmission is noted.

#### Introduction

Acquired Immunodeficiency Syndrome (AIDS) was first diagnosed as a distinct syndrome in 1981 and the virus causing the disease, Human Immunodeficiency Virus (HIV), was subsequently isolated two years later<sup>1</sup>. The infection has spread to countries throughout the world in the past decade causing the global pandemic. It is estimated that more than 7 million AIDS cases and over 27 million HIV infections have occurred globally<sup>2</sup>.

The first case of AIDS in Hong Kong was reported in 1985 when the sero-epidemiological surveillance programme started operation. It was estimated in 1994 that there were about 3000 persons infected with HIV in Hong Kong<sup>3</sup>. This paper presents the surveillance system and the updated epidemiology of HIV/AIDS in Hong Kong.

#### Methods

Data collected through the routine surveillance system of HIV/AIDS were retrieved and analysed. Currently, there are three methods of data collection, namely, voluntary reporting, serosurveillance and unlinked anonymous screening (UAS) for the surveillance of the HIV/AIDS epidemic in Hong Kong.

#### **Voluntary Reporting**

As HIV/AIDS are not statutory notifiable in Hong Kong, medical practitioners working in the public and private sectors are encouraged to voluntarily report such conditions to the AIDS

Unit of Department of Health, which is responsible for overall data collection and analysis. Information collected through this reporting system include basic demographic data, mode of transmission, date and source of confirmation. Name of the individual is not required for reporting. In some cases, more detailed information may be included e.g. place of follow up, clinical presentations, complications and laboratory findings, etc.

#### Serosurveillance

HIV antibody test has been made available in Hong Kong since 1985. Screening test is becoming more readily available and accessible in many public and private laboratories but the confirmatory test is only limited to a few laboratories. Currently, 3 public hospitals (Queen Mary Hospital, Prince of Wales Hospital and Queen Elizabeth Hospital) are offering screening as well as confirmatory HIV antibody test for all blood samples referred from different sources. The Hong Kong Red Cross Blood Transfusion Service has also been screening all donated blood regularly since 1985.

#### **UAS**

As a supplement to the other 2 programmes, UAS was introduced in November 1990. Blood, urine and saliva samples are periodically collected from various target groups for testing. These target groups include new government recruits, neonates, prisoners, tuberculosis patients, injecting drug users in street, and the clients of the methadone clinics. Clinical specimens sent to laboratory for other investigation are used for the detection of HIV antibody. All data that could potentially identify the individual are removed from the specimens before testing for UAS.

#### Results

#### **Voluntary Reporting**

The number of reported HIV infection is increasing slowly and steadily. There are now more than 100 cases of HIV infection reported per year. In parallel with the increasing cases of HIV infection cumulated, the number of reported AIDS cases is also increasing but at a faster rate. The annual numbers of HIV infection and AIDS reported is shown at table 1. There were 96 cases of HIV infection and 53 cases of AIDS reported in the first three quarters of 1996.

Table 1 Number of reported HIV/AIDS, 1984 - September 1996

Year of report	HIV	AIDS
84	7	0
85	46	3
86	20	0
87	33	6
88	28	7
89	38	17
90	34	13
91	60	14
92	71	14
93	79	19
94	104	37
95	122	45
Jan-Sep 96	96	53
Total	738	228

By the end of September 1996, a cumulative 738 cases of HIV infection were reported. Among them, 228 have developed AIDS. Of the HIV infected cases, 590 (80%) were in the age range of 20-49 years and the male to female ratio was about 8:1. A total of 504 (68%) HIV infected cases were Chinese. Heterosexual contact was the commonest mode of transmission which accounted for nearly half of all infection. Sexual contact was responsible for 598 (81%) HIV infection (table 2). There was an increasing trend for female as well as for heterosexual transmission. The proportion of female HIV infection increased from 0% in 1984 to 18% in 1996, and the proportion of heterosexual mode of transmission also increased from 2% in 1984 to 72% in 1996.

Table 2 Characteristics of reported HIV infection as at 30.9.96

Sex	
Male	652
Female	86
Ethnicity	
Chinese	504
Non-Chinese	234
Age	
<10	16
10-19	26
20-29	224
30-39	251
40-49	115
50-59	51
>50	19
unknown	36
<b>Route of transmission</b>	
Heterosexual	364
Homosexual	190
Bisexual	44
Injecting drug user	14
Blood	66
Peri-natal	3
Unknown	57
Total	738

#### Serosurveillance

The sources of referral of specimens to the three public hospitals providing confirmatory HIV antibody test are categorised as drug users, haemophiliac patients, health care workers, clients of government Social Hygiene (Sexually Transmitted Disease) Clinics (SHC), Tuberculosis and Chest Clinics, AIDS Unit, other public hospital and clinics, private hospitals and clinics, and other organisations.

By the end of September 1996, 399,884 blood samples had been tested and 738 were found positive. The overall detection rate was 0.18%. The breakdown of the detection rate in various referral sources is shown in table 3. The detection rate in haemophiliac patients was the highest (7.46%) among all sources, followed by 6.94% in the referred cases from private sectors. The prevalence of HIV in the high risk groups like attendees of SHC (0.04%) and drug users (0.04%) were low.

Table 3 Detection rate of HIV positive cases by referral sources under serosurveillance, 1985 -Sep 1996

	No. of test	No. of positive	
Referral sources	performed	detected	<b>Detection rate</b>
Drug users	9414	4	0.04%
Haemophilia patients	844	63	7.46%
Health care workers	3438	0	0.00%
Social Hygiene Clinics	333250	137	0.04%
Tuberculosis and Chest Clinics	9595	6	0.06%
AIDS Unit	1880	33	1.76%
Other public institutions	37566	298	0.79%
Private hospitals and clinics	2696	187	6.94%
Other organisations	1201	10	0.83%
Total	399884	738	0.18%

Of the 738 cases of HIV infection, 298 (40.4%) were referred from public institutions, 187 (25.3%) from private institutions and 137 (18.6%) from SHC. The proportion of drug users only accounted for 0.5%.

Of more than 1.8 million units of donated blood screened by Hong Kong Red Cross Blood Transfusion Service since 1985, only 42 were found positive resulting in an overall detection rate of 0.002%.

#### **UAS**

As of the end of June 1996, 57,396 tests had been carried out on 37,877 blood, 17,924 urine and 1,595 saliva samples. Only 22 were found positive with an overall detection rate of 0.04%. The breakdown of the detection rate in different target groups is shown in table 4. The prevalence of HIV in different target groups ranged from 0% in injecting drug users to 0.13% in prisoners.

Table 4 Results of unlinked anonymous screening as at 30.6.96

Target groups	No. of test	No. of positive	<b>Detection rate</b>	
Healthy adults	1553	1	0.064%	
Neonates	25984	1	0.004%	
Prisoners	9714	13	0.134%	
Tuberculosis patients	5570	4	0.072%	
Injecting drug users in street	1595	0	0.000%	
Clients of methadone clinics	12980	3	0.023%	
Total	57396	22	0.038%	

#### Discussion

Disease surveillance aims at the detection of change in trend or distribution of the disease generally using methods distinguished by the practicability, uniformity, and frequently their rapidity, rather than complete accuracy<sup>4</sup>. Although the HIV/AIDS figures collected under the current surveillance system in Hong Kong may not be very accurate due to various reasons like under-reporting, participation bias and selection bias, it does provide informative data on the epidemiological pattern useful for the planning of preventive and control strategies.

The reporting of HIV/AIDS is voluntary in Hong Kong. It is speculated that the number of reported cases will be similar even if they were made statutory notifiable. It may even decrease paradoxically because it may scare people from coming forward for the test<sup>5</sup>. Under the current practice, the 3 public laboratories offering confirmatory HIV antibodies testing are in close liaison with the Department of Health, under-reporting is therefore largely reduced. In addition, most AIDS patients would usually come forward for medical treatment rendering them more reportable than HIV infection which is usually asymptomatic. The actual number of HIV infection in the community may be back estimated from the reported number of AIDS cases<sup>3</sup>.

Haemophiliac patients have relatively higher HIV detection rate because many of the referred cases had history of regular blood / blood products transfusion before 1985 when preventive measures to safeguard blood and blood products was not available. The number of HIV antibody tests done among haemophiliac patients has markedly decreased in the recent years, resulting in a relatively high prevalence level in this selected group. According to the sero-epidemiological data, only 63 (8.5%) out of the 738 HIV positive cases were haemophiliacs.

On the other hand, the detection rate in SHC clients was only 0.04% (137 out of 333250) but they accounted for 18.6% (137 out of 738) of all confirmed cases of HIV infection. It should be noted that SHC contributed towards more than 80% of all HIV antibody tests referred to the 3 public hospitals for serosurveillance as the test is offered to nearly all SHC clients.

Although there is a small risk of contracting HIV infection after needle stick injury, none of the health care workers who came forward for testing after needle stick injury at work was found to be positive for the antibody.

UAS is a programme recommended by World Health Organisation to supplement the other 2 programmes in the overall surveillance of HIV infection<sup>6</sup>. However, the findings should be interpreted with caution and analysed together with the results from the other 2 sources. The relatively high HIV prevalence in prisoners was probably due to the recent sampling of female prisoners who were illegal immigrants. The figure may therefore reflect the HIV situation in our neighbouring countries.

In conclusion, a surveillance system on HIV/AIDS consisting of different methods of data collection complementing each others has been established in Hong Kong. It is noted that the prevalence of the disease is low in the general community as well as in communities which had practised high risk behaviour. However, a changing pattern of more female and heterosexual transmission is noted. With the continued monitoring of the epidemiology of the infection, targeted preventive and control measures can be planned and implemented.

#### Acknowledgement

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#### **Footnotes**

- 1. Cohen, P.T., Sande, M.A. & Volberding P.A. (1994). *The AIDS Knowledge Base: A Textbook on HIV Disease from the University of California, San Francisco and the San Francisco General Hospital*. Second Edition. Little, Brown & Company.
- 2. UNAIDS (1996). Fact Sheet. 1 July 1996.
- 3. Chin, J. (1994). Estimation and Projection of HIV Infection and AIDS Cases in Hong Kong. ASSR Project.
- 4. Last, J. M. (1988) A *Dictionary of Epidemiology*. Second Edition. London: Oxford Press.
- 5. Ohi, G., Terao, H. & Hasegawa, T. et al. (1988). Notification of HIV carriers: Possible effect on uptake of AIDS testing. *Lancet* 1988:2, 947-9.
- 6. World Health Organisation. (1989). *Unlinked Anonymous Screening for the public health surveillance of HIV Infections. Proposed International Guidelines.*

#### Factors Associated with Sexually Transmissible Diseases/ Human Immunodeficiency Virus Infection and Condom Use amongst Female Sex Workers in Hong Kong

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#### **Abstract**

Hong Kong has a low prevalence rate of HIV (0.087%) and the rate of infection amongst female sex workers (FSW) is 0.01%. Heterosexual transmission is the main and most rapidly growing mode of HIV spread in Hong Kong and FSW can be seen as indicators of this transmission rather than the cause of HIV spread. This study aims to quantitatively assess the social and demographic characteristics of FSW in Hong Kong; ascertain their knowledge, attitudes, behaviour and practices (KABP) regarding sexually transmissible diseases (STD) and HIV infection and condoms; discover the frequency of condom use; and determine the prevalence of STD/HIV in this group. A cross-sectional analytical survey using a structured questionnaire was carried out on 177 FSW from January, 1994 to July, 1995. 132 women were recruited at a government Social Hygiene Clinic (SHC) and 45 were from a private night club in a red light district of Hong Kong. Condoms were spontaneously used by 58.6% of clients, and of those who were asked to use a condom, 68.7% complied. Almost 96% of the women used condoms at work, 50.6% always doing so. "Indirect" workers (i.e. those who also offered services besides sex) were more likely to use a condom than women who only provided sexual services. 49.1% used a condom in private sexual contacts, 13.1% always doing so. The point prevalence of STD on the day of interview was 45%. Women who regularly visited the SHC, who had a primary school education and were over 35 years old were more likely to have had more than 5 STD in the preceding 2 years. Knowledge about STD/HIV and condoms did not independently predict condom use at work or in private; these factors, in turn, did not predict STD/HIV prevalence in this population. Despite widespread media messages about HIV transmission and prevention, there are many misconceptions about HIV/AIDS amongst FSW who continue to put themselves at significant risk by inconsistently using condoms in private and at work. Knowledge alone does not lead to protective behavioural change. To encourage consistent condom use, targeted education programmes developed and delivered by FSW that incorporate skills to negotiate safer sex and empower FSW are needed.

#### Introduction

By mid-1994, the estimated cumulative total number of cases of human immunodeficiency virus (HIV) in Asia was 2.5 million, 90% of whom were from South and Southeast Asia. Like most countries in Asia, HIV in Hong Kong was not a major problem in the early 1980's, affecting initially men who had sex with men (MSM), recipients of contaminated blood products and foreigners. However, since 1989, heterosexual transmission began to account for a greater proportion of the total cases of HIV, representing 29% of the total that year and 70% in 1994 (compared to 24% and 54% through homosexual transmission respectively). At the end of 1995 the cumulative percentage of the total 642 cases of reported HIV infection due to heterosexual transmission was 45.5% compared to 34.2% due to transmission amongst MSM.<sup>3</sup>

In 1994, there were a 14,848 attendances for sexually transmissible diseases (STD) at Hong Kong's eight Government Social Hygiene Clinics (SHC). <sup>4</sup> STD are not notifiable in Hong Kong and it is estimated that only 25-33% of all male STD clients are seen at the government clinics. <sup>5</sup> There are an estimated 200,000 female sex workers (FSW) in Hong Kong at any given time. <sup>6</sup> There has been a decline in the rate of all STD since 1989, partially related to economic factors as well as health education campaigns about HIV. <sup>5</sup> The prevalence rate of HIV in the general population in 1995 was 0.087 (Professor J. Chin's Keynote Address for the Hong

Kong Government's Seminar on AIDS, *AIDS in Hong Kong - a decade in review*, Marriott Hotel, Hong Kong, 24th November, 1995) and 0.1 amongst female sex workers (FSW). <sup>7</sup> Thus sex workers can be seen as indicators of heterosexual spread in the population, rather than a cause of HIV transmission.

Unlike many Western countries where it is a major risk factor for HIV transmission and is linked with prostitution, <sup>8,9,10</sup> intravenous drug use is presently not a major problem in the spread of HIV in Asia. <sup>11</sup> In Hong Kong the cumulative percentage of cases who are intravenous drug users (IDU) is 2.0%. <sup>3</sup>

Condoms have been proven useful in the prevention of STD/HIV transmission <sup>12,13</sup> and they have thus been promoted by most public health authorities as a primary prevention strategy against STD/HIV.

To discover the factors associated with condom use and STD/HIV infection amongst FSW in Hong Kong, a cross-sectional analytical survey was carried out in face-to-face interviews using a structured in-depth questionnaire with women attending the Government SHC in Yau Ma Tei and a night club in Wanchai, two red light districts with the highest concentrations of FSW (Royal Hong Kong Police Force Report to the Legco Panel on Security, Hong Kong Government, April, 1995). This study also attempts to examine the effects of knowledge on condom use and STD prevalence. The recruitment of FSW from a site other than the Hong Kong Government SHC is unique to this study and provides new insights into the lifestyles of FSW in Hong Kong.

#### Subjects and Methods

Between January, 1994 and July, 1995, 177 women were interviewed. Criteria for enrolment included a woman who consented to be interviewed; had received money or gifts in return for sexual services in the previous twelve months; and could understand Cantonese or English. Women from the SHC were approached by the nursing staff and those from the night club were asked to participate by a "ma-mi" (madam) who had consented to help in the survey. The questionnaire consisted of questions about the women's socio-demographic characteristics such as age, ethnic origin, marital status and education level; charge per act of vaginal sex, monthly income, workplace, length of time working, number of clients per week; and knowledge levels about STD/HIV, condoms and safer sex practices; attitudes and beliefs regarding STD/HIV; sexual practices and condom use at work and in private; sexual health history and preventive health measures. Confidentiality was maintained by assigning an identifying number to each subject. SHC attendees were later identified in order to confirm their medical histories and to ascertain the prevalence of STD/HIV in the group.

As part of the routine medical examination at the SHC. investigations included microscopy of high vaginal swabs and /or culture for pus cells, *Trichomonas vaginalis*, *Candida albicans* and *Neisseria gonorrhoea* at fortnightly intervals. Oral swabs are taken only on request. *Chlamydia trachomatis* is tested for only at a woman's initial visit by the Chlamydiazyme<sup>TM</sup>test. A diagnosis of nonspecific genital infection (NSGI) is made if there are more than five white blood cells per high power field on microscopy and no demonstrable causative organism. *Herpes simplex II* is tested for by culture. Genital wart is purely a clinical diagnosis. Blood tests for syphilis (VDRL) and HIV infection (ELISA for the HIV-1 and -2 antibodies which are then confirmed by the Western Blot) are done every three months.

Knowledge about STD/HIV and condoms was scored by assigning a value of -1 for incorrect answers, 0 for no response and +1 for correct answers to questions relating to knowledge. A woman's workplace was characterised as "direct" if the venue provided only sexual services (e.g. one-woman brothels) and "indirect" if the venue offered other services such as company whilst drinking (e.g. night clubs). For the purpose of analysis, gonorrhoea was looked at separately; grouped together with syphilis and trichomoniasis; and then STD was considered as another category and included all of the above STD as well as NSGI. The prevalence of STD in the last two years was analysed according to whether a woman had had a STD five or less times or more than five times in that period. A regular attendee was defined as a woman who visited the SHC four or more times a year.

The  $\chi^2$  test or Fisher's exact test were used in univariate analysis to identify significant factors. Multivariate analysis was carried out to determine any independent predictors, adjusted for those significant factors from univariate analysis by logistic regression.

#### Results

#### Socio-demographic Characteristics and Background Variables

The findings are summarised in Table 1. Most (52%) of the women were aged between 29 and 44 years; the median age was 36.0; and the range was from 18 to 69 years. The 45 women from the Wanchai night club were younger (mean age of 28.2 years compared to the general sample population mean of 36.2 years, p<0.0005); generally belonged to a higher income bracket than those from the SHC (p<0.0005); single (p=0.008); mostly local Chinese (p=0.023); had more clients (p<0.0005); were better educated (p<0.0005); and had worked for shorter periods of time (p<0.0005). More than 85% of the sample had been in Hong Kong for over 7 years. Most of the women were local Chinese and the rest were Thai or Filipino (6.8%) and 5.6% were from Singapore, Macau and England. Figure 1 shows the distribution of the women's workplaces.

Table 1 Sociodemographic & Background Characteristics of 177 Female Sex Workers by Recruitment Site

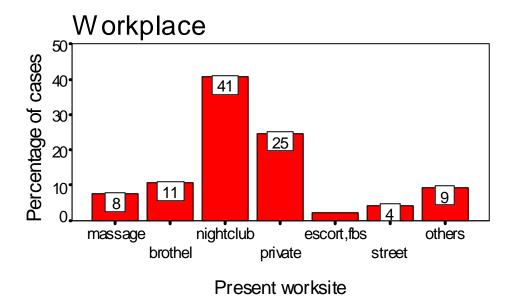
Characteristics		Total (%)	n=177	Nightclub	n=45	SHC (%)	n=132	p
Age in years	≤35	86	(48.6)	40	(88.9)	46	(34.8)	< 0.0005
	>35	91	(51.4)	5	(11.1)	86	(65.2)	
Marital status								0.008
Single		38	(21.5)	17	(37.8)	21	(15.9)	
Married/cohabiting	g	65	(36.7)	14	(31.1)	51	(38.6)	
Divorced/separated	d/widowed	74	(41.8)	14	(31.1)	60	(45.5)	
Ethnic/national	origin							0.023
Hong Kong Chine	se	100	(56.5)	31	(68.9)	69	(52.3)	
Mainland Chinese		55	(31.1)	13	(28.9)	42	(40.2)	
Others		22	(12.4)	1	(2.2)	21	(15.9)	
Education								< 0.0005
No schooling		11	(6.2)	0	(0)	11	(8.3)	
Primary school		56	(31.6)	3	(6.7)	53	(40.2)	
Secondary or high	er	110	(62.2)	42	(93.3)	68	(51.5)	
Socioeconomic s	tatus							0.681
Middle class		101	(57.0)	27	(60.0)	74	(56.1)	
Working/rural/oth	er	75	(42.4)	18	(40.0)	57	(43.2)	
Unknown		1	(0.6)	0	(0)	1	(0.8)	
Charge per act o	of vaginal sex							<0.0003
<hk\$200< td=""><td>(US\$25)</td><td>40</td><td>(22.6)</td><td>0</td><td>(0)</td><td>40</td><td>(30.3)</td><td></td></hk\$200<>	(US\$25)	40	(22.6)	0	(0)	40	(30.3)	
HK\$200-1,000	(US\$25-128)	58	(32.8)	0	(0)	58	(43.9)	
>HK\$1,0000	(US\$128)	77	(43.5)	45	(100)	32	(24.2)	
Unknown		2		0	(0)	2	(1.5)	
Income per mon	th							<0.0003
<hk\$5,000< td=""><td>(US\$641)</td><td>36</td><td>(20.3)</td><td>0</td><td>(0)</td><td>36</td><td>(27.3)</td><td></td></hk\$5,000<>	(US\$641)	36	(20.3)	0	(0)	36	(27.3)	
HK\$5,000-10,000 1,282)	(US\$641-	36	(20.3)	0	(0)	36	(27.3)	
HK\$>10,000	(US\$1,282)	103	(58.3)	45	(100)	58	(43.9)	
Unknown		2	(1.1)	0	(0)	2	(1.5)	
Number of clien	ts per week							< 0.0005
<5		77	(43.5)	8	(17.8)	69	(52.3)	
5-20		72	(40.7)	34	(75.6)	38	(28.8)	
>20		21	(11.8)	1	(2.2)	20	(15.2)	
Unknown		7	(4.0)	2	(4.4)	5	(3.8)	
Workplace								<0.0003
Indirect		95	(53.7)	45	(100)	50	(37.9)	
Direct		76	(42.9)	0	(0)	76	(57.6)	
Unknown		6	(3.4)	0	(0)	6	(4.5)	
Time working in	years							< 0.0005
≤1		42	(23.7)	13	(28.9)	29	(22.0)	

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2-10	79	(44.6)	29	(64.4)	50	(37.9)	
>10	48	(27.1)	1	(2.2)	47	(35.6)	
Unknown	8	(4.5)	2	(4.4)	6	(4.5)	

p value from univariate analysis by  $\vec{c}$  or Fisher's exact test,, excluding the unknown category for each variable

Figure 1 Places of Work



brothel ≡ one-woman brothel - a venue unique to Hong Kong in which only one woman legally works

private ≡ clients met at clubs or through friends and rendezvous are arranged or regular clients visit the women

escort ≡ escort service arranges a worker to meet the client for various services

fbs ≡ fishball stalls - a venue unique to Hong Kong consisting of a darkened room with booths in which women offer masturbation & sometimes vaginal sex. Name derived from the rapid hand movements made by chefs in making fishmeat balls

street = streetwalkers

massage ≡ massage parlors

others ≡ includes call-girls, workers in dance halls, karaoke bars & apartments (like Western-style brothels where women are called in by the management or where clients and workers can rent rooms by the hour)

Most of the clients were Hong Kong Chinese (84.0%); 2.7% were from the People's Republic of China; 3.3% were form Taiwan; 4.4% were from Japan; and the rest were Caucasians and other nationalities.

There were no current injecting drug users in the sample: two women still smoked heroin and one had injected it in the past. Over 45% used alcohol (53.8% drank less than 100gm per week and 11.3% more than 300mg per week) and 40.1% smoked. The only other recreational drug used was cannabis: 7.3% of the women smoked it.

One hundred and twenty-two women (68.9%) had private sexual relations and 49.6% ever used condoms. At work all women provided vaginal sex and 96.4% ever used condoms. There was no difference in the proportion of women who used condoms between the two recruitment sites at work (p=0.279) or in private(p=0.629).

Women from the night club went for gynaecological examinations less often than the SHC attendees ( $\chi^2$ =18.0, p=0.012): 4.7% of night club workers had never been examined. All SHC women had ever had a HIV antibody test compared to 41.8% of women from the night

club. Of the women who had never had the test, 18.6% did not believe that they were at risk of contracting HIV; and 18.6% were too scared to have the test.

# Knowledge

Knowledge about STD/HIV and condoms was generally adequate (mean score 0.61, SD 0.21; median score 0.67; and the range was from 0.06 to 0.97). There was a significant difference in the mean knowledge scores (0.21, 95% CI 0.14-0.27, p<0.0005) between the two recruitment sites: the mean score for the night club workers was 0.45 (SD 0.15) compared to 0.66 (SD 0.10) for the SHC women.

Almost 80% of all women thought that STD were always symptomatic; 10% and 11% respectively, thought that vaginal discharge and genital ulcers were not symptoms of STD. Over 14% did not know that dysuria could be a symptom. Over 82% thought that the chances of contracting HIV from sex with a HIV carrier without using a condom were between 90-100%. Over 57% thought the chances of contracting HIV when using a condom were 60-90% and 20% thought there was a 60-100% chance. Knowledge about HIV/AIDS is summarised in Table 2.

Table 2 Knowledge about HIV/AIDS (n=175)

Items of Knowledge	% with Correct Response
Reduce HIV risk by decreasing the number of partners	94.9
Reduce HIV risk by not practising anal sex	88.6
HIV can be transmitted from mother to child	98.3
HIV can be transmitted by sharing needles	93.8
Reduce HIV risk with medication before sex	74.4
Reduce HIV risk by douching after sex	40.9
Reduce HIV risk with regular medical screening	2.9
HIV can be transmitted by oral sex	72.0
HIV can be transmitted by eating with HIV carrier	69.7
Can be HIV+ve for ten years & not have AIDS	33.1

Knowledge was not correlated with marital status, ethnic origin, socio-economic status or whether one was a regular SHC attendee or not. In univariate analysis (see Table 3), it was related to older age (p=0.013); higher education (p=0.037); higher charge (p=0.013); higher income (p=0.005); and being a direct worker (p=0.018). In multivariate analysis, a higher level of knowledge was associated with charging less than HK\$200 (p<0.0005); having more than 20 clients per week (p=0.01); working for more than ten years (p=0.007); and being recruited at the SHC (p<0.0005).

 Table 3
 Factors Related to Knowledge

Characteristics	Score (median) (%)	£67% n=99	Score n=70	>67% (%)	<i>p</i> *	Adjusted OR** (95% CI)	p**
Age in years	` ′				0.013		
≤35	56	(56.6)	26	(37.1)		Not significant	
>35	43	(43.4)	44	(62.9)			
Education					0.037		
No schooling	7	(7.1)	3	(4.3)		Not significant	
Primary school	24	(24.2)	30	(42.9)			
Secondary or higher	68	(68.7)	37	(52.9)			
Charge per act of vaginal sex					0.013		
<hk\$200 (us\$25)<="" td=""><td>23</td><td>(23.2)</td><td>14</td><td>(20.0)</td><td></td><td>0.08 (0.02-0.32)</td><td>&lt; 0.0005</td></hk\$200>	23	(23.2)	14	(20.0)		0.08 (0.02-0.32)	< 0.0005
HK\$200-1,000 (US\$25-128)	24	(24.2)	32	(45.7)		0.50 (0.19-1.34)	0.17
>HK\$1,0000 (US\$128)	51	(51.5)	24	(34.3)		1.00	
Unknown	1	(1.0)	0	(0)		Excluded	
Income per month					0.005		
<hk\$5,000 (us\$641)<="" td=""><td>22</td><td>(22.2)</td><td>12</td><td>(17.1)</td><td></td><td>Not significant</td><td></td></hk\$5,000>	22	(22.2)	12	(17.1)		Not significant	
HK\$5,000-10,000 (US\$641-1,282)	11	(11.1)	22	(31.4)			
HK\$>10,000 (US\$1,282)	65	(65.7)	36	(51.4)			
Unknown	1	(1.0)	0	(0)			
Number of clients per week					0.007		
<5	41	(41.4)	36	(51.4)		0.15 (0.04-0.59)	0.01
5-20	51	(51.5)	21	(30.0)		0.22 (0.06-0.81)	0.02
>20	7	(7.1)	13	(18.6)		1.00	
Workplace					0.018		
Indirect	62	(62.6)	31	(44.3)		Not significant	
Direct	37	(37.4)	39	(55.7)			
Time working in years					0.001		
≤1	30	(30.3)	12	(17.1)		0.14 (0.05-0.44)	0.007
2-10	52	(52.5)	27	(38.6)		0.31 (0.06-0.81)	0.023
>10	17	(17.2)	31	(44.3)		1.00	
Recruitment site					<0.000 5		
Night club	39	(39.4)	4 ( 5.0007)			0.05 (0.01-0.19)	< 0.0005
SHC	60	(60.6)	66	(94.3)		1.00	

 $p^*$  value from univariate analysis by  $\mathbf{c}^2$  or Fisher's exact test, excluding the unknown category from each variable.  $OR^{**}$  of having a knowledge score >67%, adjusted for significant factors in univariate analysis by logistic regression.

# **Frequency of Condom Use**

Frequency of condom use in the last three months at work and in private relationships is summarised in Table 4. Age, marital status, ethnic origin, level of education, socio-economic status, charge per act of vaginal sex, number of clients, length of time working, whether a woman was interviewed at the night club or was a regular SHC attendee and level of knowledge about STD/HIV and condoms were not related to the frequency a woman used a condom at work. An indirect worker was more likely to always use a condom than a direct worker (OR=2.1, 95% CI 1.08-4.09, p=0.018).

Frequency	% of Contacts	% Women at Work <i>n=169</i>	% Women in Private n=122
Always	100	50.6	13.1
Almost always	60-100	38.1	18.9
Rarely	<60	7.3	18.9
Never	0	4.0	49.1

 Table 4
 Frequency of Condom Use at Work and in Private

Reasons for not using a condom at work included pressure from clients (78.8%); the feeling that unprotected sex was not that risky (27.1%); the fact that sex without a condom was worth more money (16.5%); and the fact that their clients were "regulars" (that is, seen on a regular basis).

Overall, 58.6% of clients used condoms without being asked to do so. All except 33 clients who did not use a condom spontaneously were asked to do so and of this group, 68.7% complied. Women who were direct workers tended to have less compliant clientele - 60.6% spontaneously used condoms and 78.6% used them when asked to do so, compared to 72.3% and 88.6% respectively of clients of indirect workers.

Over 86% of women had unprotected sex with their non-paying partners. Reasons for doing so included strong objections from their partners (59.1%); the feeling that condoms were too reminiscent of work (24.7%); and the fact that their was no need because their relationship was monogamous (59.1%). In univariate analysis, condom use was related to a higher level of education (p=0.008) and being an indirect worker (p=0.016). In multivariate analysis, women over the age of 35 were less likely to use a condom (OR=0.34, 95% CI 0.16-0.71, p=0.004). Knowledge was not related to condom use in private.

#### Prevalence of STD

The point prevalence (on the day of interview) of STD in the 132 women from the SHC was 45%. There were no significant risk factors identified for the presence of STD. The commonest infection on the day of interview, in the previous six months and two years was NSGI. The prevalence rates for and risk factors associated with STD are summarised in Tables 5 and 6 respectively.

Table 5 Prevalence of STD/HIV

Sexually Disease	Transmissible	Point Pre			ous 6 Months 120 (%)	In Previou		o Years
STD	No disease £5 times >5 times	72 <b>Ever</b> 59	(55.0) (45.0) (6.1)	27 87 6	(22.5) (72.5) (5.0) (20.0)		5 56 29 33	(5.6) (62.2) (32.2) n=90 (37.0) n=89
NSGI		49	(37.4)	81	(61.4)	£5 times >5 times	73 30	(70.9) (29.1)
Trichomon	niasis	3	(2.3)	10	(8.6)		18	n=103 (17.5) $n=103$
Syphilis		1	(0.6)	0			1	(1.0) $n=103$
Gonorrhoe Trichomon	ea, syphilis or niasis	10	(7.6)	32	(26.7)		38	(42.7)
HIV infecti	ion	0		0			0	n=89 n=103

Table 6 Risk Factors for Various STD

STD	Risk Factors	p* or p** OR (95%CI)
Gonorrhoea in previous 6 months	Nil	OR (25 /0C1)
Gonorrhoea in previous 2 years	Education: Primary school Secondary/higher Worktime: 2-10 years >10 years	4.41 (1.46-13.31) p**=0.008 1.00 0.35 (0.13-0.93) p**=0.035 1.00
Gonorrhoea, syphilis &/or Trichomoniasis in previous 6 months	Condoms at work: Not always Always	2.80 (1.08-7.40)  p**=0.019 1.00
Gonorrhoea, syphilis &/or Trichomoniasis in previous 2 years	Worktime Education: Primary school Secondary/higher	$p^* = 0.016$ 3.41 (1.33-8.75) $p^{**}=0.011$ 1.00
STD in previous 6 months	Regular attendee of SHC	6.21 (2.25-17.43) p**<0.0005
>5 STD in previous 2 years	Age in years: ≤35  >35  Education: Primary school  Secondary/higher	0.07 (0.010.57)  p**=0.013 1.00 3.24 (1.10-9.52)  p**=0.032 1.00

 $p^*$  value from univariate analysis by  $\vec{c}$  or Fisher's exact test

 $p^{**}$  value from odds ratio adjusted for significant factors from univariate analysis by logistic regression

Except for the prevalence of gonorrhoea, syphilis and trichomoniasis in the previous six months, knowledge and frequency of condom use at work or in private were not related to the prevalence of various STD.

#### Discussion

There are several limitations of this study to be considered. Most of the women (40.8%) in this study worked in night clubs. According to police records (Kowloon Regional Police Headquarters Monthly Vice Reports, 1993), the majority of FSW are employed by massage parlours and the commonest vice establishments are the "apartments" (like Western-style brothels where rooms may be rented by the hour or where management brings in a FSW to meet the client). SHC attendees are self-selected because they are more health-conscious. There were no injecting drug users in the sample so that the possible associations between prostitution, HIV transmission and intravenous drug use could not be examined. There was under-representation of overseas and younger teenage FSW. The absence of random sampling of subjects limits the generizability of the findings to the total FSW population in Hong Kong. An important outcome measure, frequency of condom use, was based on self-reporting and therefore open to recall bias and the women's desire to give what they believe to be the "correct" or expected answer.

There were many misconceptions about STD (e.g. NSGI is translated into Chinese as "ordinary infection" and was considered by many of the women not to be sexually transmitted); the degree of protection a condom confers; modes of HIV transmission; and effective preventive measures. Younger women tended to be indirect workers  $(\chi^2=57.09, p<0.0005)$  who earned more (Pearson's correlation coefficient R=0.65, p<0.0005) and were more educated (R=-0.42, p<0.0005). They would have been working for a shorter period of time and during the HIV/AIDS era when the population in general was exposed to public health media messages about HIV and condoms. Their level of knowledge was higher than older women. However ,women who attended the SHC had higher knowledge scores: the talks given at a woman's initial visit reinforced by further information given should she acquire an infection in subsequent visits are helpful in increasing knowledge levels. Women who had worked longer and had more clients also had higher knowledge scores, suggesting that a greater exposure to the sex industry brings a greater understanding of STD/HIV and condoms.

However a higher level of knowledge did not translate into protective behavioural practices: it was not related to frequency of condom use at work or in private. Indirect workers were more likely to use condoms than direct workers. This does not necessarily reflect a greater ability of indirect workers to negotiate safer sex: other possible reasons for the more frequent use of condoms include the fact that indirect workers charge more than direct workers and the apparent higher success rate for condom use (88.6% of clients after negotiation compared to 78.6% of direct workers' clients) may be due in part to the clients themselves being of a different socio-economic class, having different knowledge levels about HIV/AIDS and being less likely to be "regular" clients. The frequency of condom use at work (50.6% always using them and 96.0% having ever used them) in this study was comparable to other Asian studies <sup>14,15,16</sup>

Women under 35 were more likely to use a condom in private, probably, in part, because of media messages about HIV/AIDS. The low frequency of condom use in private is consistent with other Asian studies. <sup>14, 17</sup> Long-term relationships, whether in the private or commercial setting (e.g. "regular" clients) involve "trust" and emotions and as a sign of that trust,

women are less likely to use a condom.<sup>18</sup> In this study the women rationalised that unprotected sex at work, especially with a regular partner, was not that risky and that their private partners were monogamous and therefore there was no need to use condoms. Perhaps it is a legacy of Chinese traditional patriarchal society that some of the women in this study did not even dare to suggest to their clients the use of condoms, succumbed to client pressure or deferred to their non-paying partners' objections.

The prevalence of STD on the day of interview (45%) is comparable to figures from a FSW study in Calcutta in 1993 <sup>19</sup> (52%) but higher than the rate of 32.9% among FSW in Chiang Mai, Thailand in 1995. <sup>17</sup> These two countries have HIV prevalence rates amongst the highest in Asia, <sup>1</sup> the former being in the early stages of its epidemic and the latter having progressed through what Weniger describes as the fourth wave of HIV infection (amongst pregnant women and children) <sup>11</sup> and having instituted education and prevention programmes some nine years ago, is now seeing a slowing of the incidence rates of HIV.

Only a diagnosis of gonorrhoea, syphilis and/or trichomoniasis in the last six months was related to condom use at work. Otherwise, levels of knowledge, condom use at work or in private were not independent predictors of the prevalence of various STD. The apparent inconsistency in the reported high frequency of condom use and objective evidence of their use, that is, the prevalence of STD, may be explained by women deciding to always use condoms only after having contracted a STD; by the fact that despite a woman's intention to use a condom, she was under such pressure from the client that her resolve was undermined; that the infections were in fact recurrent and not adequately treated; that a woman wanted to be seen doing the "right" thing and would overestimate her frequency of condom use; that the condom had slipped or burst; or that a woman's infection was from a private partner.

Regular attendees of the SHC were more likely to have had a diagnosis of STD in the previous six months. Routine examination involves testing for STD and so a positive diagnosis is a function of a woman's presentation to the Clinic: if she experiences no symptoms, she may not seek medical advice and could unknowingly be passing an infection on to her clients. To encourage regular medical check-ups, a service that takes into account FSW's lifestyles is needed. Such a clinic would open at more user-friendly hours, such as during the night, be accessible and be discreet. It could take the form of a mobile van that travels through different red light districts; offers gynaecological examinations with laboratory facilities; and provides treatment as well as promotes prevention through educative talks, information leaflets and videos and the supply of free condoms. It could also have a peer group counsellor to provide practical skills such as how to negotiate difficult clients who refuse to use a condom and help with coping with the stresses of sex work.

In addition to all of the known risk factors for HIV being present in Hong Kong - namely FSW, unsafe homosexual and heterosexual contacts, intravenous drug users and STD - there are socio-cultural factors that further put the population at risk, such as highly mobile sex worker and client populations; the reluctance of the public to speak openly about sex; a cultural tradition of polygamy and concubinage; a general lack of perceived risk of contracting HIV in the community, many people believing that HIV is a disease of gays and foreigners; and a FSW population with many misconceptions about STD/HIV transmission and prevention, a low level of consistent condom use especially with non-paying partners and a lack of unity and self-identification as a legitimate working group that can demand safer working conditions. More HIV/AIDS awareness campaigns for the general public as well as targeted education campaigns

for high-risk behaviour groups such as FSW and their clients are needed. Like other studies, <sup>15, 20</sup> the present one showed that a high level of knowledge does not lead to the adoption of health protective behaviour. To initiate a 100% condom policy, the co-operation of an establishment's management is required. The police could help to ensure that a woman has the right to refuse safer sex and would be backed up by management security measures if confronted by hostile clients; that the policy be explicitly told to clients on arrival; and that preventive education and skills training be incorporated into the orientation of a new FSW. Peer group education through such established FSW groups as the Action for Reach Out, would provide role models, encourage self-efficacy and positively reinforce consistent condom use both in private and commercial relations as a community. Thus FSW could protect their health whilst earning their livelihoods, act as informed sources about safer sex to their clients and ultimately help prevent the spread of STD/HIV in the community.

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#### **Footnotes**

- 1. Chin, J. (1995). Scenarios for the AIDS epidemic in Asia. *Asia-Pacific Population Research Reports*. 1995: 2, 2-3, 8.
- 2. Department of Health. (1994). *HIV/AIDS situation in Hong Kong (Update: December 1994)*. Hong Kong Government.
- 3. Department of Health (1995). *Hong Kong STD/AIDS update a quarterly surveillance report*. 11:4, Hong Kong Government.
- 4. Department of Health (1995). *Annual incidence and trends of disease at Government Social Hygiene Clinics*, 1985-1994. Hong Kong Government.
- 5. Ho, WF & Ng, WS. (1993). STD occurrence in Hong Kong over a ten year period, 1982-1991. *Venereology* 1993: 6, 63-7.
- 6. housewives in sex industry. *South China Morning Post* 3 May 1993.
- 7. Li, CPK et al. (1992). A qualitative survey of female commercial sex workers in Hong Kong [abstract PO-D-5636]. *Proceedings from the VIIIth International Conference on AIDS*, Amsterdam, 19-24 July, 1992.
- 8. Ward, H & Day, S et al. (1993). Prostitution and risk of HIV: female sex workers in London. *BMJ* 1993: 307, 356-8.
- 9. McKeganey, NP. (1994). Prostitution and HIV: what do we know and where might research be targeted in the future? *AIDS* 1994: 8, 1215-26.

- 10. Philpot, CR et al. (1991). A survey of female prostitutes at risk of HIV infection and other sexually transmissible diseases. *Genitourinary Med* 1991: 67, 384-8.
- 11. Weniger, B. et al. (1992). The HIV epidemic in Thailand, India and neighboring nations: a fourth epidemiological pattern emerges in Asia [abstract PoC-4087]. *Proceedings from the VIIIth International Conference on AIDS*, Amsterdam, 19-24 July, 1992.
- 12. Conant, M. et al. (1986). Condoms prevent transmission of AIDS-associated virus (Letter). *JAMA* 1986: 255, 1706.
- 13. D' Oro, LC et al. (1994). Barrier methods of contraception, spermicides and sexually transmitted diseases: a review. *Genitourinary Med* 70:6, 410-7.
- 14. Wong, KH et al. (1994). Condom use among female sex workers and male clients in Hong Kong, *Int J of STD & AIDS* 1994: 5, 287-9.
- 15. Wong, ML et al. (1992). Factors associated with sexually transmitted diseases among female prostitutes in Singapore. *Int J of STD & AIDS* 1992: 3, 332-7.
- 16. Nigoon, J. (1995). HIV related knowledge & preventions among Thai female sex workers in Japan [abstract PB903]. *Program and abstracts of the IIIrd Conference on AIDS in Asia and the Pacific*, Chiang Mai, 17-21 September 1995.
- 17. Rugpao, S et al. (1995). Prevalence of STDs in brothel-based commercial sex workers (CSWs) in Chiang Mai, Thailand [abstract PB114]. *Program and abstracts of the IIIrd Conference on AIDS in Asia and the Pacific*, Chiang Mai, 17-21 September 1995.
- 18. Day, S. & Ward, H. (1990). The Praed Street Project: a cohort of prostitute women in London. In Plant, M. (ed.) *AIDS, Drugs & Prostitution*. London: Routledge, 61-75.
- 19. Jana, S. et al. (1993). Knowledge, attitude of CSWs towards STD/HIV and prevalence of STD/HIV among CSWs [WSC08-4]. *Proceedings of the IXth International Conference on AIDS*, Berlin, 6-11 June, 1993.
- 20. Koetsawang, S. & Ford, N. (1993). An investigation into the psycho-social factors influencing condom use among female sex workers in Thailand. Project for the EEC AIDS Task Force 002/90. Bangkok: Usa Press.

# Role and Impact of STD Control on HIV Epidemic

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#### **Abstract**

The intimate relationship and bi-directional interaction between sexually transmitted diseases (STDs) and HIV are critical elements in the development of strategy for preventing the two diseases. Control of HIV will never be successful without taking into consideration the direction of overall STD prevention. This paper reviews the statistics of STD and HIV in public service in Hong Kong and examines their interaction and thus important areas for attention and action. With the change in social and economic structure in the recent years in Hong Kong, the number of new cases registered in the Social Hygiene Service (SHS) of the Department of health increased from 20331 in 90 to 27284 in 95. The total number of new (STD) recorded increased from 10457 in 90 to 18115 in 95 while the corresponding recorded HIV incidence were 34 and 122 in 90 and 95 respectively. That may imply the rate of increase in HIV was roughly 2.5 times that of total STD. The SHS was one of the major source of referral to the government HIV clinic and constituted about 15 to 30% of the total annual referral. Many of the HIV carriers detected by the SHS were still at their early asymptomatic stage. STDs, both ulcerative and non-ulcerative enhance HIV transmission by 3 to 5 folds that was to say the 259% increase in the annual incidence of HIV may be explained by the 73% increase in STD occurrence between 90 and 95. The mechanism of STD as risk factor for HIV transmission are both biological and behavioural. On the other hand, HIV can worsen the course of STDs. It is conceivable that the WHO has advocated 3 essential components in the prevention of sexual transmission of HIV. First, provision of information and education which include safer sexual practice. Second, accessible and user-friendly health service which include early detection and treatment of STDs. Third, supportive environment for behavioural modification and sustainment of the changes. All these underscore the importance of co-ordination and integration of STD and AIDS prevention and care efforts. Although the SHS has been working hard for the WHO recommendations, it was estimated that 70 to 80% of STD patients were looked after by the private sector. The contribution of the private sector in the prevention of STD/HIV is extremely important. It is prudent to collect epidemiological and clinical data from the private sector, to keep rapport for communication and mutual understanding, and to provide continual medical education to the relevant parties before the STD/HIV control programme be actualised.

# **Background**

The intimate relationship and bi-directional interaction between sexually transmitted diseases (STD) and HIV are critical element in the development of strategy for preventing the two diseases<sup>1-3</sup>. Control of HIV will never be successful without taking into consideration of overall STD prevention. The objective of this review was to summarise the interplay between STDs & HIV in Hong Kong.

### Method

This was a retrospective study. Data of the Social Hygiene Service (SHS) of the Department of Health (DH) from 1986 to 1995 was retrieved. The demographic data , disease pattern of the clients of the SHS were analysed in parallel with similar data collected by the Special Preventive Program (SPP), DH.

#### Results

The number of new case attendance registered in the SHS decreased from 30,732 in 1986 to the trough of 20,331 in 1990 and started to rise to 27,284 in 1995. The total case attendance decreases from 178,999 in 1986 to a trough of 137,767 in 1990 and started to rise to 190,359 in 1995. The total number of new STDs detected was 11,808 in 1986, 10,057 in 1990 and 18,115 in 1995 respectively. Overall, there was 34% increase in new attendance,

38% increase in total attendance and 73% increase in new STDs from 1990 to 1995 respectively (Fig. 1).

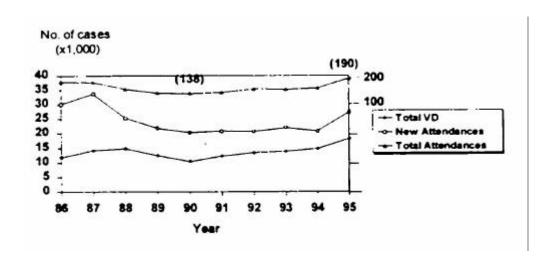


Figure 1 Annual Incidence and Trends of STDs in HK

The corresponding recorded HIV incidence was 34 and 122 in 1990 & 1995 respectively, i.e. 259% increase. Syphilis, gonorrhoea, non-gonococcal urethritis/ non-specific genital tract infection, genital herpes, genital warts were five leading STDs in HK (Table 1). They composed of more than 80% of total new STDs recorded. The major ulcerative STDs were early syphilis and genital herpes which constituted less than 10% of overall new STDs.

	91	92	93	94	95
Syphilis	310	420	457	381	381
Gonorrhoea	2996	2825	2754	2521	2300
NSGI	2374	2761	2790	2759	3602
NGU	1956	2532	2885	3431	4679
HG	584	719	779	766	796
GW	1810	1666	1898	2418	2955

Table 1 Annual Incident and Trends of STDs in HK

The age & sex distribution of the clients with STDs in 1995 are shown in Figure 2. Overall 33.5% were female patients and 66.5% were male. Young patients (age 19 or below) accounted for 3.5% of the total new cases. But in this group, female was predominantly represented. The mostly sexually active group (20 to 39 years of age) accounted for 66% of the total number of STD cases. The corresponding data of HIV from 1984 to 1996 is shown in Figure 3 for comparison. A similar trend was observed in HIV cases.

Figure 2 Annual Incidence and Trends of STDs in HK Age distribution of STD

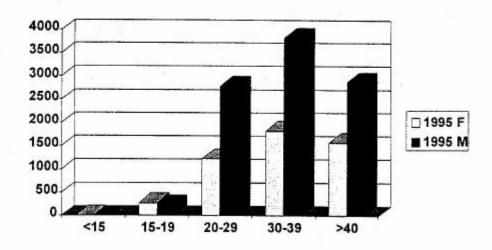
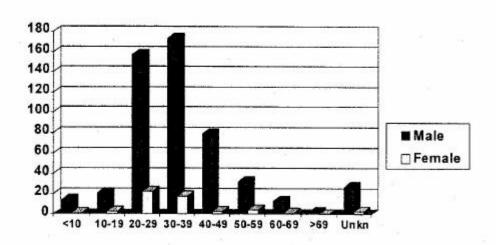


Figure 3 Reported HIV Infection in HK 1984 - June 1996

Aged distribution



The source of infection as reported by male clients in the SHS is shown in figure 4. In short, slightly less than 2/3 of them alleged to contract their STDs locally in 1990. The proportion decreased to roughly 1/3 in 1995.

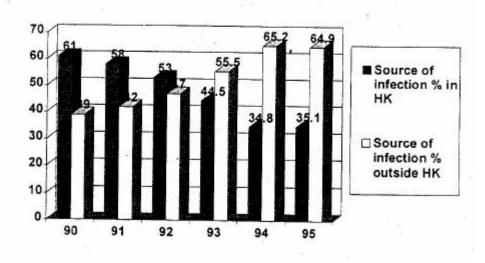


Figure 4 Source of infection as reported by male clients in SHC

#### Discussion

The mechanism of STD as risk factor for HIV transmission are both biological and behavioral<sup>1,2,4</sup>. On the other hand, HIV can alter the clinical presentation, disease course and treatment outcome of many STDs<sup>2</sup>. Both ulcerative and non-ulcerative STDs can facilitate HIV transmission by providing a portal of entry/exit for HIV. The presence of CD4 lymphocytes at the site of inflammation may provide plentiful ligands for HIV surface protein. On the other hand, CD4 lymphocytes harbour millions of HIV within. Shedding of the CD4 cells during sexual contact would mean firing HIV-containing canon to the virgin sites of contact. The lymphokines secreted by lymphocytes at the site of inflammation may enhance HIV replication and expression and thus provide a nourishing soil for the virus to flourish.

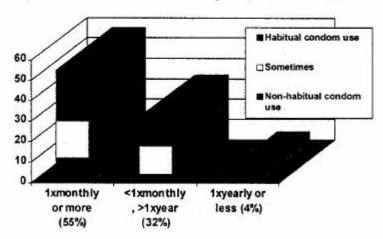
It is estimated that the presence of STD increases the chance of HIV transmission by 3 to 5 times. It is still uncertain whether repeated STDs could hasten the progression to AIDS. But certainly, the clinical manifestation, course and treatment response of STDs are altered in HIV-infected people. So much so they may not be recognised and treated readily and early enough that in-turn will facilitate HIV transmission.

STD and HIV patients share similar behavioural risk factors, viz.: lack of choice of sexual partners , high number of partners, inconsistent use of condom, delay in seeking medical check & treatment for their STDs, low risk perception and increase in mobility. A pilot behavioural surveillance study of the clients of a male STD clinic in HK conducted in 1995 by Ho<sup>6</sup> showed only 41% of this high risk group used condom habitually, 55% had casual sex once monthly or more (Fig. 5) and 88% reported sex with commercial sex worker. Their help seeking behaviour could jeopardise their regular consorts, mostly wife, to STD/HIV because 87% sought for medical consultation because of symptom, and there was a time lag (median duration 4 weeks ) between casual sex and attending STD clinic. Unfortunately, 40% had had sex already with their stable partners before presenting themselves to the STD clinic for check-up and treatment of their potential STDs.

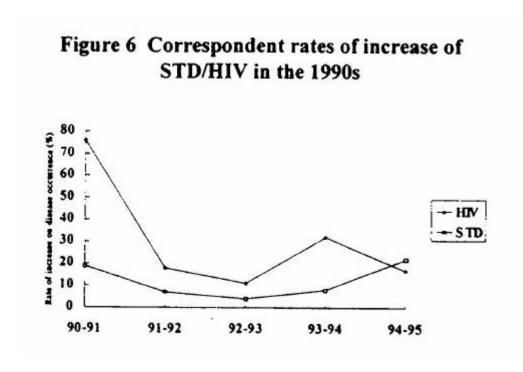
Figure 5 A Behavioural Surveillance of Clients of a STD Clinic

(Dr. Ho KM, 1996)

Habit of Condom Use and Frequency of Casual Sex



This review showed that both STDs & HIV infection has been increasing steadily since the 90. The rate of increase in total venereal diseases ranged from 4% to 22% annually and the rate of increase in HIV new cases ranged 11% to 76% annually after the 90. Their trends were kept in line with each other (Figure 6). Their age & sex distribution were similar. One would not be surprised that more than 80 to 90% of newly reported HIV cases since 1990 were attributed to sexual, predominantly heterosexual, transmission. And the SPP recorded nearly 80 female HIV cases and 3 cases of peri-natal transmission as at June 1996<sup>7</sup>.



Grosskurth³ reported a 2.5 times decrease in HIV sero-conversion in rural Tanzania by implementation of STD control program over a two years period. The decrease was not accountable by improved condom usage because at the end of the study, the condom usage rate were low at about 0.5% for both the intervention & control communities. The maximum benefit was observed in the mostly sexually active groups by age in both sexes. The impact of condom use in both STD & HIV are even more impressive. Rojanapithayakorn³ reported a 5 fold decrease in STDs from 1990 to 1994 and a 2 fold decrease in HIV sero-prevalence in the army conscripts after implementation of the 100% condom program in Thailand. I would postulate a potentiating effect of condom use and STD control program in limiting the progression of HIV epidemic³. The message of condom use as a means of safe sex may in fact be spreading by mass health education/promotion program through the media to the general public while it can be targeted to the most high risk group, the STD clinic clients , by tailor made and individualised programs/counselling . By doing so, they will supplement each other and would likely be more effective in preventing the HIV epidemic.

There has been a great concern of HIV/AIDS in many developed countries including Hong Kong. The concern is justified. There are currently 8 non-governmental organisations (NGOs) locally doing excellent works in HIV education programs. Should similar concern about STDs and their role and importance in the perpetuation of HIV epidemic be recognised, the efforts could have been even more fruitful. As many of those who seek for commercial sex conceived a risk of contracting STDs without believing/perceiving the risk of HIV transmission, it could be strategic to introduce the idea that HIV is in fact a kind of STD nowadays, and to initiate combined education programs in both STD &HIV. The role of SHS in the prevention of HIV can be summarised in figure 79.

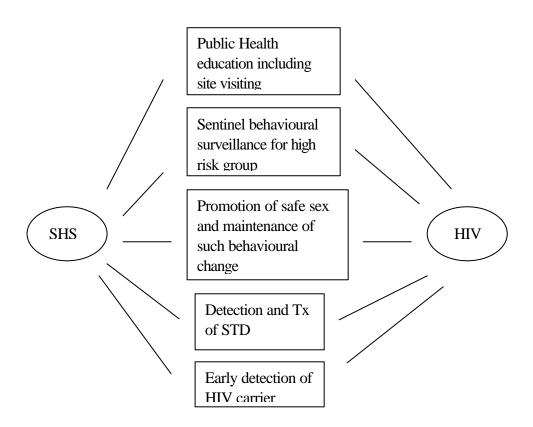


Figure 7 Summary of STD control programme in the prevention of HIV

#### Conclusion

There is intimate relationship between STDs & HIV. Their prevention program should not be segregated from one another to have successful control of both.

# **Footnotes**

- 1. Department of Health. (1995). Hong Kong STD/AIDS Update-a quarterly surveillance report 1995. 1:3.
- 2. Moss, GB & Kreiss, JK. (1990). The interrelationship between human immunodeficiency virus infection and other sexually transmitted diseases. *Med Clinic North America* 1990: 74, 1647-59.
- 3. Grosskurth, H., Mosha, F., Todd, J., Mwijarubi, E., Klokke, A. & Senkoro, K. et al. (1995). Impact of improved treatment of STDs on HIV infection in rural Tanzania: randomised controlled trial. *Lancet* 1995:346, 530-36.
- 4. Parazzini, F., D'Oro, LC, Naldi, L., Bianchi, C., Chatenould, L. & Ricci, E. et al. (1996). Sexually transmitted diseases and risk of HIV infection. *Acta Derm Venereol* (*Stockh*) 1996:76, 147-149.

- 5. Simosen, JN, Cameron, W., Gakinya, MN, Ndinya-Achola, JO, D' Costa, LJ & Karasira, P. et al. (1988). HIV infection among men with STDs-experience from a center in Africa. *N Eng J Med* 1988:319, 274-8.
- 6. Ho, KM & Lo, KK (1996). Analysis of premedical consultation assessment by health nurses- a behavioral surveillance of clients of a STD clinic. *HK Dermatology & Venereology Bulletin* 1996:4, 33-7.
- 7. Department of Health. (1996). *Hong Kong STD/AIDS Update- a quarterly surveillance report 1996*. 2:3.
- 8. Rojanapithayakorn, W. & Hanenberg, R. (1996). The 100% condom program in Thailand. *AIDS* 1996:10, 1-7.
- 9. Laga, M., Alary, M., Nzila, N., Manoka, AT, Tuliza, M. & Behets, F. et al. (1994). Condom promotion, STDs treatment, and declining incidence of HIV-1 infection in female Zairian sex workers. *Lancet* 1994:344, 246-48.

# A Report of AIDS and STDs Surveillance on the Persons of Entry and Departure in HuangPu Frontier Port

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# **Abstract**

In order to prevent AIDS or STDs into or out of our country, and to find and control them early, and to safeguard people's health, we enforced the surveillance of AIDS and STDs on the persons of entry and departure since 1988 in accordance with (the Frontier Health and Quarantine Law of the P.R.C.) and its specific rules. The authors approach a subject about how to administer the surveillance of AIDS and STD on the persons of entry or departure. The anti-HIV testing used the methods of ELISA, PA and QW. The syphilis serum testing used USR and TPHA, the treponema pallidum was observed under the general microscope after it was dyed with GLEMSA. Among the persons of 2337, we found one AIDS case, one HIV carrier, seven syphilis sero-positives and one condylomata acuminata case. The rate suffered from AIDS was 4.29/100000. The positive rate of anti-HIV was 4.29/100000. The sero-positive rate of syphilis was 30.00/100000, among them, the rate latent infection 71.43% the rate apparent infection 28.57%. The rate of condylomata acuminata was 4,29/100000. The cases and the positives were infected abroad except one syphilis case by the epidemiological investigation, and all syphilis cases were acquired. The results of investigation confirmed that the AIDS and STDs were being imported from abroad into our country. In order to prevent and control the transmission of communicable diseases in time, we must strengthen the surveillance on the persons of entry and departure.

#### Introduction

This paper reports the results of AIDS and STDs surveillance on the persons of entry and departure in Huangpu frontier port, from 1988 to 1994. It concluded that among 2337 persons, one AIDS case, one HIV carrier, seven syphilis cases, and one condylomate acuminata case were detected. Now we report the details as follows.

# The persons of surveillance and the methods

The Chinese seamen, the foreigner who will live in China for more than one year, the Chinese businessmen who have stayed out of the boundaries and are working in the foreign capital enterprise in China, the internal travellers for entry into or exit from the country including the students studying abroad, merchants, technicians, labourers, assistor, the persons for visiting relatives and setting down abroad.

The HIV test used ELISA, PA, QWB for preliminary screening, the sero-positive must be confirmed using WB by the AIDS laboratory of Guangzhou health and quarantine bureau.

The syphilis serum test used USR, RPR, the sero-positive must be confirmed using TPHA and the treponema pallidum was observed under the general microscope after it was dyed with GLEMS.

#### Results

The distribution of HIV/AIDS and STDs against target groups and years are shown in Table 1 and Table2 respectively. Statistical data showed that the rate suffering from AIDS and accumulate condylomata were 4.29/100000, the positive rate of HIV and syphilis were 4.29/100000 and 30.00/100000 respectively.

Table 1 The tested personnel classification on AIDS, HIV and STDs

Personnel	Surveillance	AIDS	HIV		Condylomata
Classification	of persons		positive	<b>Syphilis</b>	acuminata
Seamen	13551	1	1	3	-
Chinese travellers	8787	-	-	1	-
Foreign students	282	-	-	1	1
Foreigners	93	-	-	-	-
Chinese staying	674	-	-	2	-
Outside frontier					
Total	23337	1	1	7	1

Table 2 The tested condition on AIDS, HIV infection, STDs from 1988 to 1994

	Surveillance of		HIV		Condylomata
Year	persons	AIDS	positive	Syphilis	acuminata
1988	585	-	-	-	-
1989	1774	-	-	-	-
1990	3741	-	-	-	-
1991	3094	-	-	3	-
1992	5380	-	-	2	-
1993	5001	1	1	1	1
1994	3762	-	-	1	-

# The epidemiological specificity

The case of AIDS was a seaman from Tanjania and came to Huangpu port by ship in Sep 1993. He was sent to hospital of Guangzhou due to cough, fever, and chest pain. As his condition did not improve after treatment, he was suspected of suffering from AIDS. He was confirmed HIV positive by antibody and diagnosed AIDS basing on symptoms. The patient denied the histories of visiting prostitutes, injecting drug use, homesexuality, and using blood or blood products.

The HIV infected patient was a Chinese seaman who was diagnosed positive in a routine yearly physical check-up. He claimed that he had blood transfusion during an operation in 1992 in a hospital in Kenya. He denied having visited prostitutes, injected drug, homosexuality, or used blood or blood products.

Table 3 showed the demographic, clinical and laboratory features of the 7 cases of syphilis. They were all acquired, among which the rate of transmission from abroad 85.71%, of infection at home 14.29%, of latent infection 71.43%, of apparent infection 28.57%, one was accompanied by acuminata condylomata.

Table 3 The epidemiological specificity on seven cases of syphilis

No.	Age	Occupation	From	Tested date	Incubation period	Clinical symptom	Infected source	USR level	TPHA level	Treponema pallidum
1	28	Seaman	China	91.6	2 months	Have	Abroad	1:3	1:160	Negative
2	49	Worker	China	91.7	Not clear	Not have	At home	1:2	1:64	Negative
3	69	Technician	Taiwan	91.12	Not clear	Not have	Abroad	1:4	1:80	Negative
4	34	Technician	Taiwan	92.5	Not clear	Not have	Abroad	1:2	1:80	Negative
5	42	Seaman	China	92.10	Not clear	Not have	Abroad	1:8	1:640	Negative
6	45	Seaman	China	93.10	Not clear	Not have	Abroad	1:8	1:64	Negative
7	23	Student	Indonesia	94.9	3 months	Have	Abroad	1:16	1:2560	Positive

#### Discussion

In accordance with our laws and regulations, we have taken measures for these cases as follows:

The AIDS patient was isolated and kept watched by the officers concerned before he left the country. Patients with the venereal disease were treated in the hospital, and left the country within the limits period.

The HIV carrier was supervised and traced regularly. His family members were tested yearly, the specific administration of which was undertaken by the local epidemic prevention department. But there is some difficulty about the administrative measures to put into effect, because the special administrative structure hasn't been set up now, and the laws and regulation concerned are not satisfactory yet. So it is suggested that the department concerned should legislate as quickly as possible and set up a special administrative structure to strengthen the unified management.

According to the requirements concerned, the Chinese patients suffering from STDs were treated and counselled about prevention measures. Their sexual partner was traced to investigation.

The results of surveillance from 1988 to 1994 confirmed the case of AIDS, HIV carrier and most of the cases of STDs were infected abroad or from the outside frontier. To prevent wide transmission of AIDS and STDs, strengthening surveillance administration on the persons of entry and departure would be a prime concern for the health and quarantine service. The authors think that a modern center for surveillance, treatment, and research and training should be set up in order to develop AIDS and STDs treatment and consultation service, clinical and epidemiological research and research on the strategies of prevention and treatment, and to give a variety of services for the travellers.

# HIV Epidemiology, Trends and Control Policies in Guangdong Province

Lin Peng, Jiang Limin, Zeng Changhong, Zhao Xixi, Zhou Huiqiong & Lin Kaisheng, Guangdong Provincial HIV Surveillance and Testing Centre

# **Abstract**

The first HIV case in Guangdong was found in 1986, and by the end of 1995, a total of 166 HIV positive cases were reported including 13 AIDS patients and 17 units of blood products. The cases can be broken down by year, ethnicity and location. Epidemiological studies on those data reflected that Guangdong provided the opportunity for the virus to spread, such as Chao Shan region in South east. They got the virus through having sex with prostitutes. Drug use and commercial sex along the border between Yunnan and Guangdong also were another common route of HIV transmission. Consequently, it is estimated that 5000 people may be infected with HIV in Guangdong Province. The prevention policies and strategies should focus on (1) strengthening the HIV surveillance; (2) rendering massive health education; (3) strengthening the HIV screening; and (4) establishing fund for HIV surveillance, health education and preventive research.

#### Introduction

The first HIV case in Guangdong was found in 1986, and by the end of 1995, a total of 166 HIV positive cases were reported including 13 AIDS patients and 17 units of blood products.

# **Epidemiology**

# **Distribution By Year**

Of the 166 HIV cases, 1 in 1986 and 1987 respectively, 2 in 1989, 5 in 1990, 19 in 1991, 32 in 1992, 26 in 1993, 31 in 1994, 49 in 1995, the number is increasing by year. (Table 1)

Table 1 1985-1995 HIV/AIDS Surveillance of Guangdong Province

Year	Surveillance number	HIV	AIDS	Blood products	Note
1985	1752	0	0		
1986	1801	1	0		foreign student
1987	2236	1	0		foreign student
1988	18993	0	0		
1989	31981	2	0	17	imported blood products
1990	87979	5	0		first HIV positive case of our province who return from abroad
1991	78196	17	2		
1992	103071	32	0		
1993	30353	26	1		first AIDS case of our provincial resident
1994	20243	27	4		
1995	158816	43	6		first HIV positive case found in blood donors
Total	535421	154	13	17	53 HIV positive cases and 8 AIDS case in our province

# **Distribution By Location**

Fifty-nine were foreigners and 107 were Chinese citizens. Sixty were Guangdong residents and 60% were from Chao Shan region (Table 2). Forty-two were infected through sexual contacts in Thailand. Five were infected through sexual contacts with their husbands.

Table 2 Distribution by Location in Guangdong province of 60 HIV/AIDS Guangdong residents.

	1990	1991	1992	1993	1994	1995	Total
Total	2	8	12	11	18	9	60
Shangtou City	1	4	5	4	8	2	24
Urban Area		2			1		3
Chenghai		1	4	2	3	1	11
Chouyang	1	1	1	2	4	1	10
Guangzhou City	1		2	1	1	2	7
Urban Area	1		1	1	1	2	6
Huaxian			1				1
Jeiyang City		2		2	3	1	8
Puning		2		1	3	1	7
Jeixi				1			1
Couzhou City		1	1	1		1	4
Urban Area		1		1		1	3
Rouping			1				1
Meiahou City			1		3		4
Urban Area					1		1
Fongshun			1		2		3
Heyang City						2	2
Zhijing						2	2
Jiangmeng City				1	1		2
Taishan				1			1
Yengping					1		1
Shengzhui City			1	1	1		3
Urban Area			1	1	1		3
Foshan City			1			1	2
Urban Area						1	1
Nanhai			1				1
<b>Shouguang City</b>			1				1
Renghua			1				1
Zhouqing City		1					1
Urban Area		1					1
Jianmen City				1			1
Wuchuang				1			1
Unknown					1		1

# **Distribution By Population**

Of the 60 HIV positive cases in Guangdong, 51 were male and 7 were female. Their ages range from 21 to 61. Five cases are more than 55 years older. Their occupations were: 24 peasants, 10 businessmen, 7 workers, 5 people are waiting for work, 4 cadets, 2 seamen and 8 unknown.

# **Epidemiological Factors and Trends**

Guangdong is located in the south of the country, and many people frequently go in and out of the border. Some of them have sexual contacts with the local residents, which provide the opportunity for the virus to spread in Guangdong province.

Guangdong is the hometown for many overseas Chinese. For example, many people from Chao Shan region - which has 21% of the population in the province - went to reside in south-east Asian countries, e.g. Thailand. Since the detection of the first HIV case in Oct 1990, 31 cases of Chao Chan residents were found HIV positive when returning from visiting their relatives in Thailand. They all said having sexual contacts with prostitutes in Thailand. It is stipulated that Chinese who will spend three months or more abroad will be tested for HIV antibody when come back. These people accounted for only 20 percent of total people go out of the border based on our investigation. Moreover, as the Health certificate is valid for one year, Chinese going out of and come in the border will not be tested HIV antibody during this period. So, this group of people is a high risk population for introducing HIV to our province.

Accompanied by the fast economic development and frequent foreign exchanges, social problems such as prostitution and drug use are increasing. Morbidity of STDs increase sharply from 9812 cases in 1981 to 50886 cases in 1992. However, the account above is probably only 30 percent of all cases. In 1995, the first case of local infection with HIV by sexual contacts was found.

There is illegal drug trafficking out of the border through Yunnan and Guangdong. At present, more then 1000 cases of HIV positive have been reported in Yunnan, of whom ninety percent were drug users, and many drug traffickers are drug users themselves. There were more than 11000 drug users treated in our province in 1992. It has been estimated that more than 100 thousand drug users. The traffickers often use drugs and visit prostitutes. The possibility of HIV transmission among these people is very high, and they are more dangerous if they have sexual contacts with other people.

Many hospitals are seeing an increasing number of overseas patients, and HIV awareness is still quite low in health care personnel. Some hospitals have not yet set up HIV testing. It happened that some patients were found HIV positive after being treated for some time.

It is estimated that 5000 people may be infected with HIV in Guangdong Province.

# **Prevention Policy**

In view of the potential for further spread of HIV in Guangdong, prevention programmes should be strengthened. They are: (1) to strengthen the HIV surveillance in high risk populations, such as STD patients, drug users, and those Chinese returning from abroad; (2)to expand HIV/AIDS health education through public media, such as magazine, newspapers, radio and TV; (3).to strengthen HIV screening in blood centres; and (4) to establish AIDS funds for HIV surveillance, health education, and preventive research.

# A Report on Finding AIDS International Seamen in Clinical Emergency Cases

<u>Tan Renzan</u>, Zhang Min & Zhang Jianming, Guang Zhou Health and Quarantine Bureau, PRC

#### **Abstract**

This paper has reported 3 HIV positive international seamen in the clinical emergency cases. We have made the epidemiological investigation and found that two of them are homosexual and have unsafe sexual behaviour. In this paper, we have discussed the importance of enforcing the management of international seamen and AIDS surveillance. In this paper, the methods are ELISA, PA, QT and WB. Two of the international seamen are AIDS patients, one is only HIV positive. AIDS is a kind of sexual transmitted disease and the mortality is high. With the open policy and travel development, the number of people for entry into or exit from the countries is increasing. How to prevent its transmission to China is being widely concerned. We have found two AIDS patients and 1 HIV positive from international seamen in clinical emergency cases, so enforcing the management of international seamen and AIDS surveillance are of great importance.

#### Introduction

AIDS is a kind of sexually transmitted disease and the mortality is high. With the open policy and the travel development, the number of people entering or exiting from the country is increasing. How to prevent transmission of HIV to China is being widely concerned and is also an important task for the Health and Quarantine Service. We have found 3 HIV antibody positive international seamen in the clinical emergency cases for high fever from 7 July 1993 to 12 April 1996.

# Introduction of the cases

#### Case I:

A Tanzanian male engineer, aged 48, was sent to Sun YIxian Hospital for continuous pain in the right chest, dry cough, fever, bad appetite and loss of strength and weight. X-ray examination indicates a little liquid in the right chest. He was treated for the lung infection.

P. E: T:38.5<sup>o</sup>C, P:108/m, R:28/m, BP:16/10Kpa. There are 3 bean-like lymph nodes in the front of trapezius muscle on both side, and 4-5 peanut-like lymph nodes in the middle and lower part of trapezius muscle. We can hear all kinds of bubble on both lower and middle of the lungs, and under both side of chest, we can hear audible pleural friction. The heart, liver and spleen are all normal.

HIV-antibody test: ELISA, PA, QT and WB are all positive. The band types are gp160,120, p65,55,51, gp41-43, p32,24,18.

Epidemiological history: From 1993, the patient had been to Mozambique, South Africa and Singapore from Tanzania in the ship. He arrived in Shanghai Port in May 1993, and in Huangpu port in July 1993. The patient denied the history of sex intercourse with prostitutes, drug use, homosexuality, surgery, transfusion of blood or blood product. He is married and has a son and a daughter. All of them are healthy.

#### Case II:

A Myanmar cooker in the ship, aged 52, was sent to a hospital for high fever, vomiting and semi-comatose state. A month later, he began to lose his appetite, vomit and lose his weight continuously.

P. E: T:39.8°C P:90 /M, BP:16/10KPA. There are moist rales in the lungs, and 3 peanut-like lymph nodes under his right chest. The X-ray examination indicates the obstructive pneumonitis in the upper right lung. Ultrasonic examination indicates the occupied lesions on the head of the pancreas.

HIV-antibody test: ELISA, PA, QT and WB are all positive. The band types are gp160, 120 p65, 55,5 pg41-43 p32, 24, 18, 15.

#### Case III:

A 25-year old male seaman from Myanmar with no symptoms.

HIV-antibody test: ELISA ,PA,QT and WB are all positive. The band types are gp160, 120 p65, 55,5 pg41-43 p32. 24, 18, 15.

Epidemiological history: The patient was in the ship from Malaysia and arrived at Guangpu port on 10 April 1996. In the afternoon of 11 April 1996 the seaman was sent to hospital for high fever and coma. He was suspicious of AIDS and the HIV test is positive. The patient admitted of the histories of sexual intercourse with prostitute and homosexual.

# **Treatment**

The blood of the 3 seamen was sent to AIDS Confirmed Centre of Guangzhou Health and Quarantine Bureau and was confirmed HIV positive.

The patients were isolated and disinfected after they were confirmed HIV positive. Antibiotics were also used. The situation was reported to the Guangzhou Health Bureau and Guangzhou Foreign Affairs Office in order to dispatch the patients home.

#### Discussion

The 3 cases are all from AIDS epidemic areas. Case I denied all possible ways of infection. But we don't know whether he told the truth. Africa is an AIDS epidemic area, contusion, surgery or sex may be the possible way of HIV infection. Further investigations are required to discern the transmission route. Case II had sexual intercourse with prostitutes and was homosexual, and Case III was homosexual.

Having found 3 HIV-positive seamen in the clinical emergency cases indicates the importance of surveillance of the clinical emergency of international seamen. Before the transferring of emergent cases, the Health and Quarantine Service should make an examination first. We use the PA method to screen first, then use WB method to confirm. This can hasten the AIDS test.

It is important to enforce the surveillance and health education of AIDS. AIDS spreads very fast. Now, there are 17 million adult and child HIV carriers, of them 4 million have become AIDS patients. On average, there are more than 6,000 new HIV infections everyday. The UN secretary Carlie appealed the poor countries to fight against AIDS on the AIDS Conference in Paris on 1 Dec 1994; he said, "We are here, not to warn, but to declare that the whole world is in an emergent state. Everyday, AIDS kills our children, destroys our family, threaten our society. We must get going". In the next 10 years, there will be 9 million people die of AIDS in the 15 poorest African countries. It is estimated by the World Bank that in the next 20 years, AIDS will waste 22% of GNP of the African countries. So it is of importance to enforce the surveillance and prevention of AIDS, ensure the people's health and our country's economic construction.

# A Report on the Finding of a HIV Carrier from the Foreign Students in China

Zhang xiaofeng, Guangzhou Health and Quarantine Bureau, PRC

#### **Abstract**

This paper reports a Burmese student (holding Chinese passport three months ago) was confirmed to be anti-HIV positive when she accepted medical examination for residence in China, then we made epidemiological investigation and health measures, and also approached the subject about how to administer AIDS surveillance on the foreign students in China. We used five methods to test, they were ELISA, PA, QWB, Agen HIV-1 Ab Testing, WB. Above mentioned five testing were all positive and WB bands were gp160, gp120, p65, p55, gp41-43, p32, p24, p18±, p15±. Through epidemiological investigation and analysis, we could not find out how and where the carrier was infected with HIV. According to our laws and regulations, the HIV carrier had been stopped her studies in the university, and had been kept watch to leave the country by the officers concerned. The place she lived and the articles she used had been disinfected thoroughly. Some regulations in our country about how to administer the AIDS surveillance on the foreign students were not satisfactory and clear. In order to reduce the epidemic of AIDS as far as possible on the campus, the author suggested that any person who lived either abroad or outside frontier (Hong Kong, Macau, Taiwan) should be tested for HIV antibody irrespective of whether they hold foreign passport or Chinese passport when they came to China to study and at the annual medical examination.

#### Introduction

On 21 Dec 1995, a Burmese student Miss Liu who was studying in an university of Guangzhou was confirmed to be anti-HIV positive by medical examination. We now report the case as follows:

#### General condition

The HIV carrier Miss Liu is single, 18 years old, a foreign student from Burma. Her original family home is Yunnan, China.

Her development and nourishment are good, general examinations including throat, mucous membrane of mouth , sclera, skin are normal; lymph nodes, liver and spleen are not palpable; breath sounds clear, beats regular and no heart murmur; X-ray and ECG normal; genitourinary examination did not reveal abnormal finding.

#### Laboratory examination

Five HIV antibody test methods were used, i.e. ELISA, PA, QWB, Agen HIV-1 Ab testing, WB. All of the tests were positive, and WB bands were gp160, gp120, p65, p55, gp41-43, p32, p24, p18±, p15±.

# Epidemiological investigation

Miss Liu had been studying between Burma and the Burma frontier of China before she came to Guangzhou. She denied that she had history of homosexuality, sexual intercourse, intravenous drug use, and operation.

In 1992, she received transfusion in a private clinic of Burma because of enteritis. Two years ago, after getting a bad cold she injected antipyretic using glass syringe also in a private clinic of the Burma frontier of China. Since she came to Guangzhou, she had been injected hepatitis B vaccine using single use syringe, and had been treated with laser for hemorrhoids.

In Nov 1993, Miss Liu entered Guangzhou holding Chinese passport for study in the continuation school of overseas Chinese of Guangzhou, so she hadn't been required testing HIV antibody.

In July 1995, Miss Liu went back to Burma for applying Burmese nationality. On 3 Dec 1995, she entered Guangzhou again holding Burmese passport for studying in an University of Guangzhou.

Miss Liu said that she had cough at sleep recently, but no fever, diarrhoea or emaciation. Since her parents divorced early, Miss Liu and her brother lived together with their father who was a businessman and often went out for business, so they were lodged long-term at their relatives' for living and studying.

#### Discussion

In accordance with the requirement of our laws and regulations, Miss Liu had discontinued her studies and had been advised to leave the country by the officers concerned on 1 Dec 1995. Her roommate moved out immediately and the room she had lived and the articles she had used has been disinfected thoroughly using 2% C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>.

Miss Liu had been studying in Burma or in the Burma frontier of China from childhood. Health condition of people and the medical equipment is poor. As Burma is the main business marketplace of drug and the area of high incidence of HIV infection in Asia, and the Burma frontier of China is also the area of high incidence of AIDS in China, we cannot exclude the possibility that Miss Liu was infected HIV through transfusion or injection in the way just above mentioned.

Our laws and regulations do not require that any person with Chinese passport who lived either abroad or outside frontier and came back to China for study need to be tested for HIV. This could lead to serious consequences and harmfulness for Miss Liu and the mass of student. Miss Liu entered Guangzhou with Chinese passport at the first time and did not need HIV antibody test. She had then stayed in China which made it difficult to confirm the place and time of her HIV infection This time if Miss Liu happened to enter Guangzhou with Chinese passport, again she did not need to have anti-HIV test. As a result, there will certainly be the risk of HIV spread.

In recent years, several cases of HIV infection were found in the foreign students in our country. The department concerned should pay great attention. Nowadays some students are liberal about sex, the phenomenon of exchange of sex partners, making these people vulnerable to HIV infection. Therefore it is thought that AIDS surveillance on the foreign students are not yet satisfactory and still need to be expanded. In order that the work of surveillance could be given effective legal basis, it is also suggested that any person who lived either abroad or outside frontier (Hong Kong, Macau, Taiwan) should be tested for anti-HIV antibody no matter whether

they hold foreign passport or Chinese passport when they come to China for study. According to the principle of epidemiology and serology, the foreign students should have annual AIDS surveillance to detect HIV infection . Strict precautions against the spread of AIDS within the campus and society should be taken.

# The Analysis on STDs and AIDS Surveillance to International Sailor

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#### **Abstract**

In order to prevent and control sexually transmitted diseases (STDs) and acquired immunodeficiency syndrome (AIDS) in time, we act according to related documents of our country to survey STDs and AIDS of international sailor. This paper analyses surveillance data of International sailor on Huangpu port from 1991. 1-1996.9. In the study period 13859 international sailors were inspected: 8 (5.77/10<sup>4</sup>) syphilis patients, 3 (2.16/10<sup>4</sup>) AIDS patients and 3 (2.16/10<sup>4</sup>) HIV sero-positives were found. All the infected sailors were male, and most of them got infected abroad. 8 syphilis patients and 1 HIV sero-positive sailor were Chinese while the others were foreign sailors. Investigation showed that most of sailors with STDs in this report admitted sex relations with prostitutes; one of the 3 AIDS patients had homosexual activities. These indicated that sexual transmission was the focal point of prevention. An AIDS sailor had been in hospital because of head injury, and got transfusion in Kenya. It was the most probable way that he get infected. In this regard, medical services of sailors needed attention. As a result of high rate of floating populations, the HIV infection rate of sailor in Hunagpu port was a little higher than other port. Efforts in the control and prevention of HIV should be focused on educating this group and continuing surveillance of international sailor.

#### Introduction

Huangpu Port is an international port in South China. Numerous international sailors were potential intermediary to transmit sexually transmitted diseases (STDs) in the nation. We act according to related documents of our country to survey presence of STDs and AIDS in international sailor. In this study, we analysed surveillance data of international sailor on Huangpu port from 1991. 1-1996.9.

#### Materials and Methods

**Populations:** International sailors

**Source of material:** The surveillance data by Huangpu port from 1991. 1-1996.9.

#### **Laboratory method:**

The serologic test used for syphilis was USR and RPR. Positive reaction was confirmed by TPHA. Anti-HIV was inspected by PA or RWB, and positive reaction was confirmed by WB.

## Results

8 Syphilis, 3 HIV and 3 AIDS patients were found from 1991. 1 to 1996.9 in Huangpu port (Table 1). All infected sailor were investigated by epidemiologically (Table 2).

Table 1 Yearly STDs & AIDS surveillance results of international sailors

Year	Surveillant No.	Syphilis	Anti-HIV	AIDS
		Seropositive	Seropositive	
1991	1850	1	-	-
1992	2936	1	-	-
1993	3250	1	1	1
1994	2182	-	-	-
1995	1818	4	-	-
1996. 1-9	1823	1	2	2
Total	13859	8	3	3

 Table 2
 Demographic and clinical characteristics of infected sailors

No.	Age	Sex	Nationality	Disease	Symptom	Detection Time
1	28	Male	Chinese	Syphilis	Yes	1991.6
2	42	Male	Chinese	Syphilis	No	1992.10
3	44	Male	Chinese	Anti-HIV	No	1993.5
4	48	Male	Tanzania	AIDS	Yes	1993.7
5	45	Male	Chinese	Syphilis	No	1993.10
6	29	Male	Chinese	Syphilis	No	1995.2
7	53	Male	Chinese	Syphilis	No	1995.3
8	32	male	Chinese	Syphilis	No	1995.11
9	54	male	Chinese	Syphilis	No	1995.12
10	51	male	Burma	AIDS	Yes	1996.4
11	25	male	Burma	Anti-HIV	No	1996.4
12	59	male	Chinese	Syphilis	No	1996.7
13	36	male	Thailand	AIDS	Yes	1996.9
14	36	male	Thailand	Anti-HIV	No	1996.9

## Discussions

STDs are a group of widely epidemic diseases in the world. International sailors were potential intermediary to transmit STDs. During the study period, 13859 international sailor were inspected,  $8 (5.77/10^4)$  syphilis patients,  $3 (2.16/10^4)$  AIDS patients and  $3 (2.16/10^4)$  HIV seropositive sailors were found. The HIV infection rate of sailor in Huangpu port was a little higher than other port  $^{1-3}$ . Therefore, it is important to screen for STDs and AIDS in international sailor.

Investigations showed that most of the sailors infected with STDs admitted having sex relations with prostitutes while one of the 3 AIDS patients had homosexual behaviours. The results indicated that sexual transmission was the focal point of prevention<sup>4.</sup>

An AIDS sailor had been in hospital because of head injury, and got transfusion in Kenya. This was the possible way he get infected. The medical services obtained by the sailors needed attention.

All syphilis patients and 1 HIV sero-positive sailor were Chinese, the others were foreign sailors. Efforts in the control and prevention of HIV should be focused on educating this group.

In order to prevent and control STDs and AIDS in time, enforcing the management of international sailor and STDs & AIDS surveillance are of great importance.

# **Footnotes**

- 1. Xu, Zihong (1995). The analysis on infectious disease surveillance of Shen Zeng port from 1984-1992. *Chinese Journal of Frontier Health and Quarantine* 18:1, 7.
- 2. Lun, Liguang et al. The analysis of AIDS surveillance result to people leaving or entering the frontier during 1985 -1992. *Scientific paper on the 120th Anniversary of Frontier Health and Quarantine of China*.
- 3. Shun, Wei et al. (1995). The primary discussion on HIV surveillant Emphasis to Chinese international traveller. *Science of Travel Medicine* 1:1, 10.
- 4. Xu, Hua et al. (1995). An analysis of STDs problem during international travel. *Science of Travel Medicine* 1:1, 6.

# Symposium B:

# Clinical Management of HIV Infection

# **Surrogate Markers of HIV Disease**

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#### **Abstract**

Surrogate markers of HIV infection are laboratory measurable traits that correlate with clinical outcome. A good marker should identify patients with highest risk of disease progression, provide estimation of infection duration, assist in staging, predict development of indicator diseases, responsive to immunomodulating and antiviral treatments, easily quantifiable, accessible, reliable and affordable. Markers that are useful in early (immunocompetent phase) HIV disease consist of immune activation markers which may involve cellular (HLA-DR<sup>+</sup> T cells, IL-2R<sup>+</sup> T cells), serum (β<sub>2</sub>- microglobulin, neopterin, sCD8, sIL-2R) components or antibody upregulation (anti-gp120, anti-p24, IgA). Late (immunodeficient phase) stage markers are indicators of immune dysfunction and include markers of cellular immune dysfunction (CD4<sup>+</sup> T cells), cytokine depletion (interferon- $\alpha$ , interleukin-2), and antibody downregulation (anti-p24, anti-gp 120). Other serologic markers are tumour necrosis factor (TNF- $\alpha$ ), anti-NEF (negative factor, an accessory gene product of HIV) while 24 antigen, SI phenotype are proven antigen markers. More recently, quantitative measurement of plasma HIV RNA levels was demonstrated to be a good surrogate marker of HIV disease progression and response to antiretroviral therapy before substantial immune destruction has occurred. The single best predictor of AIDS disease and progression characterised to date is the percentage or absolute number of circulating CD4+ T-cells. In Hong Kong, using flow cytometry technique, we studied the distribution of T- lymphocytes in a normal healthy adult Chinese population and established a set of lymphocyte sub-population reference range values for monitoring HIV- infected Chinese adults. We found that Chinese adults have low peripheral circulating CD4<sup>+</sup> T cells (normal range, 95% CI: 292- 1366/uL, 23.1-51.0% lymphocytes). Values for CD8<sup>+</sup> T cells and CD3<sup>+</sup> cells are 240- 1028/uL (17.9- 47.4%) and 672- 2368/uL (54.8-83.0%) respectively. Use of peripheral CD4<sup>+</sup> T cells (in absolute counts/uL or % lymphocytes) values as a surrogate marker for HIV-infected Chinese adults should be interpreted with caution.

#### Introduction

Surrogate markers of HIV infection are laboratory measurable traits that correlate with clinical outcome. A good marker should: (1). identify those with highest risk of disease progression, (2) provide estimation of infection duration, (3). assist in staging, (4). predict development of indicator diseases, (5). responsive to immunomodulating and antiretroviral treatment, (6). easily quantifiable, (7). accessible, (8). reliable, and (9). affordable.

Surrogate markers provide scientific and statistical estimates for the likelihood of survival for HIV-positive patients, and they attempt to answer the following simple but difficult questions which must be addressed by every attending physician: "How serious is my illness?", "How will I respond to therapy?", "How long can I live?" and "When will I die?".

#### Discussion

The early (immunocompetent) phase of HIV- disease is mostly characterised by the immune activation markers. These include: (1)cellular components, e.g. HLA-DR+ T cells, IL-2R+ T cells, (2)serum components, e.g.  $\beta_2-$  M, neopterin, sCD8 and sIL-2R, (3)antibody upregulation, e.g. anti- gp 120, anti- p24, and IgA.

The late (immunodeficient) phase of HIV disease is characterized by (1) serologic markers, e.g. Tumour necrosis factor (TNF-  $\alpha$ ), anti- NEF (negative factor); and (2) antigen markers, e.g. p24 antigen, synctium inducing (SI) phenotype.

The experience of the last ten years in monitoring HIV disease shows that the markers that are most useful are (1) CD4 cell counts, (2)  $\beta_2$  microglobulin, and (3) neopterin. More recently, plasma viral RNA levels have also been shown to correlate strongly with the progression of disease.

However, it is now known that that various surrogate markers can be affected by factors other than HIV disease alone. For example,  $\beta_2$  microglobulin levels are elevated in viral diseases (e.g. CMV), lymphoproliferative disorders (e.g. lymphomas), chronic hepatitis, in hemophiliacs as well as drug abusers. Neopterin levels are elevated in viral, bacterial, and fungal infections, in aseptic meningoencephalitis, kidney graft rejection, acute graft vs host disease, collagen vascular disease and in advanced malignancies.

CD4+ T cell changes have also been extensively studied, and shown to decrease in sepsis, pneumonia, malaria (*P.falciparum*), tuberculosis, acute cytomegalovirus infection, rubella, chronic active hepatitis B disease and tetanus vaccination. On the other hand, increases in CD4+ T-cells have been found in HTLV II infection and endocarditis.

In Hong Kong, we have established a reference range of T-lymphocyte sub-population for monitoring HIV-infected Chinese adults, and found that the healthy Chinese adult has lower peripheral T-cell and B-cell, but higher NK-cell, than the Caucasian partner, both in terms of the percentage of circulating lymphocytes as well as expressed in absolute numbers per ml. See figures 1-6.

In reading results and recommendations, both for treatment and prophylaxis, which are based on Caucasian studies, physicians should take caution in directly translating CD4+ levels from the Caucasian to the Chinese adult. Further studies will be needed to substantiate the possible influence in actual clinical practice.

# Acknowledgements

The authors would like to thank the Editorial Board of the journal *Clinical and Diagnostic Laboratory Immunology* for permission of re-printing Figures 1 to 3 from the article - Lymphocyte sub-population reference ranges for monitoring human immunodeficiency virus-infected Chinese adults by Kam et al at Clin Diagn Lab Immunol 3:3, 326-330.

# References

Reichert, T., DeBruyere, M. & Totterman, T. et al. (1991). Lymphocyte subset reference ranges in adult Caucasian. *Clin Immunol Immunopathol* 60, 190-208.

Kam, KM, Leung, WL, Kwok, MY, Hung, MY, Lee, SS & Mak, WP. (1996). Lymphocyte sub-population reference ranges for monitoring human immunodeficiency virus- infected Chinese adults. *Clin Diagn Lab Immunol* 3:3, 326-330.

Figure 1 Distribution of leukocyte (WBC) differential count in 208 healthy Chinese adults

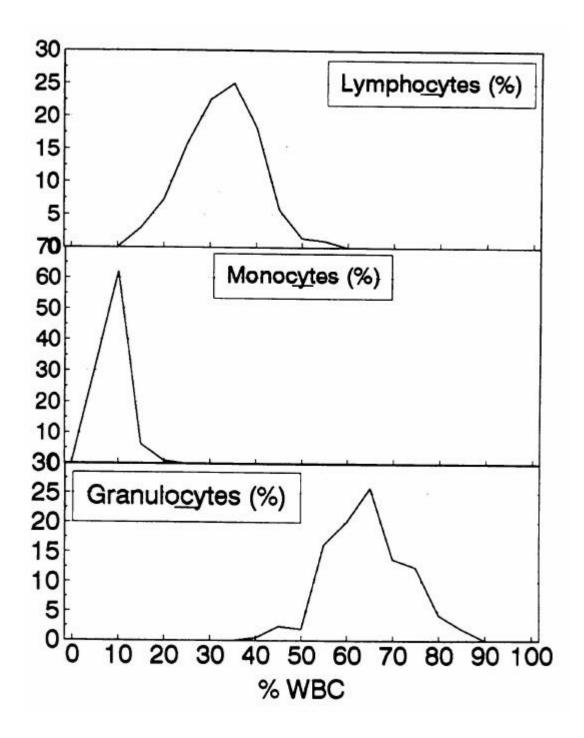


Figure 2 Distribution of lymphocyte subsets (CD3+, CD3+ CD4+, CD3+ CD8+, CD3- CD19+ and CD3- with CD16+ and/or CD56+) in 208 Chinese adults

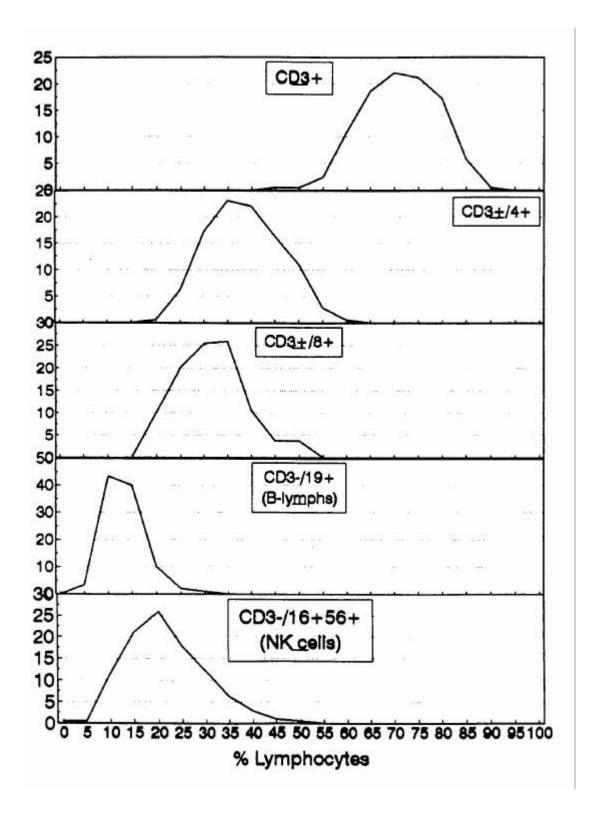


Figure 3 Distribution of lymphocyte subsets (CD38+, CD8+/CD38+. HLA\_DR+ and CD8+ HLA\_DR+) in 208 Chinese adults

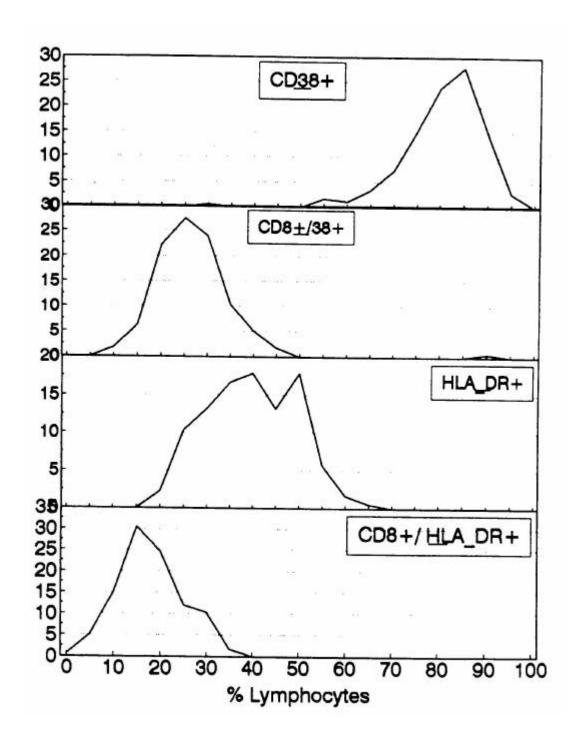


Figure 4 Comparison between Caucasian (Ca) and Chinese (Ch) lymphocyte subpopulation reference ranges – T cell, B cell and NK cells

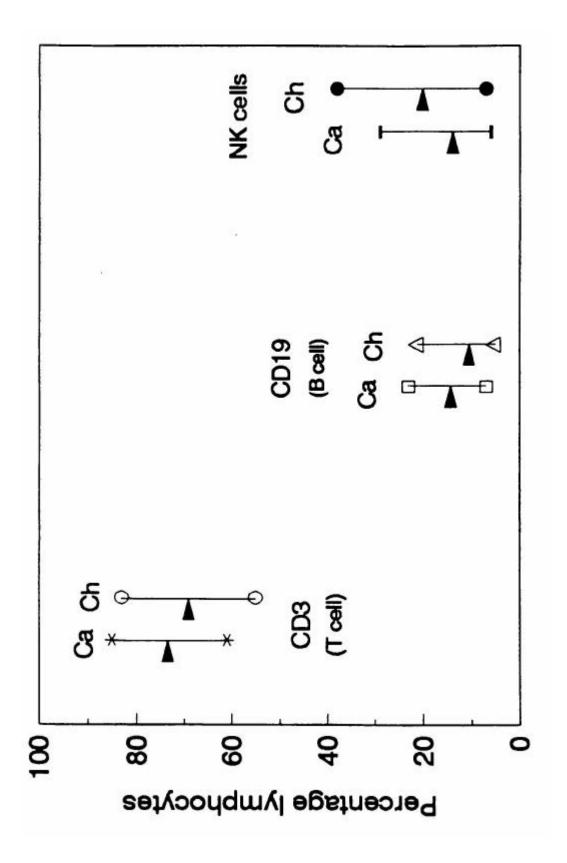


Figure 5 Comparison between Caucasian (Ca) and Chinese (Ch) lymphocyte subpopulation reference ranges – CD4 and CD8 cells

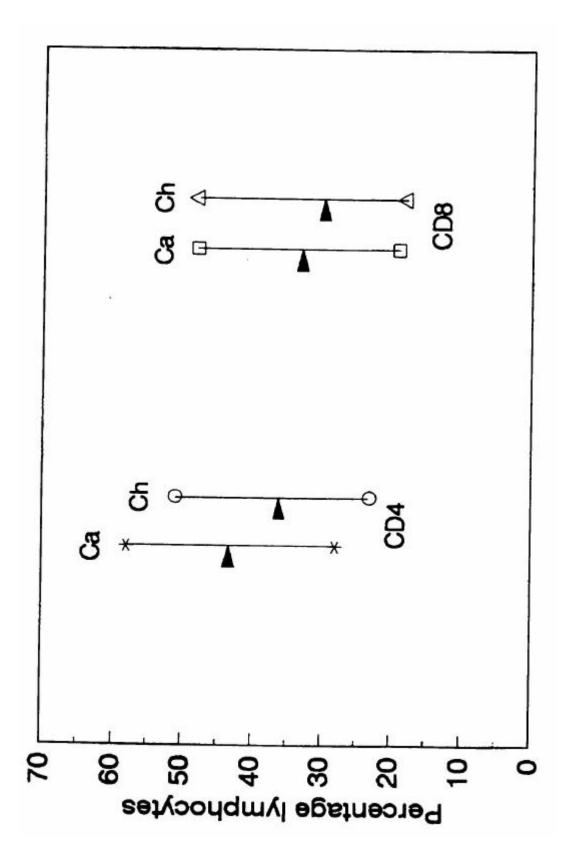
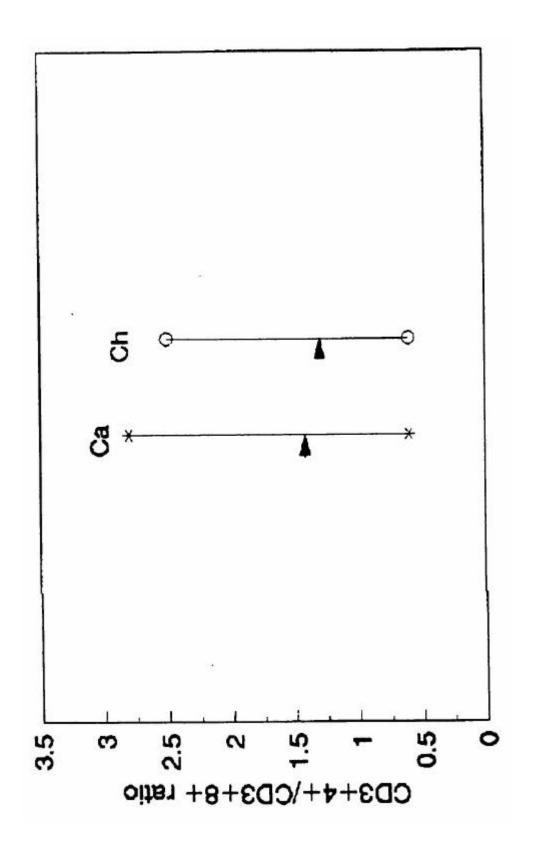


Figure 6 Comparison between Caucasian (Ca) and Chinese (Ch) lymphocyte subpopulation reference ranges – CD4/CD8 cells



# Oral Manifestations of HIV-infected Individuals in Hong Kong

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#### Abstract

Although oral manifestations of HIV-infection are well documented in Western cohorts, little data is available on oral diseases in similar Asian populations. Hence a longitudinal study of oral manifestations of 32 HIV-infected individuals who visited the Prince Philip Dental Hospital HIV Research Clinic in Hong Kong was undertaken. Each individual was followed for a minimum period of 12 months (February 1993 through September 1995), at three monthly intervals. All were males (Chinese 94%, age range 20 to 51 years; mean 33.15 years) and the CD4+ counts ranged from 2 to 850 cells/mm³. A total of 14 different categories of oral lesions associated with HIV-infection were observed during the study period. The most frequent lesions were apthous ulceration (41%), xerostomia (28%) and non-specific ulcers (22%). Lesions strongly associated with HIV-infection such as pseudomembranous candidosis (19%) and hairy leukoplakia (16%) were also observed, although at a frequency lower than in the Western cohorts. Other findings included herpes labialis (13%) and the erythematous form of candidosis (6%) and ulcerative gingivitis (6%). Whereas the majority had one or more oral findings, a small minority (8%) of subjects had no oral signs and symptoms during the study period. These data indicate that oral manifestations of HIV-infection in this Asian cohort (predominantly Chinese) are essentially similar to their Western counterparts, despite the noticeable absence of few lesions such as Kaposi's s sarcoma.

#### Introduction

Oral lesions are common in HIV-infected patients and they are usually the first signs of HIV infection. The early detection of these oral lesions is important not only because they serve as clinical markers of disease progression, 1,2 but also because prompt intervention will help to improve the prognosis and quality of life of the patients.

Although there are many studies on the oral manifestations of HIV infection, these are mainly limited to the Western world and little is known about the situation in Asian populations. For instance there is no data on the oral manifestations of HIV-infected individuals either in China or Hong Kong. Therefore the aim of this study was to collect information on the oral conditions of these individuals and to provide baseline data for further investigations.

# **Methods and Materials**

The sample group consisted of 32 HIV-infected patients in Hong Kong. They were diagnosed as HIV-infected by ELISA and confirmed by Western Blot. All patients were outpatients regularly attending the Queen Elizabeth Hospital, Hong Kong and the AIDS Unit, Department of Health, Hong Kong.

Patients with CD4+ count less than 600 cells/ $\mu$ L were referred to the Prince Philip Dental Hospital, Hong Kong for oral examination. Oral consent was obtained from each patient before the experiment.

Each patient was followed for a period of one year on a three month basis, except when there might be clinical conditions which required more frequent attendance. At each visit, medical history was taken and extra- and intra-oral examination was performed. Diagnostic criteria for oral lesions were based on studies described before.<sup>3,4</sup> Previous and current medical and laboratory parameters were obtained from medical doctors in the AIDS Unit.

# Results

A total of 32 subjects were included in this study. All were male patients with age ranging from 20 to 51 with a mean of 33.15 (median 31). All were ethnic Chinese except for two who were of Dutch and Indian origin. The study commenced in February 1993 and ended in September 1995.

The majority (13, 40.63%) contracted the virus through homosexual contacts, followed by heterosexual transmission (11, 34.8%). Four (12.5%) were haemophiliacs and two (6.25%) were bisexuals. Another two (6.25%) were intra-venous drug users.

Due to the difficulty in recruiting volunteers, individuals with CD4+ count more than 600 cells/ $\mu$ L were also included. The CD4+ count of these patients during the whole study ranged from 2 to 850 cells/ $\mu$ L. About one third (10, 31.25%) had CD4+ count less than 200 cells/ $\mu$ L, 14 (43.75%) had CD4+ counts between 200-499 cells/ $\mu$ L, and the other 8 (25%) had CD4+ count more than 500/ $\mu$ L in the first visit.

As some of the patients were first seen before the CDC revised the HIV staging in 1993, the 1992 CDC classification system was used in this study. In the first visit, eight (25.0%) were in stage II, one (3.13%) was in stage III, nine (28.13%) in stage IV C-1, eight (25.0%) in stage IV C-2 and six (18.75%) in stage IV E.

At the end of the study, seven (21.88%) of them were deceased and 23 (71.88%) were alive and under various stages of the infection. Two (6.25%) of the patients left Hong Kong before the end of the study.

A total of 14 different types of oral lesions or conditions were observed during the whole period of the study. The commonest lesion found was minor aphthous ulcer. Thirteen (40.63%) patients had this lesion at some point of the study. Xerostomia was reported in 9 patients (28.13%). Ulcers classified as 'Aot otherwise specified' was observed in 7 cases (21.88%). Pseudomembranous candidiasis was found in six patients (18.75%). Hairy leukoplakia, another oral lesion that is strongly associated with HIV infection, was observed in 5 patients (15.63%). Herpes labialis was found in four patients (12.5%), erythematous candidiasis and ulcerative gingivitis in two patients (6.25%). Other lesions were found only once and Table 1 summarises the lesions found in the study group.

Table 1 Prevalence of oral lesions/conditions in a cohort of 32 HIV-infected patients in Hong Kong

Oral lesions/conditions	No.	<u>%</u>
Minor aphthous ulcer	13	41
Xerostomia	9	28
Ulcer (NOS)	7	22
Pseudomembranous candidiasis	6	19
Hairy leukoplakia	5	16
Herpes labialis	4	13
Erythematous candidiasis	2	6
Ulcerative gingivitis	2	6
Major aphthous ulcer	1	3
Herpetiform ulcers	1	3
Ulcerative periodontitis	1	3
Melanotic hyperpigmentation	1	3
Palatal petechiae	1	3
Herpetic ulcer	1	3

Subjects with no oral signs and symptoms during the whole study were not uncommon (8, 25%). The majority had one or more oral findings, but not more than five. It was commonest to find two oral findings in these subjects (31.5%). Only one (3.13%) had five different findings in his oral cavity.

For illustrative purposes we give below two case reports from our cohort.

# **Case Reports**

# Case One

A 36-year-old ethnic Chinese, heterosexual male was referred to the Prince Philip Dental Hospital for routine dental check-up on May 10, 1993. He was diagnosed to be HIV antibody positive in January 1990 and had recurrent episodes of genital herpes. Medications included AZT, pentamidine, and INAH. The CD4+ count in the first visit was 150 cell/ $\mu$ L and dropped to a level of 20 cells/ $\mu$ L within 15 months.

Nothing abnormal was detected on examination of the head and neck region. On intraoral examination, minor aphthous ulcers were detected on the right buccal mucosa. Ten months later, the patient came back complaining of painful ulcers on the left border of tongue and on left side of the cheek which prevented the patient from swallowing comfortably. On examination, two major aphthous ulcers of diameter about 10mm were found on left border of tongue and on the left buccal mucosa. CD4+ count at this visit was 96 cells/µL. Kenalog in Orabase (triamcinolone acetonide) was prescribed and the lesions healed, with scars, in less than one month. A painful ulcer which started on the buccal side of tooth 24 and 25 area was found two months later and this spread across to quadrant one and in less than one week literally affected the gingivae of the whole mouth. Patient had difficulties in maintaining oral hygiene as the lesion was very painful. Ulcerative gingivitis was diagnosed and metronidazole and chlorhexidine mouthwash were prescribed. Debridement of the affected area was also done in the same visit. This lesion took about one month to heal. All of the lesions mentioned about recurred within the next three months and after the treatment protocol mentioned above, the lesions disappeared. In the last visit when the patient was reviewed, he had oral pseudomembranous candidiasis on the buccal mucosa and throughout the oropharynx. Fluconazole was prescribed. CD4+ at this visit was 20 cells/μL. The patient died in April 1995.

# Case Two

A 39-year-old Caucasian, homosexual male was referred to the Prince Philip Dental Hospital for routine dental check-up on March 1, 1993. He was diagnosed as HIV antibody positive in June 1985. He had oral pseudomembranous candidiasis in February 1993 and medications included AZT, ddI, ddC, Septrin and ketoconazole. CD4+ count at the first visit was 494 cells/µL.

Examination of the head and neck region of the patient revealed freely movable, tender lymph nodes of the submandibular and cervical regions. The patient complained of dry mouth especially in the morning. Intra-oral examination revealed a relatively dry but otherwise normal mucosa. Three months later when the patient came back for review, he still complained of dry mouth in addition to painful gums at the lower anterior teeth region. Tooth 31 and 41 were mobile and tender to the slightest pressure. No periodontal pocket deeper than 3mm could be found. The pain as described by the patient originated deep, from the bone which is characteristic of ulcerative periodontitis. For treatment of ulcerative periodontitis, local debridement of tooth 31 and 41 were done under local anaesthesia as the teeth were extremely tender. Metronidazole and chlorhexidine were prescribed and in the review one week later, the teeth were no longer tender and there was no bleeding on probing. In the last visit when the patient was seen, white patches all over the buccal mucosa which could be wiped away with a gauze, leaving behind bleeding areas could be found. Oral pseudomembranous candidiasis was

diagnosed and as the patient was already taking ketoconazole at that visit, no antifungal therapy was prescribed. The patient died in 1995.

# Discussion

Oral lesions are usually the commonest and earliest clinical manifestations of HIV infection. The occurrence of some of these lesions such as thrush and hairy leukoplakia in an individual where the serostatus is unknown is strongly suggestive of HIV infection. Although the prevalence of these lesions in our study was lower when compared with the Western world (Table 2), they were nonetheless the most common.

Table 2 Prevalence of oral lesions (%) in HIV-infected individuals from different studies.<sup>5-10</sup>

Lesion	HIV-infected	<u>AIDS</u>	Current Study
Hairy leukoplakia	9-44	4-23	16
Candidiasis	11-85	29-87	25
Kaposi's sarcoma	0	35-38	0
Herpes	11-29	0-9	3
Aphthous	11-14	2-7	41
Viral wart	0	0-1	0
necrotising stomatitis	0	0-7	0
ulcerative gingivitis	0	51	6
ulcerative periodontitis	0-21	19	3

The prevalence of oral candidiasis in HIV infection may vary from 11-96% and this may be due to choice of different sample groups and the use of different diagnostic tools. 11 Erythematous candidiasis, which is as important as pseudomembranous candidiasis, can be easily overlooked if the patients are not examined carefully. Although it is reported that recurrent candidiasis is common in HIV infection, in our study which followed the patients for a period of one year, recurrence was only found in one case. However, it should be noted that only 60% of the patients returned for the second appointment. Another reason for the low recurrence found in our study may also be the continuous/intermittent use of prophylactic antifungals in some of the cases.

Hairy leukoplakia was reported in 16% of the patients. This lesion is usually symptomless and in our patient group, none of them complained about the lesion. If treatment is needed, it usually responds well with acyclovir or ganciclovir, or podophyllin and retinoin. However, recurrence is not uncommon. First thought to be unique to HIV-infected patients, this lesion is now also found in other immunosuppressed patients like organ or bone-marrow recipients and those taking long-term steroid. Moreover, a few cases have been reported in immunocompetent individuals. Even so, the appearance of this lesion in an otherwise healthy individual whose serostatus is unknown should not be taken lightly as this lesion is strongly suggestive of HIV infection. Further, it is a prognostic indicator as some three quarters of patients with hairy leukoplakia develop AIDS within two to three years. In the patients with the patients of the patients with hairy leukoplakia develop AIDS within two to three years.

Xerostomia was common in our study group. However, this might be due to the side effect of medications like AZT rather than a direct effect of the HIV on the salivary gland. Aphthous ulcers were relatively common in our cohort, but this finding is non-conclusive as there is no data on the prevalence of apthous ulcers in the non-HIV infected individuals in this region.

Oral lesions of Kaposi's sarcoma, which were commonly reported in the literature, was not found in our study. It is tempting to suggest that there is a racial difference in the distribution of this lesion in HIV-infected patients. However, due to the relatively small number of patients in this study, investigation of a larger cohort over a prolonged period is required before drawing this conclusion.

In conclusion, the oral diseases found in our subjects were similar to their Western counterparts, although the prevalence of some lesions was lower and others such as Kaposi's sarcoma were notable being completely absent in this cohort.

# Acknowledgment

We thank Dr. K.H. Wong and Dr. S.S. Lee from Department of Health, Hong Kong and Dr. P.C.K. Li from Queen Elizabeth Hospital, Hong Kong for referring patients to us during the study period.

#### **Footnotes**

- 1. Klein, RS, Harris, CA & Small, CB, et al. (1984). Oral candidiasis in high risk patients as the initial manifestation of the acquired immunodeficiency syndrome. *N Engl J Med* 311, 354-8.
- 2. Greenspan, D. & Greenspan, JS. (1992). Significance of hairy leukoplakia. *Oral Surg Oral Med Oral Pathol* 73, 151-4.
- 3. Greenspan, JS, Barr, CE & Sciubba, JJ et al. (1992). Oral manifestations of HIV infection. Definitions, diagnostic criteria, and principles of therapy. *Oral Surg Oral Med Oral Pathol* 73, 142-4.
- 4. EC-Clearinghouse on Oral Problems related to HIV Infection and WHO Collaborating Centre on the Oral Manifestations of the Immunodeficiency Virus. (1993). Classification and diagnostic criteria for oral lesions in HIV infection. *J Oral Pathol Med* 22, 289-91.

- 5. Barone, R., Ficarra, G., Gaglioti, D., Orsi, A. & Mazzotta, F. (1990). Prevalence of oral lesions among HIV-infected intravenous drug abusers and other risk groups. *Oral Surg* 69, 169-73.
- 6. Melnick, SL, Engel, D. & Truelove, E. et al. (1989). Oral mucosal lesions: association with the presence of antibodies to the human immunodeficiency virus. *Oral Surg* 68, 37-43.
- 7. Feigal, DW, Overby, GL & Greenspan, D. et al. (1989). Oral lesions and immune function with and without HIV infection. *J Dent Res* 65, 190. Abstracts.
- 8. Roberts, MW, Brahim, JS & Rinne, NF. (1988). Oral manifestations of AIDS: a study of 84 patients. *J Am Dent Assoc* 116, 863-66.
- 9. Barr, C., Croxson, T., Dobles, A., Miller, L., Anderson, M. & Khan, M. (1990). HIV-associated oral lesions: immunologic and salivary parameters. *J Dent Res* 1443, 289. Abstracts.
- 10. Silverman, S. Jr., Migliorati, CA, Lozada-Nur, F., Greenspan, D. & Conant, MA. (1986). Oral findings in people with or at high risk for AIDS: a study of 375 homosexual males. *J Am Dent Assoc* 112, 187-92.
- 11. Samaranayake, LP. (1992). Oral mycoses in HIV infection. *Oral Surg Oral Med Oral Pathol* 73, 171-80.
- 12. King, GN, Healy, CM & Glover, MT, et al. (1994). Prevalence and risk factors associated with leukoplakia, hairy leukoplakia, erythematous candidiasis, and gingival hyperplasia in renal transplant recipients. *Oral Surg Oral Med Oral Pathol* 78, 18-26.
- 13. Felix, DH, Watret, K., Wray, D. & Southam, JC. (1992). Hairy leukoplakia in an HIV-negative, nonimmunosuppressed patient. *Oral Surg Oral Med Oral Pathol* 74, 563-66.
- 14. Samaranayake, LP & Pindborg, JJ. (1989). Hairy Leukoplakia. *Br Med J* 298, 270-71.

# Placement of Chronic Central Venous Catheter in AIDS Patients

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# **Abstract**

The primary objective of this study is to examine the profile and outcome of AIDS patients who required placement of chronic central venous catheter over a 4-year period in Queen Elizabeth Hospital (QEH). Retrospective analysis of records in QEH of all AIDS patients who had placement of chronic central venous catheter from June 1992 through August 1996. During the study period, 13 male and 4 female AIDS patients required placement of chronic central venous catheter for long term administration of intravenous medication. Their median age was 37 years (23-65) and their CD4 count at or soon after catheter placement was 24/µl (10-396). All except 2 patients had had one or more AIDS defining illnesses before developing the opportunistic infection necessitating placement of chronic central venous catheter. The types of catheters used included implanted subcutaneous port in 14 patients and Hickman catheter in 3. Drugs administered through the catheter included ganciclovir and foscarnet (16), either as sequential monotherapy or combination therapy for treatment of CMV retinitis (14) or CMV esophagitis (2); and amphotericin B (1) for treatment of disseminated penicilliosis. The median catheter survival time was 8 months (1-33). 9 patients had died, 2 developed catheter-related septicaemia and 4 required removal and replacement of the catheter. Chronic central venous catheters facilitate long term administration of intravenous drugs by patients or their caregivers in the management of opportunistic infections and were well accepted and tolerated by the patients.

#### Introduction

Because of profound immunodeficiency, AIDS patients are prone to various opportunistic infections and malignancies. Successful treatment of these complicating illnesses, together with anti-retroviral therapy, remain the mainstay of medical treatment for AIDS patients and indeed increase their quality of life and survival. Nevertheless intravenous administration of medication is often required for the acute and chronic treatment of opportunistic infection. An example is cytomegalovirus (CMV) infection which can affect the retina, gastrointestinal tract, lungs or elsewhere in an AIDS patient. Drug such as ganciclovir or foscarnet is usually required to be given intravenously initially at a higher induction dosage and followed by a lower chronic suppressive dosage, which may be continued for the rest of the patient's life. Administration of medication via the peripheral veins is only feasible in short term but a chronic central venous catheter is usually required for long term medication because of better venous accessibility and more convenience and acceptance of treatment by patient.

#### Methods

We retrospectively revealed all hospital records of AIDS patients who had placement of central venous catheter in Queen Elizabeth Hospital from June 1992 through August 1996 of a total duration of 51 months.

# Results

The patients consisted of 13 males and 4 females. Their median age was 37 years old (range: 23-65). Twelve patients were Chinese, four Thai and one Caucasian. All patients were in advance HIV disease as shown by their median CD4 count of 24 per  $\mu$ l (range:10-396) at or soon after their placement of catheter. All had a CD4 count below 100 per  $\mu$ l except two with

368 and 396 per  $\mu$ l respectively. All but two patients had one or more other AIDS-defining illnesses prior to the placement of catheter: seven with 1 illness, seven with 2 illnesses and one with 4 illnesses.

Fourteen patients required placement of catheter for treatment of CMV retinitis, two for CMV esophagitis and one for disseminated penicilliosis. Ganciclovir or foscarnet was used either as monotherapy or in combination therapy to treat the CMV infection. Occasionally, switching from ganciclovir to foscarnet or vice versa was required because of either adverse drug reaction or progression of the CMV disease despite adequate drug therapy. Amphotericin B was used to treat the disseminated penicilliosis.

For the types of the central catheter implanted at the first time, fourteen patients had a subcutaneous port and three had a Hickman catheter. Twelve patients administered the medication by themselves, four with the help of their caregivers and the patient with penicilliosis received in-hospital therapy.

The outcome of the catheters can be measured by (i) catheter-survival time and (ii) catheter-related complications. Catheter-survival time was defined as the time from date of catheter implantation to either (a) end of study (August 1996), (b) date of removal of the first catheter, (c) date of cessation of intravenous medication or (d) date of patient's decease. The median catheter-survival time was 8 months with a range of 1 to 33 months (SD = 9.17 months).

Eight patients had no complication from their catheters: six of them are still alive at the time of study (the patient with disseminated penicilliosis switched to oral itraconazole after stablization and had his catheter removed five months after implantation; one patient with CMV esophagitis stopped ganciclovir injection after eight months of treatment and his catheter is still kept patent by weekly flushing; other patients had had their catheters implanted for 1, 3, 9 and 11 months respectively). Two patients died seven and sixteen months after catheter placement due to other AIDS complicating illnesses, unrelated to their catheters.

Nine patients developed catheter-related complications: two local catheter-related infections and two catheter-related septicaemia, three partial or complete catheter blockage, one leakage around catheter and one skin breakage due to tightness of skin. Seven patient died but only one with septicaemia was related to complication of the catheter.

# Discussion

The present treatment of opportunistic infections in AIDS patients largely depends on intravenous medication which usually has to be administered frequently and chronically. Chronic central venous catheter has been successfully used in the management of other groups of patients who require long term intravenous medications. In this study, chronic placement of central venous catheter is also showed to be safe, can be indwelling for a long time, facilitates the administration of intravenous medications and is well tolerated and accepted by AIDS patients and/or their caregivers in the management of their illnesses.

Prior to the placement of the chronic central venous catheter, a nurse specialist will give advise and counselling to the patient and/or his caregivers concerning the need of chronic central catheter, the types of catheters, the surgical procedure, the caring of the catheter and injection technique. The choice of catheter was made by the patient and/or his caregivers mainly after

consideration of his ability to give self injections and his visual acuity. Repeated assessment of injection technique and catheter care is carried out by the nurse specialist after catheter placement. This intensive programme yields the good outcome of the catheters.

Local infection related to the catheter is usually adequately treated with antibiotics and daily wound cleaning. Blockage of catheter is usually managed by installation of local thrombolytic therapy such as urokinase or streptokinase. Skin breakage around the catheter or persistent catheter infection often necessitates the removal and replacement of the catheter. Four patients in our group needed catheter replacement: two due to skin breakage and two due to resistant bacterial infections. Two patients changed to Hickman's catheter from subcutaneous port in their second implantation.

Until newer drug in oral form or having a much longer half-life is available to treat opportunistic infection, the use of chronic central venous catheter remains indispensable in the management of AIDS patients.

# Acknowledgement

The authors would like to thank the Department of Surgery, QEH for the placement of catheters and also the nursing staff who play an important role in the caring of patients and catheters during the in-patient periods.

# Local Experience in Managing a HIV Positive Woman during Pregnancy

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#### **Abstract**

Madam A, a 19 years old housewife, booked for ante-natal care at 20 weeks of her first pregnancy in September 1993. Her past health had been unremarkable. She came to Hong Kong from Africa 7 months before she had her first ante-natal check-up and a voluntary HIV test 1 year before was negative. Her husband worked in Africa as well. HIV-1 antibody test at the first ante-natal visit was positive. The couple were counselled at 22 weeks and they decided to continue with the pregnancy. The husband was also found to be HIV-1 antibody positive. The ante-natal course was uneventful. She remained asymptomatic and was monitored with T cell subset count and p24 antigen. The cervical smear was negative and there was no evidence of other sexually transmitted diseases. She went into spontaneous labour at 41 weeks. A 2900gm baby was delivered normal vaginally after 6 hours of labour. Precautions were taken as directed by the guidelines for HIV positive patients provided by the department. These include provision of single room, avoidance of invasive monitoring & delivery, confidentiality, and standard infection control measures. Both the mother and baby were discharged well six days after delivery. Advice was given as regard to bottle feeding, vaccination and precautions against infection. Postnatal follow-up at 3 and 7 weeks revealed normal findings. Safer sex was advised and oral contraceptive pills was started. The baby has been monitored with serial T cell subset count and HIV antigen/antibody tests. There was no evidence of vertical transmission till the latest follow-up at 2½years of age. Long-term follow-up was arranged for the couple and they remained asymptomatic so far.

#### Introduction

Acquired immunodeficency syndrome (AIDS) was first diagnosed in USA in 1981. Up to the end of Jan 1993, there had been 340 individuals in Hong Kong with serological evidence of exposure to HIV. Eighteen (5.3%) of them were women<sup>1,2</sup>. In USA, 9% of the HIV infected people were women in 1989 and the trend has been increasing<sup>3,4</sup>. The sex ratio of African AIDS was close to 1:1<sup>4,5</sup>. In UK, the prevalence of HIV infection complicating pregnancy was 0.25% in Edinburgh in 1991<sup>6</sup>.

Hong Kong is an important centre for international travel. There was a passenger traffic of 70 million in and out of Hong Kong in 1991<sup>1</sup>. Moreover, homosexuality, intravenous drug use and sexual promiscuity occur in a significant proportion of local population. The first AIDS case in Hong Kong was diagnosed in 1985<sup>1</sup>. HIV/AIDS is not a notifiable disease in Hong Kong but clinicians are encouraged to report it. The following is a discussion on the local experience in managing a HIV positive woman during pregnancy.

# Antepartum

Madam A was a 19 years old housewife. She booked for ante-natal care at 20 weeks of her first pregnancy in September 1993. Her past health had been unremarkable. She came to Hong Kong from Africa 7 months before she had her first ante-natal check-up. A voluntary HIV test 1 year before was negative. Her husband worked in Africa as well. HIV-1 antibody test at the first ante-natal visit was positive. The husband was also found to be HIV-1 antibody positive.

Who should be screened for HIV infection? In Hong Kong, the seroprevalence of HIV is still low. Hence, mass screening is not cost-effective and may not be acceptable to all pregnant women. Each HIV antibody test cost \$410 in 1993<sup>7</sup>. Screening, on the other hand, is indicated for the high risk group, for example, those coming from endemic area (our patient came from

Africa), those with multiple sexual partners and intravenous drug users<sup>8,9</sup>. Sometimes, the test is requested by the mother<sup>4</sup>.

Appropriate explanation of the test and discussion on the HIV disease process is warranted. Counselling should be given with adequate privacy and time and confidentiality should be kept. One should be alert that testing without consent is unethical and may constitute assault<sup>4</sup>. Discussion should also include the impact of HIV infection to pregnancy, the risk of peri-natal infection - range from 24-60%<sup>3</sup> and the prognosis for the infected baby. The risk of transmission increases with advanced HIV disease, and before or around sero-conversion (high viral load)<sup>6</sup>. The European Collaborative Study in 1991, a large follow-up study, reported a transmission risk of 22.9% (6). Re-testing three months later is needed if the mother is suspected of having seroconversion<sup>4,8</sup>. An appointment for breaking the test result is important.

The option of termination of pregnancy is raised for Madam A and her husband. They were counselled at 22 weeks and they decided to continue with the pregnancy. Studies showed that HIV infection is usually not seen as a cause to terminate a wanted pregnancy<sup>6</sup>. This also applied to our patient. Tactful and compassionate counselling in privacy with and without the partner is important.

The ante-natal care has to be supportive. Multidisciplinary services involving finance, housing, support services for drug addiction and social problems may be needed. Screening for other sexually transmitted, any predisposing diseases and cervical intraepithelial neoplasia<sup>3,5-6</sup> are necessary. Low birth weight / intrauterine growth retardation may be more common. Fetal growth and well being can be monitored with serial ultrasound examinations, cardiotocography and biophysical profile. Usually, pregnancy does not affect the asymptomatic carrier. However, case reports continue to describe adverse effects, deterioration and death during pregnancy in AIDS patient<sup>4</sup>. Clinical signs and symptoms should be monitored. Blood tests, e.g. complete blood count, lymphocyte count and CD4 level are useful<sup>6</sup>. The Paediatrics team is informed. Any opportunistic infection should be treated by the expertise.

Fortunately, Madam A had an uneventful ante-natal course. She remained asymptomatic and was monitored with serial T cell subset count and p24 antigen level. The cervical smear was negative and there was no evidence of other sexually transmitted diseases.

# Intrapartum

She went into spontaneous labour at 41 weeks. A 2900gm baby was delivered normal vaginally after 6 hours of labour. Precautions were taken as per the guidelines for HIV positive patients established by the department. Protocols should be clear and well publicized<sup>4,10</sup>. Provision of single room ensured privacy and allowed easy management. In addition, confidentiality should be kept<sup>1</sup>. One should delay artificial rupture of the membranes and minimise the number of vaginal examinations. One should also avoid vulval shaving, fetal scalp electrode/scalp blood pH testing, internal uterine pressure monitoring, instrumental delivery and mouth suction to the newborn. Caesarean section is indicated for obstetric reasons only and there is a high risk of glove puncture<sup>4</sup>.

HIV infection of health workers in health care settings is mainly through exposure to contaminated blood or body fluid. Fortunately, the risk of HIV transmission is much lower than hepatitis B virus (HBV), due to a much lower concentration of viral particles in blood. For

example, after a needle-stick injury, up to 30% of health workers may contact HBV but less than 0.5% may acquire HIV<sup>3</sup>. USA study revealed that the risk of needle-stick injury was 0.4%<sup>6</sup>. By the end of 1990, 27 cases of HIV infection acquired in hospitals was reported<sup>3</sup>. 20 due to needle-stick injury, 5 due to mucous membrane exposure and 2 had exposure to virus in research laboratory. Preventive measures include double gloves, masks, protective eyewear, face shields, growns, aprons, waterproof dressing to all skin defects<sup>4</sup>, provision of single room, safe disposal, and modifications of operating procedures<sup>6</sup> which include usage of blunt needles, uterine holding forceps, needle forceps, skin clips and staples. It has been shown that 54% of gloves were perforated during Caesarean section<sup>3,6</sup>. Surgical gloves did not protect against needle-stick injury and the intraoperative parenteral exposure risk was 1:40<sup>3</sup>.

# **Postpartum**

Both our patient and her baby were discharged well six days after delivery. Advice was given as regard to bottle feeding, vaccination and precautions against infection. Breastfeeding should be avoided if there is safe alternative. However, mothers should not be refrained from cuddling her baby, being aware that this will not transmit HIV infection but improve the bonding. Provision of single room ensures privacy and easy care. Safe disposal of soiled sanitary towels and linen should be arranged. Immunisation would be the same as baby born to seronegative mother except for substituting the oral polio vaccine with inactivated polio vaccine and omitting BCG for baby with symptomatic HIV disease.

The postnatal follow-up at 3 and 7 weeks revealed normal findings. Safer ex was advised and oral contraceptive pills was started. The baby has been monitored with serial T cell subset count and HIV Ag/Ab tests. There was no evidence of vertical transmission till the latest follow-up at 2½ years of age. Long-term follow-up was arranged for the couple and they remained asymptomatic so far.

# Conclusion

This case presentation demonstrates the importance of high index of suspicion in screening for HIV carrier in pregnancy. In order to optimise the pregnancy outcome, close surveillance and long-term follow-up are mandatory.

#### **Footnotes**

- 1. Department of Health, Hong Kong. (1992). *Information on AIDS for doctors & nurses (Second edition)*. August 1992.
- 2. Li, PCK. (1993). Management of HIV infection the Queen Elizabeth Hospital Experience. *Hong Kong Practitioner* 15:3, 2503-9.
- 3. Howard, LM. (1990). HIV infection in women. *Obstetrics & Gynaecology Clinics of North American* 17:3.
- 4. Marwood, RP. (1990). HIV infection and pregnancy. *Br J Hosp Med.* 43, 287-9.
- 5. Family Planning Association Hong Kong. (1993). Women and AIDS. *Medical News Bulletin. January 1993*.

- 6. Johnstone, FD (1992). Management of pregnancy in women with HIV infection. *Br J Hosp Med*. 48:10, 664-5, 668-70.
- 7. Pathology Department, Kwong Wah Hospital. (1993). *Cost of laboratory tests.* June 1993.
- 8. McCarthy, KH, Johnson, MA & Studd, JWW. (1992). Antenatal HIV testing. *British J Obstet Gynaecol*. 99, 867-868.
- 9. Roberts, R. & Dinsmore, W. Sexually transmitted diseases in pregnancy. *Br J Hosp Med*. 47:9, 674-679.
- 10. Department of Obstetrics & Gynaecology, Kwong Wah Hospital. (1993). *Guidelines for HIV positive patients*. December 1993.

# First Case of Cervical Intraepithelial Neoplasia in Female HIV Carrier in Hong Kong

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#### **Abstract**

Madam C was referred to the Colposcopy Clinic of Kwong Wah Hospital for abnormal cervical smear in January 1996. She was 26 years of age, single with history of four sexual partners, but no history of drug abuse. She had genital wart in 1991. She was known to be seropositive for HIV antibody eight months earlier and was asymptomatic. CD4 count was 450/ul. Cervical cytological surveillance was carried out in the Special Medical Consultation Clinic in Yau Ma Tei Jockey Club Clinic. High grade squamous intraepithelial lesion (SIL) with glandular involvement was noted in December 1995. Colposcopy was performed in January 1996 and low grade SIL noted. Biopsies revealed cervical intraepithelial neoplasia (CIN) II and human papilloma virus (HPV) infection. Large loop excision of transformation zone (LLETZ) was performed under local anaesthesia in April 1996. Histological examination showed CIN III and HPV infection. Ectocervical margin was involved. The plan was close cytological surveillance. However, patient defaulted follow-up in June 1996 and was called back in August 1996. The first cervical smear after LLETZ revealed HPV infection only. The need for close follow-up was explained. This single case of CIN in female HIV carrier demonstrates that regular cervical cytological surveillance is applicable in early detection of premalignant lesion of the cervix in asymptomatic female HIV carrier. This enables institution of conservative treatment with LLETZ, during which the abnormal transformation zone of the cervix is completely removed, with success rate of over 95%; while the reproductive capacity is conserved in this young lady. However, poor compliance with follow-up schedule may result in delayed treatment in case of recurrence.

#### Introduction

Huamn immunodeficiency virus (HIV) infection has been shown to be associated with an increased risk of development of cervical cancer and its pre-malignant stage, cervical intraepithelial neoplasia (CIN). As both the malignant and pre-malignant stages of cervical cancer can be detected by cervical cytology, it has been suggested that women infected with HIV be recruited into cervical cytological screening programme. The following is an illustration of the detection of CIN in an asymptomatic lady.

# Case Report

Madam C was 26 years of age, single with history of four sexual partners. She had history of genital wart in 1991 and there was no recurrence after initial treatment. There was no history of drug abuse. She was found to be sero-positive for HIV antibody in May 1995. She was asymptomatic with CD4 count of 450/ul at the time of referral. Cervical cytological surveillance was carried out in the Special Medical Clinic at Yau Ma Tei Jockey Club Clinic. High grade squamous intra-epithelial lesion (SIL) with glandular involvement was noted on cervical smear in December 1995 and she was referred to the Colposcopy Clinic in Kwong Wah Hospital.

Colposcopy was performed in January 1996. The impression was low grade SIL. However, colposcopically directed biopsies revealed CIN II and human papilloma virus (HPV) infection. Result was explained to the patient and she was advised to have Large loop excision of transformation zone (LLETZ) of the cervix. LLETZ was performed under local anaesthesia in April 1996. She had an uneventful recovery. Histological examination of the LLETZ specimen showed CIN III and HPV infection. Ectocervical margin was involved. The plan of subsequent management was close cytological surveillance. However, patient defaulted follow-up in June

1996 and was called back in August 1996. The first cervical smear after LLETZ revealed HPV infection only. The need for close follow-up was explained.

# Discussion

This case of CIN in female HIV carrier demonstrates that regular cervical cytological surveillance is applicable in early detection of pre-malignant lesion of the cervix in asymptomatic female HIV carrier. This enables institution of conservative treatment with LLETZ in this young lady while the reproductive capacity is conserved. LLETZ is an excisional method of treatment for CIN during which the whole transformation zone of the cervix is removed under local anaethesia, with a success rate of over 95%.

For management of CIN, excisional methods offer the definite advantage over destructive methods such as laser ablation, in the availability of specimen for histological confirmation. However, the recurrence rate is similar among the various modalities of treatment and regular follow-up is mandatory. The poor compliance of the patient with follow-up schedule is a concern because appropriate treatment in case of recurrence may be delayed.

Heterosexual transmission has become an important mode of transmission of HIV infection in South-east Asia. As it has been shown that heterosexual transmission is the commonest mode of acquisition of HIV infection among female HIV carriers in Hong Kong, it is expected that there will be rapid increase in the number of female HIV carrier. Further report of malignant and premalignant lesions of the cervix in HIV carrier is expected.

# References

Centers for Disease Control and Prevention (1994). Update: AIDS Among Women, United States, 1994, MMWR. 44, 81.

Fruchter, R., Maiman, M., Sedlis, A., Bartley, L., Camilien, L. & Arrastia, C. (1996). Multiple Recurrences of Cervical Intra-epithelial Neoplasia in Women with the Human Immunodeficiency Virus. *Obstet Gynecol* 87, 338.

Johnstone, F., McGoogan, E., Smart, G., Brettle, R. & Prescott, R. (1994). A population-based, controlled study of the relation between HIV infection and cervical neoplasia. *BJOG* 101, 986.

Prendiville, W., Cullimore, J. & Norman, S. (1989). Large loop excision of the transformation zone (LLETZ). A new method of management for women with cervical intraepithelial neoplasia. *BJOG* 57, 145.

Prendiville, W. (1995). Large loop excision of the transformation. *Clinical Obstetrics and Gynaecology* 9:1, 189.

Wright, T. & Moscarelli, R. (1996). Significance of Mild Cytologic Atypia in Women Infected With Human Immunodeficiency Virus. *Obstet Gynecol* 87, 515.

# Symposium C:

Social Impacts & Responses

# Evaluation of HIV/AIDS Seminar Programme in the Faculty of Medicine

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# **Abstract**

The primary aim of this study is to evaluate the impact of a HIV/AIDS seminar programme, for students of the Faculty of Medicine, which was designed to increase their knowledge, awareness, counselling skills and positive attitudes towards AIDS. A 3 hour seminar session, which targeted year 3 medical students of the University of Hong Kong, delivered as a module in Health, Behaviour and Medical Care teaching. Several educational techniques were used, including mini lectures, video presentation and group discussion. Evaluation was performed by using a survey of knowledge and attitudes conducted 1 week prior to and at the end of the seminar session. Five open ended questions were also analysed which students completed before the seminar and were discussed during group discussions. Students posses some knowledge about HIV/AIDS which was increased after the seminar. Misconceptions about the transmission pattern of HIV/AIDS and in the identification of high risk groups were decreased after the seminar. Almost all students felt that this was an important seminar. 92% (107/117) students feel that the education manual given to them 5 days before the seminar would be valuable while only 4% (5/117) suggested some changes. The seminar is now in its 3 year and its popularity is increasing among third year medical students. Teaching manuals designed to implement the seminar session were reviewed and will be revised on the basis of feedback before the next seminar. A HIV/AIDS seminar programme in the academic curriculum can increase knowledge and awareness of HIV/AIDS among future medical professionals. It may also influence their positive attitudes in treating HIV infected patients and promote skills in counselling.

# Introduction

Acquired Immune Deficiency Syndrome (AIDS) has been considered is one of the leading cause of death and loss of potential life years world wide. The Human Immunodeficiency Virus(HIV) that causes AIDS has circled the globe, and is now penetrating every community and level of society. Since the start of the global epidemic, around 25.5 million adults and 2.4 million children have been infected with HIV. UNAIDS (United Nations Agency for International Development) estimates that everyday 8,500 HIV infection occur world wide of which 7,500 are adults and 1,000 are children<sup>6</sup>. By the year 2000, the number of annual deaths due to AIDS may climb upto 1.5 to 3 million<sup>7</sup>.

Although much effort and resources have been directed towards the control of HIV/AIDS world wide, there is an unmet need for preventive health education. A lack of commitment among physicians and other health professionals has been mentioned as an obstacle in promoting AIDS prevention -related knowledge to the general public <sup>1,2</sup>. One published report suggested that this lack of commitment may be due to a lack of physicians' training and expertise in providing basic preventive education<sup>3</sup>. In the prevention of HIV/AIDS, education, behaviour change and proper counselling is pivotal. But, as to who will implement such programme in a professionally effective way has frequently been overlooked. Health workers can play an important role in implementing such action and it should be a part of their undergraduate programme. Studies conducted in the USA indicated an increase in knowledge and improved attitudes towards HIV/AIDS patients among medical school teachers after an educational workshop<sup>4</sup>. A study among health care workers in Hong Kong suggested that 32% would be concerned about having an HIV infected co-worker; 35% believed that they might be infected through caring for patients and 25% showed some tendency to avoid AIDS patients<sup>5</sup>. These findings give us a clear indication about the need for AIDS education which supports future medical professionals.

The Department of Community Medicine of the University of Hong Kong introduced a seminar programme as a module in the Health, Behaviour and Medical Care(HBMC) course which is taken by mature (3rd/4th year) medical students. The aim of this seminar is discuss the public health aspects of HIV/AIDS from a health professional's perspective, to increase their knowledge, awareness, counselling skills and to promote positive attitudes towards the care of AIDS patients. This paper demonstrates the impact and effectiveness of the seminar in University setting and describes the possible contributions of such seminars in curriculum planning.

#### Methods

Year 3 students in the faculty of Medicine of the University of Hong Kong were eligible to participate in the study. In June 1996, a 3 hour seminar was organised as a module within the standard teaching programme. One week prior to the seminar, an anonymous self-administered questionnaire which incorporated 27 knowledge and attitude related questions, were distributed to students during a tutorial and were collected immediately thereafter. Five days before to the seminar, students received a manual which covered various public health aspects of HIV/AIDS most of which were discussed again during presentations within the seminar. The schedule for the seminar was also enclosed with the manual. Five open-ended questions were given as home work and the responses to these were discussed during tutorials at the end of the seminar. Several educational techniques were used during the seminar, including didactic presentations, video presentations and group discussions. Finally, students were divided into 8 small groups (20-25 students per group) during the last hour for small group discussion in the tutorial led by a tutor. The questionnaire which was completed one week before the seminar was re-issued at the end of the session for completion. Both pre and post seminar data were entered into a computer database and analysed. As the questionnaires were anonymous, it was not possible to identify exactly how many students completed both the pre and post seminar questionnaires. An evaluation form asking for the students comments about the format of the seminar, contents of the manual and necessity of such seminar was also collected.

#### Results

A total of 172 students were in the year 3 class, 114 (66%) completed the pre seminar questionnaire and 117 (68%) completed the post seminar questionnaire. Almost all who attended the group discussion session completed the post seminar questionnaire. Those who were absent in the class and those who expressed unwillingness to complete the questionnaire were not approached again.

As shown in *tables1*, 2 and 3 differences were observed between pre and post seminar surveys. Our result indicated that students possess some knowledge of HIV/AIDS which was increased after the seminar. Improved attitudes about HIV/AIDS were also identified. Most of the students knew that casual contact does not lead to the contraction of HIV. In the pre seminar survey 6% of the students thought that sharing eating utensils may present a risk for HIV infection compared to 3% in the post seminar survey. Unprotected sexual intercourse was identified as an important (very high to high) risk factor by most (98%) students in both the pre and post seminar surveys. In both the pre and post seminar surveys, most (about 98%) of the students were able to identify the sharing of injecting drug needles as a vector for HIV transmission.

Table 1 Percentage distribution of responses on *knowledge of routes of HIV* infection in pre (n= 114) and post (n=117) seminar surveys

Statement	High risk	Low risk	Uncertain
Shaking hands	0 (0)	99 (100)	
Kissing	10 (11)	90 (89)	
Using the same toilet	3 (3)	97 (97)	
Untested blood transfusion	96 (97)	4 (3)	
Sharing eating utensils	6 (3)	94 (97)	
Unprotected sexual intercourse	98 (98)	2 (2)	
Using same swimming pool	5 (6)	93 (94)	2 (0)
Sharing needle or syringes	98 (99)	2 (1)	
Mosquito bites	13 (10)	83 (87)	4 (3)
Risk to the baby during pregnancy in an HIV infected mother	98 (97)	2 (2)	
Having unprotected anal sex	100 (100)	0 (0)	

Table 2 Percentage distribution of responses on identification of high risk groups in pre (n=114) and post (n=117) seminar surveys.

	High risk (%)	Low risk (%)	Uncertain (%)
Intravenous drug addicts(who share needles)	99 (100)	1 (0)	
People who have oral sex	92 (92)	5 (7)	3 (1)
Prostitutes	100 (100)	0 (0)	
Medical people (Doctors, nurses)	62 (58)	38 (42)	
People with many sex partners	100 (100)	0 (0)	

Table-3 Percentage distribution of responses on *attitudes and beliefs* in pre (n= 114) and post (n=117) seminar surveys.

		Agree		Uncert	ain	Disagree
a)	IDS is a medical condition in which 96 (97 body cannot fight off other diseases	)	1 (3)		3 (0)	
b)	AIDS is not at all serious, it is like 2 (0) having a cold.		3 (0)		95(100	))
c)	HIV infected people may appear to 93 (97 be quite normal	()	1 (3)		6 (1)	
d)	Everybody should have a test for the HIV antibody	25 (22)	)	27 (36	)	48 (42)
e)	Travellers who engage in sex usually use prostitutes as their sexual partners	46 (66)	)	42 (28	)	12 (6)
f)	There is a medical cure for AIDS	5 (6)		3 (5)		92 (89)
g)	People with AIDS usually have lots 96 (97 of other diseases as a result of AIDS	()	1 (1)		3 (2)	
h)	Prevention is the only solution to the AIDS problem.	94 (95)	)	3 (3)		3 (2)
i)	AIDS patient should be isolated from the society	8 (2)		16 (6)		76 (92)
j)	AIDS is only a disease for gay men 3 (1)		1 (1)		96 (98	)
k)	It is possible to be HIV positive without symptoms	98 (96)	)	1 (3)		1 (1)

Students' knowledge about high risk groups and responses on attitudes and beliefs were different between pre and post seminar surveys. In the post seminar survey 2% of the respondents thought that AIDS patients should be isolated from the society in comparison to 8% before the seminar.

Almost all students felt that this was an important seminar; 92% felt that the manual given to them five days before the seminar would be valuable while only 4% suggested some changes to the contents of the manual and format of the seminar (*table 4*).

Table: 4 Student's evaluation of the seminar (n=117)

	Yes	No Ha	Have comments	
	(%)	(%)	(%)	
Were the goals and learning objectives of this session clear?	87	13	0	
Was the format of the session useful?	85	9	6	
Were the contents of the Manual useful?	92	4	4	
Did you prepare for the assessment exercise (read the manual and answer the questions)?	89	9	2	

# Conclusion and Discussion

The implementation of an HIV/AIDS seminar in an undergraduate medical curriculum can clarify misconceptions regarding HIV/AIDS, improve attitudes towards HIV infected patients and raise awareness among future medical professionals.

The response rate (pre seminar 66% and post seminar 68%) in the survey provides some grounds for optimism in terms of the interest and willingness of medical students to give priority to the sensitive issues related to HIV/AIDS. The anonymity in the survey does not allow us to collect information from those who did not attend the seminar or those who did not complete the questionnaire. Information from this non-responders would be useful in the design of future programmes. Further evaluation in terms of attitudes and knowledge among this group of medical students after a lapse of a further year and at graduation is suggested to improve our understanding of the students educational needs.

#### **Footnotes**

- 1. Colombian Ministry of Health, Bogota. (1995). National AIDS Program. *National Epidemiology Bulletin* 1:2.
- 2. Gerbert, B., Maguire, B. & Coates, T. (1990). Are patients talking to their physicians about AIDS? *Am J Public Health* 80, 467-469.
- 3. Fergusson, K., Stapleton, J. & Helms, CH. (1991). Physicians effectiveness in assessing risk for HIV infection. *Arch Int Med* 151, 561-64.
- 4. Ricardo, Garcia B. *Personal communication*. Department of Epidemiology and Public Health. The University of Miami.

- 5. Lau, J T F. (1996). Attitudes and Training of Health Care Workers on AIDS in Hong Kong. *XI International Conference on AIDS, Vancouver, 7-12 July 1996*. Abstracts, Volume 1, 130 Mo.D.
- 6. UNAIDS Fact Sheet. I July 1996.
- 7. Atwood, JB (1995). Proceedings from the 3rd USAID HIV/AIDS Prevention Conference, 7-9 August 1995, Washington DC, p11.

# Attitudes & Behaviours Towards HIV of Hong Kong Adolescents -Implications For Education.

Day Jeffrey R., The Hong Kong Institute of Education

#### **Abstract**

The primary aim of this study is to examine a broad range of health related attitudes and behaviours of school students in order to inform curriculum developers both in and out of schools and the caring community about their concepts and actions towards their own health. A well validated school survey from Britain, translated and adapted for Hong Kong is completed under benevolent supervision by teachers in classrooms. The instruments' broad base ensures the widest possibility of correlative assessment and factorial determination within 6 areas of health-related behaviour, one of which is HIV and AIDS. It also allows relationships among the domains to be examined. Results, covering 32 specific variables related to HIV & AIDS knowledge and intention to behave, may be correlated with other health related behaviour. Analysis is possible by student income, by other behaviours such as tobacco use and, of course, by residential district and by school. Both school and district-based differences in response are noted and potentially valuable profiling of students becomes possible with attention to specific risk factors at an early stage of adolescence being possible. Although students are broadly knowledgeable about HIV, they lack important specific knowledge. Reasons for this may be derived from the data and its significance in public health terms may be gauged. Teachers and caring professionals may use this information for both school-based and centrally advised school curriculum development both to address matters of individual and public concern in teaching about HIV. Health Promotion professionals may interact with educators to ensure community action to reinforce knowledge gaps and parents may be fully advised concerning their children's perceptions at the school level so that district based or school based variability in parental background may be more accurately addressed.

#### Introduction

Hong Kong moved very quickly to put in place public health measures to deal with HIV as soon as the aetiology of the disease, as it was then known, became apparent in 1985. Because of a supposed cultural predisposition away from homosexuality, and draconian laws against such practices, decriminalised only in 1987, Hong Kong felt safe against the perceived risks to youth and to the wider population. A paper by this author in 1987, (Day, 1987) counselled against such complacency, and a number of youth related initiatives were set up in subsequent years, including adolescent questionnaires and forums. There were of course ill-considered and well considered developments, one of the worst being a Primary school age double booklet for students & parents (C.E.PA.I.D.S./Breakthrough 1988) at a time when it was extremely rare to teach any sex education in Primary schools and when as now, most parents of most children have only primary school education and would find the task of answering youthful questions about sexuality in general and HIV in particular most embarrassing, not to say intellectually challenging. HIV is not a simple disease to explain!

Annually, smaller or larger scale surveys are carried out which give cause for concern that youth are less than satisfactorily knowledgeable about HIV risks and good practice, but all such surveys have been focused rather on knowledge than on the reasons why such knowledge is poor and on ways which might help to develop young persons abilities to protect themselves in the future.

Such protection demands however, a change of attitude in schools, where sexuality, the key to HIV transmission, is not treated prudishly, left to biology teachers and taught in a manner which "names the parts" and assumes knowledge of function will develop, but in a sociobehavioural manner where sex, love, sexuality and libido are sensitively intertwined so that young people, if they have intercourse of whatever kind, and 14% of Form 5 leavers who do not move

on to Form 6 have done so, (Family Planning Association, 1995); whilst less than 1% of students coming to The University of Hong Kong admit to such experience. (U.H.K. Health Service, 1995) Clearly the rigors of education in Forms 6 & 7 lead to a celibate existence!

By means of a well validated survey instrument (Balding 1994) which focuses on a wide range of health related behaviour, and not specifically on H.I.V./A.I.D.S., it has been possible to collect data concerning underlying reasons for youth unpreparedness and these may allow educators and policy makers to focus curriculum and public education more clearly to reduce ignorance in the near future. This data is presented with analysis of its educational implications and recommendations for process development in both formal or informal school curriculum and public information campaigns. The survey collects approximately 450 different responses to questions demanding knowledge, attitudes and statements of intended behaviour of which 32 responses are specifically related to HIV/ AIDS.

# Scope and Administration of the Survey

The instrument, originally developed in the late 1970's in U.K. and now in its 18th version there, covering 45,000 adolescents in 1994, was adapted by a group of experienced teachers and translated into Chinese in Hong Kong in 1993. It has subsequently been piloted and administered first to a large pilot group of 1400 local Chinese students mainly in Hong Kong Island and Kowloon in 1994, and then to 3200 students in all Districts of the Territory excluding Northern and Islands Districts in 1995. (Day, Bacon Shone & Law, 1996).1996 will allow another territory wide data collection, including a cohort study in six schools examined in 1994. Each year has seen collection of the same basic data set, but with modification of some questions according to perceived need. The H.I.V./A.I.D.S. questions have not been modified.

The survey is administered by interested teachers to about 160 students in each school, two classes in Form 2, aged 12-14 years, and two in Form 4 aged 15-17 years. The schools are selected to represent the widest spectrum of ability across the whole survey, (i.e. it is an average response, not one focusing upon students in able-band or weak- band schools, although those could be examined if we chose.) Students give the data anonymously and teachers are briefed to answer only questions relating to technicalities when students answer the questionnaire, and not to react to potentially biasing questions. Data were entered by hand into a programme which checks, as far as possible, for entry errors. (Bacon Shone 1990ff). Missing data were found to be very low and consistent, indicating that students were not choosing to omit responses to certain types of questions, (e.g. about sexual matters) and such data showed response patterns consistent with the other data in the instrument which could not be seen as sensitive, e.g. about sports involvement or personal spending, magazine readership etc.

Data is analysed as a whole and by school. School data is returned to the school Principal to inform about curriculum planning for health, personal & social education and extra-curricular matters. Whole community data should be able to inform preventive health policy both at the local and Territory-wide level and assist in planning youth related facilities etc.

In the present context, the data demonstrate young people's significant ignorance of certain important HIV/AIDS matters and suggests ways to overcome them. A poster presentation here also focuses upon the public health implications, from the bizarre to the serious of some of these attitudes and beliefs also.

#### Results

In 1994, from the more restricted sample in Hong Kong & Kowloon, it seemed that schools, although a call for sexuality education was issued by the Education Department in 1986 in its "Guidelines for Sex Education," were not meeting the expectations of the pupils and were not responding significantly to that guideline. (Table 1). The evidence from the 1995 data was, however, more encouraging although not providing any cause for complacency.

Table 1 Perceptions of Main Sources of Sexuality Education compared with Preferred Sources, Form 4 Students, Hong Kong 1995

Main Source of Sexuality Information	Present			t Source 995		d Source		d Source 195
Per cent	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
Parents	12.9	8.0	13.4	8.0	23.0	9.5	21.6	12.3
School	13.4	15.4	38.9	27.8	20.1	25.9	31.4	26.2
Friends	25.8	28.4	21.4	32.8	11.5	15.9	13.6	22.5
Brothers/Sisters	1.4	1.2	1.7	0.6	1.0	0.6	1.1	0.8
Doctor/Social Worker	3.8	0.6	3.4	2.3	10.5	5.8	8.9	7.7
Family Planning Assn.	1.0	1.5	-	-	9.1	7.3	ı	-
Video recordings	1.0	5.9	4.5	6.9	1.0	4.3	5.9	8.1
Stories in books/magazines	34.0	25.6	11.4	13.3	18.7	20.1	9.1	12.2
Posters/Leaflets	6.7	13.3	0.4	0.7	5.3	10.7	2.4	2.2

n = about 300 students in each age group for 1994, and 800 for 1995

It is significant here that girls prefer to receive such information from parents significantly more than boys, and that, when a wider range of schools than those considered in 1994 is examined, as in 1995, the schools are seen to be taking a more significant part than was first evident (**bold type**). However, only about 30% of older students find schools as a main source of sexuality information. Friends, as a present and somewhat preferred significant source (bold), must be seen as less than satisfactory as must stories in books and magazines of unknown provenance. It may be significant that, in some of the more traditional metropolitan schools used for the large pilot survey in 1994, the tendency to use and prefer books & magazines was seen, whilst in the more widespread schools, where access to such books etc. may be less easy the source is less utilised.

The work of the Family Planning Association, (1983, 1987 & 1991) in supplying accurate information about youth behaviours in respect of sexuality must be of significance here too, They show that less than 50% of adolescents use contraception in the first six months of an intimate relationship, and of those who do, only 37% use condoms. (Hong Kong Family Planning Association, 1991) It is therefore clear that a school population still exists, ten years after the HIV situation was first noted as significant in this Territory, where only 24% of students perceive schools to be providing sexuality education and only 19% are using HIV/AIDS protective contraception when in an intimate relationship. The more detailed data from the present study therefore presents little surprise, but it does demand significant work for both teachers and community educators as follows.

# Youth Knowledge about HIV/AIDS

Several surveys have shown that young people are generally knowledgeable about the spread of HIV. However there are concerns when detail is examined as recent work at The

Chinese University of Hong Kong, (Reported in *South China Morning Post* 31/10/96) has shown. Seventy per cent of adolescents surveyed were unsure of their HIV status when kissing an infected person. The present study looks at a list of potential risk situations, as follows:

taking drugs by mouth
injecting drugs using a new needle
injecting drugs with a shared used needle
donating blood in Hong Kong
receiving a blood transfusion in Hong Kong

Note: Hong Kong blood products have been screened and processed since 1987 and are safe.

touching an infected person's skin
from a public toilet seat
offering or receiving mouth-to-mouth resuscitation (MMR)
contact with infected person's blood
kissing an infected person on the lips
deep kissing inside an infected person's mouth
sexual contact using a condom, male with female, m/f
sexual contact using a condom, male with male, m/m
sexual contact without using a condom, male with female, m/f
sexual contact without using a condom, male with male, m/m
sexual contact without using a condom, female with female, f/f

Table 2 shows the certainty of response from each gender in the age-group 15-17 years (Form 4).

Table 2 Uncertainty of Risk of Infection from HIV, Hong Kong Students, 1995

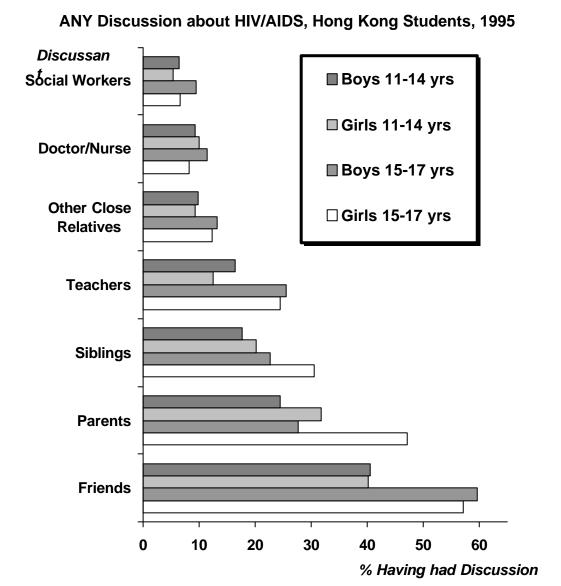
Potential Risk Situation	Can b	e Infected	<i>Uncertain</i> about Infection Risk		
	Boys %	Girls %	Boys %	Girls %	
sex, m/m condom	34.2	33.5	37.1	47.0	
sex, m/f condom	28.6	27.2	33.3	42.3	
deep kissing	28.9	28.9	29.0	38.2	
lip-kissing	9.4	8.3	30.0	35.6	
public toilet seat	9.6	13.1	29.7	34.4	
MMR	17.9	20.2	27.9	34.4	
drugs by mouth	7.4	6.0	23.1	30.9	
Donating blood	28.0	31.7	28.7	29.1	
Receiving blood	44.0	45.8	27.1	29.1	
sex, f/f <b>no</b> condom	65.6	70.1	24.3	25.0	
sex, m/m <b>no</b> condom	79.0	76.0	16.1	21.9	
sex, m/f <b>no</b> condom	82.8	82.1	13.3	16.0	
drugs new needle	26.2	26.2	13.6	14.7	
touch skin, infected	5.4	4.1	14.4	10.0	
person	05.2	967	0.0	0.6	
Infected blood	85.3	86.7	9.8	8.6	
drugs shared used needle	92.2	93.1	5.3	4.2	
Average uncertainty			22.7	26.3	

<sup>&#</sup>x27;n' for each column is approximately 800 students

Table 2 lists in order of **uncertainty** the knowledge of 15-17 years old girls about a wide and quite precise range of potential sources of H.I.V./A.I.D.S. infection. Of course it is heartening to see very high levels of assurance about drug injection using shared needles and about the dangers of infected blood, also that young people are not afraid to touch the skin of an HIV carrier. However, what are the implications for the future of a population where 30% perceive risk in donating or receiving donated blood in Hong Kong. It is notable that girls levels of uncertainty are higher than those of boys, notwithstanding their choice (Figure 1) to discuss HIV/AIDS more frequently with parents and teachers than boys do.

The public health implications of some of these issues are debated in another paper in this publication. It is only necessary here to re-emphasise that parents, (if they can), teachers and public media specialists need to take a more **precise** role in offering knowledge and advice, so that the work which has failed to educate today's potential parents does not leave them in uncertainty when **they** need to educate their children. They can do this only if the endless committees which discuss such issues are similarly precise, and those who prepare the materials for the approval of those committees are focused, involved and practitioners in the field, which many are not.

Figure 1

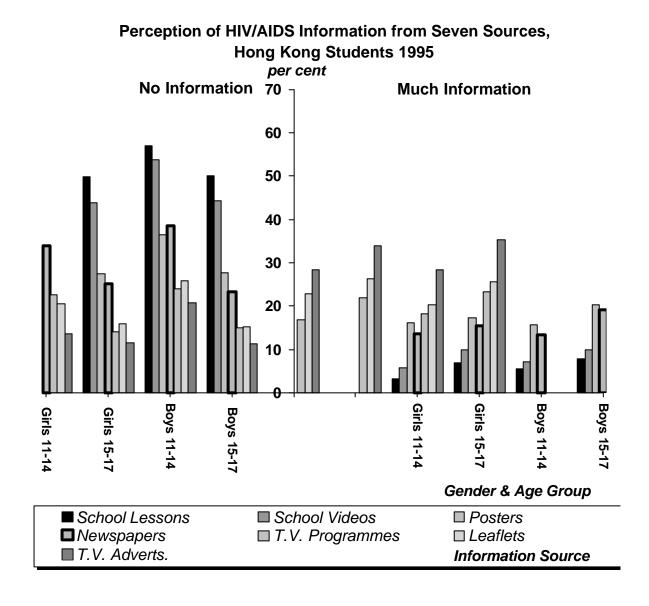


# The Reasons for Doubts and Uncertainties

If we consider why the young are so lacking in certainty about the HIV issue, teachers among us will only have to point to the imprecise generalities of public media campaigns with smiling happy families 'told" to talk about HIV/AIDS or the late night "condom-slots," to realise how poor has been the message in factual and precise terms. Only a single advertisement declaring that you "can't catch AIDS (*sic*) by sharing the same food" remains in the mind as approaching precision concerning HIV transmission. Even "always use a condom" with no further elaboration leaves the type of uncertainty seen in the data above. Of more importance however is the ongoing and continual taboo in talking about sexual matters in general and H.I.V./A.I.D.S. in particular. Figure 1 shows the degree to which different age groups responded to the question "How frequently have you discussed A.I.D.S. with....." followed by seven potential discussants. It is evident that most younger adolescents have had no discussion with a close family member or with a teacher to any degree about H.I.V./A.I.D.S. and even for 15-17 year old adolescents, some of whom will be legal adults after a further year, less than 30% of boys and only 50% of girls recall

any discussion with parents. For both categories teachers have contributed to talk for less than 30%. Breakdown of discussion is available for sub-categories, and the sum of "a few times and "a lot" makes up a very low proportion in every case.

Figure 2



There is evidence of where young people feel that significant information to come from. Seven categories are investigated in Figure 2. The percentage illustrated gives the negative response, i.e. students get **no** useful information from that source and also the response of those getting **much** information from that source. The difference is made up by those getting "some" information. It must be seen as significant that, even though more schools are "doing' sex education, pupils perceive that they get very little information about H.I.V./A.I.D.S. from the school sources. Television advertisements are seen as being most informational, yet these consist largely of 30 second warning messages and messages declaring that "families should talk about H.I.V./A.I.D.S." It is clear from Figure 1 that they do not do so! It must surely be of great significance that no more than 35% of students feel that they are getting much information from **any** source. The greatest hope for such information dissemination seems to be from a massive leaflet campaign, probably to schools, of leaflets carefully providing not generalities, but details of

some precision, with an Education Department recommendation to principals that the leaflets be distributed, perhaps to all Form 2 and Form 3 students, every two years.

#### Behavioural and Attitudinal Reactions to the concern about HIV/AIDS

One question in the research asks students about their degree of worry towards HIV/AIDS. This question is one of ten related to issues commonly declared as worrying to adolescents, such as school-work, friends and family. HIV is a worrying issue to them as shown in Figure 3. It is significant that they worry less as they grow older, and that girls worry less than boys. It has been shown elsewhere, (Day 1996) that students worry less as they become more aware of issues. It is also known, (Driver, 1988) that knowledge structures are more secure if initiated early in learning rather than later. We have evidence that students are insecure in their HIV/AIDS knowledge, and about 25% of them worry more than a little about the issue. They are not receiving help from parents, teachers or the media and evidence from Hong Kong Family Planning Association work, (F.P.A., 1991 & 1992 in F.P.A., 1995) indicates high risk behaviour in at least one third of the 14% sexually active students at age 17. This data is supported here from a question which asks about their intention to protect themselves from HIV/AIDS "when in a high risk situation. The results is shown in Figure 4.

The reasons for such an irresponsible attitude can only be guessed at without further study. It is possible from this data to examine links with other high risk behaviours such as drug use and tobacco smoking, and in the latest data collection, links with perceptions of the acceptability of more detailed high risk sexual behaviour and behaviour related to bullying or carrying of means of personal protection. It is possible, as has been shown for drug taking, that it is linked to other high risk-taking behaviour patterns. If such young people could be profiled earlier, and this data can do that (Balding 1994); it may be possible to detect and act for the benefit of these people in early secondary schooling both for themselves and for the society in which they will be irresponsible adults the next century.

Figure 3

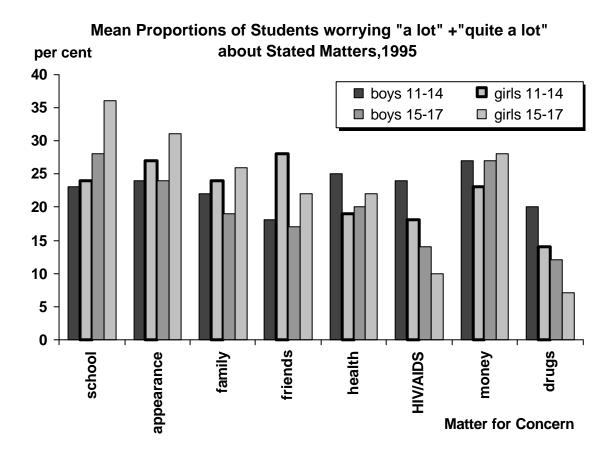
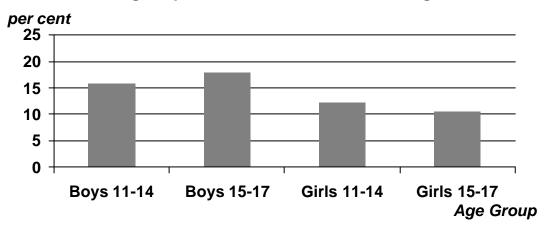


Figure 4





#### Conclusion

This data has shown a concerning lack of detailed HIV knowledge amongst maturing adolescents, which may have serious consequences for themselves and their own children if not rectified. It may also have serious public health consequences, (see Day, elsewhere in this publication). There are clear messages here that work so far undertaken by the Education Department, by teachers and by the Central Health Education Unit is not, after 10 years, having

significant effects upon young people's perceptions of knowledge sources about H.I.V./A.I.D.S. Their detailed knowledge about the issue is poor. A significant number (14%) are engaging in sexual behaviour by age 16, and of those only 37% are using condoms. Indeed up to 18% of 15-17 year old boys declare they will not attempt to take precautions when in a high risk situation relating to HIV.

It is essential that this situation is addressed by parents, teachers, Government and the media, since, as the sero-prevalence grows in Hong Kong, these young people will be part of the problem of its growth, and are not in a position accurately to educate their children who will enter a more significantly sero-positive population in the next century.

#### References:

Bacon Shone, J. (1990). *Market Research Statistical Package*. Hong Kong: The Social Sciences Research Centre, University of Hong Kong.

Balding, J. (1994). Young People in 1994. London: University of Exeter.

Committee for Education & Publicity on AIDS (CEPAIDS) with Breakthrough Ltd. (1989). *Questions About AIDS for Parents & Children*. Hong Kong: Hong Kong Government Printer.

Day, J.R., Bacon Shone, J., & Law, S.W. (1996). The Health Related Behaviour of Hong Kong Adolescents, an Overview Report and Age/Gender Related Data from the First District Based Study. Hong Kong: Social Sciences Research Centre, University of Hong Kong.

Day, J. R. (1989). The Role of Institutions of Higher Learning in Formulating Strategies and Implementing Actions for Prevention and Control of AIDS in Hong Kong. (Territory Report). Conference: AIDS in South East Asia and the Pacific Region: Strategies for Prevention & Control-The Role of Institutions of Higher Learning (ASAIHL) Seminar. Chinese University of Hong Kong.

Day, J. R. (1989). The Role of Tertiary Institutions in the Preparation of Secondary Students for Community Life in an HIV Infected Society. *Conference:AIDS in South East Asia and the Pacific Region: Strategies for Prevention & Control-The Role of Institutions of Higher Learning (ASAIHL) Seminar.* Chinese University of Hong Kong.

Day, J.R. (1996). The Evaluation of Talks given by the Narcotics Division, Hong Kong Government Secretariat to Students in Secondary Schools for the Prevention of Drug Abuse. Hong Kong: The Social Sciences research Centre, University of Hong Kong.

Driver, R. (1985). Children's Ideas in Science, Milton Keynes: Open University Press 1985. Hong Kong Family Planning Association. (1995). *Sexual Behaviour of Adolescents in & out of School 1991 & 1992*. Hong Kong: Hong Kong Family Planning Association.

Hong Kong Family Planning Association. (1985, 1989 & 1995). *Youth Sexuality Studies* 1983, 1987 & 1991. Hong Kong: The Family Planning Association of Hong Kong.

The University of Hong Kong Health Service. (1995). *The Health of Newly Enrolled Students*. Hong Kong: University of Hong Kong.

#### Public Health Implications in Relation to HIV/AIDS Knowledge and Attitudes amongst Hong Kong Adolescents

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#### **Abstract**

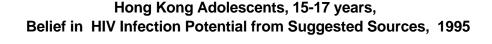
The aim of the study is to develop understanding of current youth health related attitudes and behaviours in Hong Kong in order to inform curriculum and community development in such matters for school students both at school, in the community and at Territory wide levels. Part of the study concerns HIV and AIDS knowledge, attitudes and behaviours which have potentially important public health implications. A well validated, broadly-focused school survey was administered according to a method evolved in Britain over the past twenty years. The instrument was adapted and translated by practising school teachers and validated to Hong Kong after consultation, by pilot studies. Sample sizes were based on successful empirical practice and statistical considerations. Administration, although within a setting monitored so that local help by a trusted teacher was available, ensured referral of the instruments to the researchers confidentially. Responses from 300 discrete variables in 80 questions covering six health related areas were collected from 4000 students aged 12-18 years. Relationships between factors making up a paradigm of health-related attitudes and behaviours may therefore be investigated. These can be compared with excellent reliability. Thirty two variables relate specifically to HIV and AIDS. Results suggest that students are broadly knowledgeable about the topic but that specific knowledge relating to some public health issues is very poor, students frequently believe HIV can be transferred through toilet fittings! Other matters with more serious implications are also evident and will be examined. Serious concern must be given to such misconception when students are at school. School based health education will help. However, the administration must focus upon specific areas if long term community welfare is to be achieved. Such broad spectrum data should be collected perhaps annually, so that health promotion related to HIV may be less generally focused and both school-based and tertiary programs can ensure that required knowledge about community understanding of the topic is available to both health professionals and community leaders for improved community health care at the primary level.

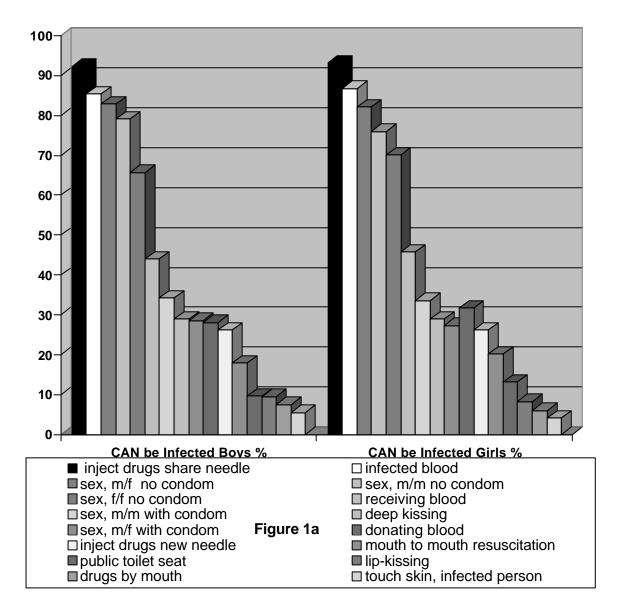
#### Introduction

Another paper in this volume by the same author focuses upon the curriculum and informational media responsibilities for developing more precise HIV/AIDS knowledge and attitudes amongst Hong Kong's young people who will, in a few years, become the parents of a new generation of children who will continue in the levels of ignorance which they themselves have, unless improved health education about HIV/AIDS and other matters is rapidly developed. The data was gathered in a large scale Territory wide school survey following the work of Balding and The Schools' Health Education Unit, the University of Exeter, U.K. (Balding 1994). The material graphically demonstrates areas of concern and argues that there may be serious public health consequences for the Territory if they are not addressed. It is suggested that schools, the broadcast and print media, the Legislative Council, the Urban & Regional Councils and the District Boards all bear responsibility over the ten years since HIV/AIDS became a perceived risk in Hong Kong and that, whilst medical professionals responded at once to the clinical risk, bureaucrats and other education professionals have been less urgent, with greater potential risk to the Territory, especially as it returns to China. (Day, Bacon Shone & Law, 1996). These issues are only indicated by the present research, it may be vital that deeper study is made of such indications to better prepare future generations for increasing local and international seroprevalence.

#### Public Health Implications of Adolescent Knowledge and Attitudes.

Figures 1a & b illustrates the levels of certain knowledge and of uncertainty about infectivity of individuals through precise routes. From Figure 1a it becomes clear that there are certain areas about which young people have dangerously faulty knowledge:





#### Mouth to Mouth Resuscitation

Medical wisdom is that mouth to mouth resuscitation (MMR) does present a significant risk of HIV infection, yet 50% of students are uncertain about this and only 20% have correct knowledge (Fig 1a). Of course the chances of coming upon an infected person in Hong Kong are very low, so the indications would probably be to take the risk. However if the matter has not been discussed, students are unlikely to do so. Hence, in a swimming accident, or another emergency, possibly able students will not respond because of the fear of contracting HIV. Others who might respond will delay to give the matter consideration, whilst the patient dies!

#### **Blood Donation**

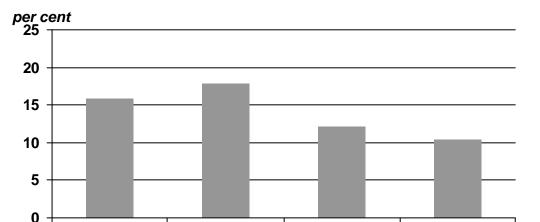
A still more alarming reflection is upon the presumption of 40+% of students that receiving blood by donation is dangerous in Hong Kong, and by about 30% that donating blood has risk

here. (Fig. 1a)). Hong Kong has a blood donor shortage each day. The perception that giving or receiving blood in the Territory has significant risk may affect such donations adversely, to the detriment of all. Such mis-information, which is understandable when generalisations about the blood transfer route are made without detailed treatment of the situation in blood donation, must be corrected.

#### Common Transmission Sources

The public health risk of having only 80% of the school-leaving population certainly knowledgeable about the most common HIV transmission sources must be significant, especially in view of data from The Family Planning Association (1987ff) about sexual behaviour amongst such adolescents (*see* author's other publication in this volume). It may be of further significance here that numbers of these adolescents state that they will not take precautions against HIV/AIDS when in a high risk situation. (Figure 2)

Figure 2



**Boys 15-17** 

### ■ Students stating NO protection will be taken in HIV High Risk Situation

#### Condom Use & Transmission

**Boys 11-14** 

It may be gratifying that up to 30% believe that HIV transmission is still risky even when condoms are used, (Fig. 1a) and that 60% understand that homosexual transmission through the female route is possible, but may the 3-5% believing that skin contact with an infected person may be a transmission route the same group responsible for the NIMBY\* responses seen where community HIV clinics are suggested?

**Girls 11-14** 

Girls 15-17

Age Group

#### Bizarre Knowledge

The existence of bizarre "knowledge" such as transmission from public toilet seats, or by means of orally ingested drugs throws the security of all of their knowledge into question (Fig. 1a) whilst recent knowledge concerning "deep kissing" suggesting enhanced risk from this source, throws the certainty of only 30% that it IS a source of infection into some question. Since

newspapers are not a significant source of information for many, (*see* same author's second publication in this volume) it is to be questioned whether such information will be transferred.

\* (NIMBY=Not In My Back Yard)

#### **Knowledge and UNCERTAINTY**

Of possibly more significance for public health than the errors in knowledge about transmission are the levels of uncertainty shown by these near-adults (Figure 1b) which must carry over to the next generation - unless strident attempts are made to rectify the matter by media and public health campaigns. For most of these children it is *too late* for schools to rectify the matter, they are mainly in their last year of formal schooling, approaching Form 5 examinations and the work-force. Does the Vocational Training Council who will take many of them through their early years of work-training exercise a public health responsibility beyond workplace safety matters?

#### Responsibilities for Action

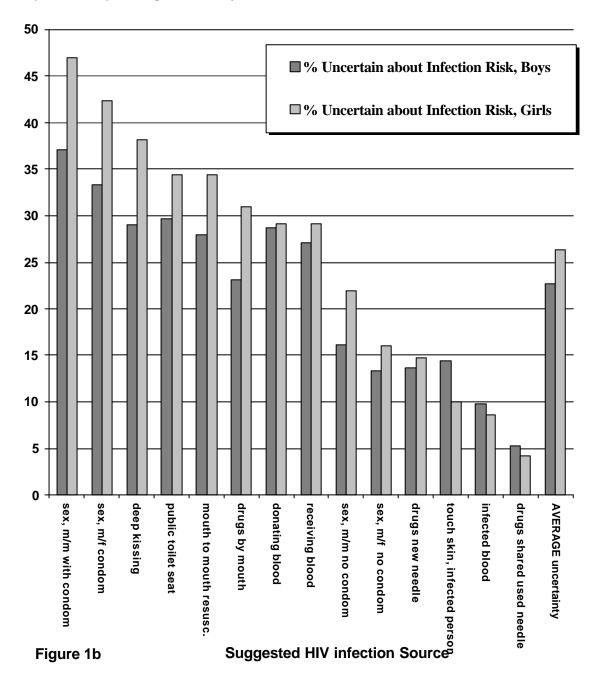
The Blood Transfusion Service was informed of this situation in 1995, (Day 1995i) no response was received to the detailed data and narrative offered. It is surely in their interest to offer clarifying leaflets and possibly an announcement of public interest (API) which could reeducate the public concerning the safety of blood and blood products in Hong Kong.

Quite properly, the Regional and Urban Councils act to discourage the practice of casual homosexuality in public toilets. It would be easy for them to incorporate the message that public toilets are safe, except when users engage in casual intimacy in them, hence serving a double purpose in enhancing the reputation of their newly improved facilities.

The medical profession are almost universally responsible for hypodermic needle use in the Territory (less than 0.5% of the population are injecting drug users). It may be that doctors and nurses can provide an educative role for parents and younger children in explaining the importance of clean needles and at the same time discouraging in adolescents any suggestion of needle use for injections by other than a qualified medical practitioner.

## Adolescent Expression of Uncertainty about HIV Infection Sources, ages 15-17 years, 1995 (The ''Don't Knows'')

#### per cent expressing uncertainty



To dispel uncertainty concerning simple kissing and deep kissing is properly the role of parents in giving sex education to children, but such are the inhibitions at present against effective parental responses (Day 1995 ii), it probably falls to school teachers to do this, perhaps also inclusions into family life education "announcements of public interest" productions on local television, which could indicate that kissing is a normal safe expression of affection between people and its risk as a disease vector is rather low.

Use of condoms is a detailed issue, probably best left to teachers (or parents, but unlikely) however, action by the Government Central Health Education Unit to provide simple yet precise condom use guides, with reasons beyond simply "how to" for adolescents, may be prudent. The willingness of supermarkets etc. to make condoms easily accessible to all could be met by a response from the Government to request such stores to hand a leaflet detailing good use practice to anyone buying a packet of condoms, since the leaflets enclosed with the product are more concerned with effective use than enhancing general public health knowledge. In addition, all school students in Form 4 & 5 should perhaps receive a "brief guide" to beginning sexual activity! Such a move would need co-operation from parents, teachers and the Hong Kong Education Department!

#### **Conclusion**

Public knowledge amongst adolescents about the main transmission routes of HIV seems to be no more than adequate at best. The present data contain both the bizarre and the dangerous in that knowledge in a public health sense. It is suggested that detailed analysis should be undertaken of public uncertainty and individual and organisational willingness to deal with these matters, it then falls to responsible agencies to take ongoing and thoughtful action to develop individuals awareness of the potential outcomes for public health if such issues are not met. The question of China demanding a one child policy in a nation where boy children are favoured, and reducing its population to zero at a stroke of legislation is a useful analogy in developing public health policy in respect of HIV/AIDS knowledge.

#### References

Balding, J. (1994). Young People in 1994. London: University of Exeter.

Day, J.R. Specialist Report from The Health Related Behaviour 'Large Pilot' Study, concerning Data related to Blood Donation. Hong Kong: The Social Sciences Research Centre, University of Hong Kong. (unpublished)

Day, J.R., Bacon Shone, J., & Law, S.W. (1996). The Health Related Behaviour of Hong Kong Adolescents, an Overview Report and Age/Gender Related Data from the First District Based Study. Hong Kong: Social Sciences Research Centre, University of Hong Kong.

Hong Kong Family Planning Association. (1995). *Sexual Behaviour of Adolescents in & out of School 1991 & 1992*. Hong Kong: Hong Kong Family Planning Association.

Hong Kong Family Planning Association. (1985, 1989 & 1995). *Youth Sexuality Studies* 1983, 1987 & 1991. Hong Kong: The Family Planning Association of Hong Kong.

## University Students' Responses to AIDS Awareness Discourse: A Sociolinguistic Approach

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#### **Abstract**

The paper explores the linguistic strategies used by university students in Hong Kong when discussing the issue of AIDS in a variety of settings and the implications of these strategies on AIDS education and prevention. Data from focused group and individual interviews and role-plays in which students responded to Hong Kong Government AIDS Awareness API's was analyzed using Wertsch's theory of mediated action. The analysis showed that students tended to verbally distance themselves from the issue of AIDS, constructing it as the consequence of socially proscribed behavior (IV drug use, homosexuality). They also demonstrated an ambivalence regarding the efficacy of condoms for preventing the spread of AIDS, and were more likely to see AIDS prevention in terms of avoiding 'casual sex'. In their retellings of AIDS Awareness API's, students tended to recall narrative aspects of the commercials better than the 'message' or informational aspects and tended to have more favorable responses to more emotional or 'shocking' advertisements. Few, however, were able to identify with the characters or felt themselves to be the target audience of the ads. Results of the analysis were used to construct a questionnaire to determine students' practices in talking about AIDS in non-controlled settings and their attitudes towards and expectations of public health discourse about the issue. The survey found that, among other things, most believed themselves and people close to them to be at little risk for contracting HIV, that sexual behavior with a steady partner without a condom posed little danger, and that, although talking about AIDS was important, they seldom discussed the issue with family members, friends or prospective sexual partners. The survey also found substantial variation in how students conceived of and defined the practice of 'casual sex'. This research shows that, although students were for the most part able to recount the information provided for them in public health discourse and to incorporate it into their own discourse about AIDS, they were unable to apply this information effectively to their own particular situations. Suggestions are offered on how AIDS education might be made more effective and relevant to this population.

#### Introduction

By far the biggest frustration for all educators, not to mention AIDS educators, is that 'students' don't always 'learn' what we 'teach'. One reason for this mismatch between teaching and learning is that the producers of educational materials and the receivers often approach the messages with different expectations as to which aspects of the messages are important or useful. Tulloch (1992), for example, in his study of the treatment of AIDS on Australian television, noted significant differences between audience cultures and production cultures in such notions as 'impact' and 'effectiveness'. Such observations, as Lupton (1991) argues, indicate that traditional approaches to AIDS education which focus of knowledge, attitudes and behavior should be complemented with a better understanding of media representations and audience cultures.

One useful model for examining audience responses to AIDS related media messages is the notion of 'mediated action', developed by Wertsch (1994) and other students of socio-cultural practice theory. According to this perspective, people take action by appropriating and adapting to their particular situations the various 'cultural tools' made available to them. In the case of AIDS related media messages, such tools include not only explicit 'facts' and information, but also narratives, identity formations, images and linguistic structures. Audiences are not simply passive recipients of messages, but active participants who selectively *appropriate* various tools and *adapt* them for use in their particular situations.

# **TV Commercials** ('cultural tools')

information language narratives identity (selection/ use images emphasis) formations

V







## APPROPRIATION-ADAPTATION









language attitude assessment sexual behavior formatio of risk behavior

Viewers ('mediated action)

Figure 1

Such a view challenges assumptions in health education that simply enhancing knowledge or perception of risk enhances preventative behavior change. On the contrary, knowledge and statements about risk are only tools which, along with other tools like stories, pictures, and characterization, may be appropriated and adapted by viewers in different ways.

This study aims to identify the various cultural tools made available to viewers in a collection of twenty-one television API's (Announcements in the Public Interest) produced by the Hong Kong government between 1987 and 1995, to explore how these tools might amplify or limit audience perceptions of AIDS prevention, and to analyze how one particular audience, students from City University of Hong Kong, appropriate and adapt these tools in constructing their own discourse of HIV/AIDS.

#### **Methodology**

In order to understand how students appropriate different aspects of AIDS related media-messages in their own discourse, I used a methodology which combines critical discourse analysis (Fairclough 1992) with conversational analysis of focused group and individual interviews (Jenson 1991).

First, an analysis of the advertisements was conducted, focusing on physical (images, filming techniques), rhetorical (narrative structure, identity formations) and linguistic (word choice, sentence structure) aspects of the messages to determine the types of cultural tools made available.<sup>1</sup>

Second, various groups of City University students studying English for Professional Communication and Teaching English as a Second Language were observed taking part in a number of communicative tasks in which they responded to the ads including focused group interviews, an individual recall experiment<sup>2</sup>, and an activity in which students were asked to perform role plays about the topic of HIV/AIDS and design their own AIDS Awareness API's.

Finally, a questionnaire survey was conducted on 100 students to measure their degree of agreement with selected recurring statements and themes from the communicative tasks as well as individual assessments of risk and expectations of AIDS education media messages.

This combination of ethnographic and quantitative techniques yielded four primary themes in students' discourse about HIV/AIDS: 1) a tendency for subjects to verbally distance themselves from the issue, 2) an ambivalence about the efficacy of condom use in preventing the spread of AIDS, 3) a emphasis on the practice of 'casual sex' as the main cause of HIV transmission, 4) and a reluctance to talk about HIV/AIDS with friends and family members, even though 'talking about AIDS' was seen as an important ingredient in prevention.

#### Narratives, Identity Formations and Verbal Distancing

By far the most salient cultural tools in the commercials for students were the stories that they told and the characters who enacted these stories. In the recall exercise, students were more than twice as likely to remember the narrative aspects of the commercials than the informational aspects (Jones 1996b).

An analysis of the narratives and identity formations presented in the ads reveals a tendency for characters portrayed as 'AIDS carriers' to be 'outsiders' (prostitutes, drug users, 'one-night-stands') rather than intimates (friends, relatives, 'steady partners'). Moreover, in many of the commercials a kind of 'visual distancing' can be observed between these characters and the audience, with 'AIDS carriers' often appearing out of focus or not fully in the camera frame. The stories tend to follow a behavior-consequence type of structure, with HIV infection presented as the result of some socially proscribed behavior. Such rhetorical techniques emphasize not so much the dangers of AIDS as the dangers of particular individuals, and are not likely to encourage a high degree of audience identification (see Jones 1996a).

Students' responses to the commercials bear this out. In the majority of focus group discussions, students verbally distanced themselves from the stories and characters portrayed in the commercials, as in the following example:

S10: I think that's very threatening...but maybe I'm not the target. I don't feel it. Do you think that's effective?

S8: It is effective when it has to remind | them^

You've got the

information.

S7: Yes.

S6: Something will be in your mind.

S7: Imagine...Imagine if you were gay..if you see the one night stand..I think you may think of this commercial.

S6: But we have no experience, right^

S7: Imagine.

S6: We can't directly comment on this.

Not only do students fail to identify themselves as the target audience, but they impute for both themselves and their group members an identity of 'not gay' and 'not at risk', and conclude from this that they are unable to comment upon the commercial.

Even when discussing ads more explicitly directed towards people like them, students still distance themselves.

S20: It describes sex is not too easy^...too easy to..have sex.

S18: Sex.but the girl is...maybe too sexual in the commercial.

S20: (inaudible)

S18: Maybe young people..especially girls..are not attracted by

this commercial.

S20: I don't know why, but I think this commercial can get people's attention.

The students here, themselves young girls, nevertheless refer to the audience in the third person and avoid talking about their own responses to the ad.

This distancing was also evident in questionnaire responses (Appendix 1) which showed levels of agreement for statements like 'In our Chinese society if you have a steady sexual partner you can assume there is no risk of AIDS'; 'Having sex outside of HK is more likely to lead to AIDS'; and 'If you know and trust your partner there is not much chance of getting AIDS.' When asked about the likelihood that various people might be infected with HIV (Appendix 2), students' perceptions of likelihood increased with the relative social distance of the individuals, with themselves judged the least likely, then their family members, then their friends or partners, then their classmates, and finally strangers with the highest likelihood.

#### Condom Use

The ads themselves present a certain ambivalence about condom use. It is recommended in only six of the 21 AIDS Awareness API's produced by the Hong Kong government, and when it is, it is often couched in linguistic constructions which undermine the thematic salience of efficacy, such as *qualification*:

Always use a condom. It is not 100% safe, but it is safer. (AD5)

or opposition:

Condoms offer some protection, but the best defense is to avoid casual sex. (AD6).

Slogans also associate condom use with 'danger':

If you carry on with a dangerous lifestyle, at least use a condom (AD4)

as well as notions of 'trust' and 'doubt':

If you have doubts about your sexual partner, you should certainly use a condom (AD4) (trans. from Cantonese)

The idea that condoms are ineffective can also be seen in individual student responses to the ads in which the same linguistic devices of *qualification* and *opposition* are reflected:

and then th- the government also promote the same thing..AIDS is very dangerous..even though you have used condom...but (laugh) it is not effective. (S4/2)

the commercial..the speaker mentioned using a condom is not enough..em..and they have they have every every one have to make sure that..um..they won't..um ..they shouldn't have sex with anyone..um..they know or they don't know...because..uh..they can contact some carrier of eh AIDS easily..I mean..so not to have sex with anyone..be sure.. okay (S5/2)

it says that uh use condom may may protect AIDS..but it's not..uh..the most important is not to have sexual relationship with others... (S7/2)

The same idea can be seen in this student authored treatment for an AIDS awareness API in which the ineffectiveness of condoms is the main theme:

Group: 3

Commercial Name: Don't sleep around Target Audience: General Public Goal: Condom is not 100% safety

Summary:

Conversation between a doctor and a patient. Doctors tells patient AIDS result. The patient is going to talk about his history--how he get the virus and use condom. The doctor advise him--Condom is not a safety solution.

Slogan: Don't sleep around

In the questionnaire data, although the degree of agreement with the statement: 'Condoms are not very effective for preventing AIDS' is not as high as others, 47% of the respondents agreed with the statement, and 31% were not sure.

#### 'Casual Sex'

Perhaps the most salient feature of students' discussions about AIDS was the frequency with which they appropriated the term 'casual sex' from the commercials. Most importantly is the manner in which they *adapted* the term to conform to they own assessments of personal risk and notions of AIDS as something that happens to 'others'.

'Avoiding casual sex' was the most popular response to the question 'What can you do to avoid HIV infection' (Appendix 3a). When asked to define 'casual sex', however, twentytwo different responses were given (Appendix 3b). Some answers focused on the number or frequency of sexual partners, while others focused on the relationship between the partners. Most were equally as vague as 'casual sex', like 'having sex with many people', 'not knowing your partner well', and 'sex without love', while others were amazingly specific, like 'having sex with more than three people'. In any case, the degree of adaptation to which the term is susceptible limits its effectiveness in discouraging concrete, individual behavior.

In their discussions, students' clearly disassociate the notion of 'casual sex' from interaction between intimates. In the following example, students planning their own AIDS Awareness API negotiate the meaning of 'unsafe' or 'casual sex', insisting that it can only be applied *outside* of intimate or socially sanctioned relationships:

```
S5:
          My idea is more realistic...a wife and a husband
(gestures by holding his hands out in front of him, palms
facing each other)
S1:
```

S5: And...and, ah...they want...

S1: But the question is...casual sex...we are emphasizing on...

S4: Casual... A boy^ S5: S1: casual sex. S5: A man and a woman...

S1: Unsafe sex.

S5: Just a man and a woman. S1: And that is unsafe^..casual^

S5: First | is,

S1: What you want to emphasize?

S5: Both.

S1: What are their relationships?

S5: Umm, S1: Friends^

S4: Prostitutes.

S5: ... (looks from one classmate to the other)

S1: Prostitutions^

S5: Perhaps so.

This construction of 'casual sex' is also reflected in students' risk assessment, with 46% of respondents judging sex with their 'steady' girlfriend or boyfriend without a condom as 'low risk'.

#### Talking about AIDS

The notion that 'talking about AIDS' can help prevent AIDS is an important aspect of some of the Hong Kong government's more recent API's which bear the slogan: 'the more you know, the less the risk'. One such API portrays a group of women in a beauty salon discussing getting an 'AIDS test' and incurring the disapproval of the woman working in the salon. One potential problem with this presentation is that the most salient feature of the narrative is not the benefit of talking about AIDS but the social disapproval that results, a feature consistently mentioned in students' discussions about the ad and characterized as the unmarked response in 'Chinese society'. Therefore it is not surprising that questionnaire respondents rated highly both the statement 'You should be open minded to discuss AIDS' and the statements 'Chinese are shy to talk about AIDS' and 'We seldom discuss AIDS with our friends or family members'. Such a construction of social norms makes the cultural tool: 'talking about AIDS is good' particularly difficult to apply as viewers are placed in a dilemma in which talking about AIDS is seen at odds with both socially acceptable behavior and 'cultural identity'.

Furthermore, viewers are provided with very few socially acceptable models for talking about AIDS. In fact the only model presented in the commercials as free from social disapproval is the model of 'gossip'. Thus, in student discussions and role plays, talking about AIDS is often interpreted as talking about people with AIDS, as can be seen in the following except from a student role-play:

```
Stella--..Louisa--..do you know Willie got
         AIDS.
S3 & S4: (burst of laughter)
S3:
         AIDS^
S4:
         Willie got AIDS^
S1:
         Yeah.
S3:
         How do you...how does he got AIDS?
S1:
         I don't know..I heard it from Mimi.
S3:
         (laughs)
S1:
         You know..his girlfriend.
S4:
         He deSERVED it...he used to have CASual SEX...with
                                                                  others.
S3:
         He always proud he had so many sexual partners.
         And Mimi said he never used CONDOM--
S1:
S3 & S4: Oh--
S1:
         He DESERVE it--
```

#### Students Expectations of HIV/AIDS Education

Questionnaire results on students' expectations of AIDS education media messages (Appendix 4) indicate that in many ways the Hong Kong government API's are not providing them with the tools they consider most useful for them. When asked what information they most desired from AIDS education, the top three responses were things not dealt with (and perhaps not easily dealt with) in the television commercials: information on the relative risks of different kinds of sexual activities, information on other STD's, and information on how to use a condom properly.

At the same time, students responded positively to the narrative technique used in many of the ads. Responses in the recall experiment also point to the effectiveness of narrative for this particular audience. Other techniques receiving favourable ratings were advertisements which used 'real people with AIDS' and advertisements which gave detailed, factual information.

#### Conclusion and Recommendations

Looking at how students respond linguistically to AIDS education messages can help us to understand what kinds of things they take from them and how they use these things in their own lives. The results of this study indicate that students were more likely to appropriate narrative aspects of the commercials than informational aspects, and, while they were able to accurately recall the narratives, they were unable to apply these stories to their own particular situations.

It is difficult to change audiences' patterns of appropriation, but we can change the tools that are made available by providing a narrative of AIDS which integrates the idea that even sex with someone you love or know well can be risky and that condom use is an effective preventative measure. We can also give more detailed tools for harm reduction, if not in the media, at least in the schools, give more information about other STD's, and frame our advice to them in more concrete, less ambiguous language.

#### References

Fairclough, N. (1992). Discourse and social change. Cambridge: Polity Press.

Jensen, K. B. (1991). Reception analysis: mass communication as the social production of meaning. In Jensen, K. B. & N. W. Janowski (eds.) *A handbook of qualitative methodologies fro mass communication research*. London: Routledge.

Jones, R. H. (1996a). Talking AIDS in Hong Kong: cultural models in public health discourse. *Asia Pacific MediaEducator1*:1, 114-133.

Jones, R. H. (1996b). Responses to AIDS awareness discourse, Department of English Research Monograph No. 10. Hong Kong: City University of Hong Kong.

Lupton, D. (1991). AIDS and the popular media: a new perspective at Florence. AIDS Care 1:3, 447-9.

Tulloch, J. (1992). Using TV in HIV/AIDS education: production and audience cultures. *Media Information Australia* 65: 28-35.

Wertsch, J. V. (1994). The primacy of mediated action in socio-cultural studies. *Mind, Culture and Activity 1:*4, 202-8.

<sup>&</sup>lt;sup>1</sup> A more detailed discussion of this analysis can be found in Jones 1996a.

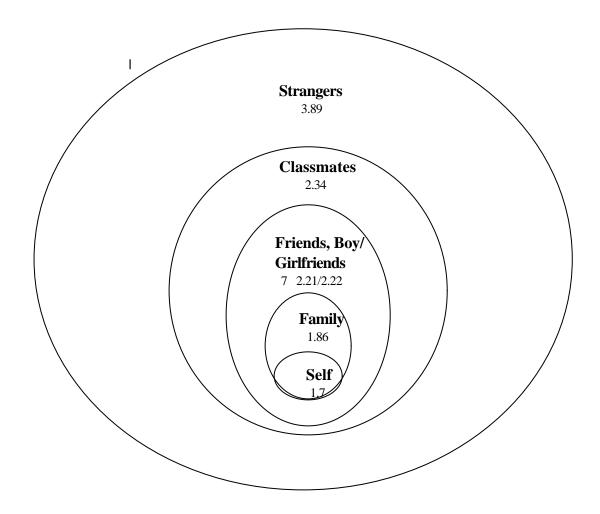
<sup>&</sup>lt;sup>2</sup> A detailed description and discussion of students' retelling of selected AIDS Awareness API's can be found in Jones 1996b.

Rank	No.		Mean	SD	Female	SD	Male	SD
1	2	'You should be open minded to	4.15	.08918	4.12	.14467	4.18	.10571
		discuss AIDS with your friends or family members.'						
2	9	'Everyone should have a test for the AIDS virus before they get married.'	4.03	.09995	4.18	.15815	3.88	.15815
3	12	'Chinese people feel shy or embarrassed to talk about sex and AIDS.'	3.97	.08221	4	.11780	3.94	.11574
4	11	'AIDS commercials should convey facts in a very direct and unemotional way.'	3.73	.07635	3.72	.11080	3.74	.10617
5	19	'In our Chinese society if you have a steady sexual partner, you can safely assume that there is little risk of AIDS.'	3.69	.10219	3.5	.13170	3.88	.15290
6	14	'Having sexual behaviour outside of Hong Kong is more likely to lead to AIDS.'	3.54	.11139	3.64	.13926	3.44	.17416
7	17	'Prostitutes are usually AIDS carriers.'	3.48	.09263	3.42	.14023	3.54	.12192
8	1	'The worst thing about AIDS is that it can destroy your family.'	3.31	.12366	3.18	.16828	3.44	.18106
9	8	'It is a common phenomenon nowadays for people to have a lot of sexual partners.'	3.29	.10664	3.18	.15568	3.4	.14568
10	13	'AIDS commercials should be threatening or shocking to make a stronger impression on people.'	3.25	.10480	3.18	.14196	3.32	.15502
11	4	'We seldom talk about AIDS with our friends or boy/girlfriend.'	3.17	.08995	3.04	.12440	3.3	.12875
12	20	'A large number of people with AIDS in Hong Kong are drug addicts.'	3.13	.07740	3.28	.10705	2.98	.10875
13	10	'' It is difficult for a woman to ask her husband or boyfriend if he had many sexual partners before.'	3.13	.11862	2.92	.15607	3.34	.17522
14	6	'If you know your partner well and trust him/her, there is not much chance of getting AIDS.'	3.03	.11845	2.58	.15412	3.48	.15711
15	5	'A lot of people who get AIDS deserve it.'	2.92	.09285	2.76	.12955	3.08	.13043
16	3	'Condoms are not very effective for preventing AIDS.'	2.91	.10926	2.9	.14914	2.92	.16122
17	7	'Homosexuality is the main cause of AIDS.'	2.79	.11916	2.62	.15357	2.96	.18061
18	21	'Most people with AIDS have done something wrong.'	2.66	.10562	2.48	.13167	2.84	.16253
19	15	'It is very easy to get AIDS.'	2.43	.08675	2.42	.11811	2.44	.12828
20	18	'If a man has sex with another man, they will get AIDS.'	2.31	.10607	2.14	.12780	2.48	.16718
21	16	'It is best not to have sex with anyone.'	2.06	.11265	2.2	.15386	1.92	.16373

#### Appendix 2

What is the likelihood that the following people might now or in the future be infected by HIV (the virus that causes AIDS)?

- 1=extremely unlikely
- 2=unlikely
- 3=don't know
- 4=likely
- 5=extremely likely



## **Appendix 3: Prevention of Infection**

## A.

What is the best way for you to avoid HIV infe	ction and AIDS?
(n=100, Some subjects had more than one a	nswer)
Avoid 'casual sex'	25
Use a condom	22
Have a 'stable partner'	14
Blank or Don't know	9
Don't have sex	8
Have 'safe sex'	6
Have an 'AIDS test'	5
Education ('knowing more')	4
Don't take drugs	4
Don't have sex with people I don't know	3
Avoid homosexuality	3
Have only one partner	3
Limit sexual partners	3
Have less sex	3
Have a partner I 'trust'	3
Be careful with wounds	3
Have more 'understanding' about sexual partners	2
Know partner well ('deeply')	2
'Self discipline'	1
Only have sex with wife	1
Only have sex after marriage	1
Don't use other people's towels	1
Don't share needles	1
Be 'careful' when having sex	1
Be 'cautious' when touching others	1
'My partner and I should behave ourselves'	1
Avoid infected people	1

#### B.

What is your definition of 'casual sex'? (n=100, Some subjects had more than one answer) Defined by Quantity or Frequency						
Having 'many' partners	31					
Having 'more than one' partner	13					
Having sex with different people	11					
Having 'many' or 'more than one partner at a time	7					
Changing partners frequently	3					
Having sex frequently	2					
Having 'too many' partners	2					
Not have a steady sexual partner	2					
Having 'many partners in a short period'	1					
Having 'several' partners	1					
Having 'more than ten' sexual partners	1					
Having 'more than three' sexual partners	1					
Having 'more than two' sexual partners	1					

What is your definition of 'casual sex'? (n=100, Some subjects had more than one answer) Defined by Relationship, Attitude or Other						
Sex with people you don't 'know/understand well'	14					
Sex without 'love'	6					
Having sex 'indiscriminately'	4					
'One night stand'	4					
Having sex 'easily'	3					
Not using condoms	3					
Sex outside a 'long-term' relationship	1					
Sex with prostitutes	1					
Blank or Don' t know	7					

## **Appendix 4: AIDS Education**

## A. Perceived effectiveness of various promotional techniques (n=100)

Rank	No.	Technique	Mean	SD	Female	SD	Male	SD
1	3	'TV commercials featuring real	4.04	.08155	4.22	.08708	3.86	.13404
		people with AIDS.'						
2	6	'TV commercials with stories	4.03	.07171	4.14	.09408	3.92	.10629
		showing the consequences of						
		high risk behaviour.'						
3	5	'TV commercials that give	3.95	.08211	4.2	.10690	3.7	.11517
		detailed factual information.'						
4	2	'TV commercials that show	3.42	.10462	3.52	.14912	3.32	.14691
		shocking or horrible images.'						
5	4	'TV commercials with famous	3.22	.08211	3.14	.15615	3.3	.15452
		people.'						
6	1	'TV commercials that say using	3.01	.10777	3	.13997	3.02	.16534
		condoms is normal and fun.'						

## B.

How effective are the HK government TV ads on AIDS?								
Mean SD Female SD Male SD								
2.79	.08562	2.74	.12057	2.84	.12242			

## C.

		What kinds of things	would yo	ou like to	know me	ore abou	t?	
Rank	No.	Statement	Mean	SD	Female	SD	Male	SD
1	5	Information on how risky different kinds of sexual activities are.	3.49	.09898	3.74	.12057	3.24	.14999
2	4	Information about other sexually transmitted diseases.	3.48	.10296	3.64	.14217	3.32	.14691
3	3	How to use condoms properly.	3.36	.11504	3.66	.12907	3.06	.18162
4	1	What happens when someone gets HIV/AIDS.	3.29	.10758	3.54	.14058	3.04	.15638
5	6	Information on contraception and pregnancy	3.27	.10811	3.48	.15183	3.06	.14958
6	2	How to prevent/avoid HIV/AIDS	3	.13853	3.1	.19639	2.9	.19639

#### Awareness among the General Public since 1994

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#### **Abstract**

The presentation focuses on the general public's awareness and knowledge of HIV/AIDS, including its transmission, symptomatology, prevention, and education activities. Data came from telephone surveys of the general public which consisted of (1) 1,519 people in 1994, (2) 1,601 people in 1995, and (3) about 1,017 in 1996. Respondents were between 18 and 50 years old and were drawn randomly from randomly selected households. Modest proportions of the general public knew that daily contact does not transmit HIV. However, relatively few knew that one is unlikely to contract HIV by donating blood and kissing. While some would still avoid friends infected with HIV. Not many people showed interest in attending AIDS-prevention activity and regarded the activity as effective. Considerable proportions found difficulty in obtaining treatment, information, and counseling about AIDS. Only slightly above half trusted the effectiveness of using condoms for preventing AIDS. Very few perceived themselves to have a chance of contracting HIV in future. Around one-third of the public perceived AIDS to be serious in Hong Kong and fewer people held such a perception in 1995 and 1996 than in 1994. However, majority perceived that it was both common and risky for a person from Hong Kong to use commercial sex in Mainland China. Despite some occasional misconceptions, modest proportions of the general public have adequate knowledge about HIV/AIDS. Reduced avoidance of infected friends may reflect the effectiveness of AIDS awareness programs directed to the public. However, more effort is necessary to increase the public's participation in AIDS-related activity and trust in the effectiveness of condoms.

#### Introduction

Since 1992, a series of large-scale, territory-wide studies have employed a KABP framework to investigate public awareness of AIDS in Hong Kong. The KABP framework has been a prototype of research on AIDS which focuses on knowledge, attitudes, beliefs, and practice related to AIDS (Abraham et al., 1995; Andre and Bormann 1991; Fishbein et al., 1993; Hobart 1992; Ndeki et al., 1994; Ross 1988; Sweat et al., 1995). The KABP framework incorporates social theories such as the health belief model (Rosenstock et al., 1994), reasoned-action theory (Terry et al., 1993), and social cognitive theory (Bandura 1994) to investigate the sophisticated interrelationships between knowledge, attitudes and behaviors (Van der Velde and Van der Pligt 1991). It focuses on such variables as knowledge about HIV/AIDS, perceived susceptibility to HIV infection, the perceived efficacy of using condoms against HIV infection, and so on. These variables tend to have close relationships to preventive behavior against HIV infection (Connors and Heaven 1995; Lau et al., 1996; Mahoney et al., 1995; Terry 1993). They are therefore essential for ongoing research on public awareness of AIDS..

Following a few studies (Li et al., 1990) and a landmark one using the KABP framework in 1992 (Hong Kong AIDS Foundation 1996), the Community Research Program began in 1994 to launch a large-scale, territory-wide research project to survey public awareness annually. So far, such a project has surveyed the public in August 1994 and October in both 1995 and 1996 (see Table 1). These surveys and others of specific professional populations have collected data from near 15,000 persons. The data are now massive and sophisticated and entailing the present review to disentangle their intricacy.

#### Aims of the review

This review attempts to synthesize main results of the aforementioned studies, trying to identify areas of improvements and weaknesses. Hence, it makes contribution to:

- 1. monitoring public awareness,
- 2. evaluating the effectiveness of AIDS-related programs, and
- 3. understanding relationships among KABP variables.

It employs survey data obtained from near 15,000 persons, including 1,000 persons just interviewed in October, 1996. In total, 9 surveys of the general public and professional groups in Hong Kong since 1992 generated the data (see Table 1).

#### Results

#### Perceived seriousness of AIDS

The public's perceptions of the seriousness (being serious or very serious) of AIDS both at present (36.3% down to 21.0%, see Figure 1) and in future were on the decline from 1994 to 1996 (75.5% down to 62.0%). The decline was especially salient in 1996. The proportion of the public who perceived that AIDS would be serious 10 years later was more than twice the proportion who perceived seriousness at present. Females were consistently more likely than males to perceive AIDS to be serious at present and ten years later.

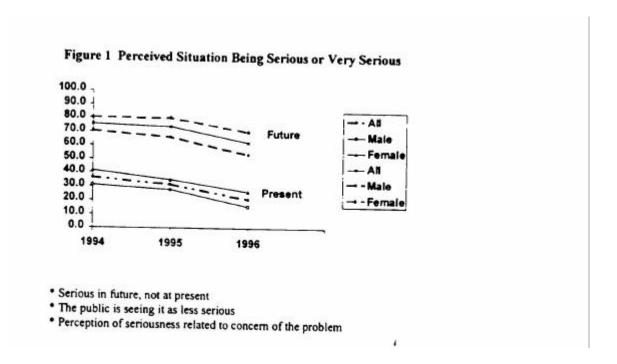


Figure 1

The perception of the seriousness of AIDS probably reflects the present state of low reported prevalence and the public might have been accustomed to the threat of AIDS.

Table 1: Background information of different studies used

Na	me of survey	Target population	Age	Sample size	Sampling method	Data collection format	Time of completion	Response rate
1)	KABP Survey on AIDS in Hong Kong	General public	18-56	1245	Random address from census	Face-to-face	92.12	42.9
2)	Community Awareness Survey	General public	18-50	1519	Random telephone numbers	Telephone	94.8	57.6
3)	Community Awareness Survey	General public	18-50		Random telephone numbers	Telephone	95.10	55.0
4)	Community Awareness Survey	General public	18-50		Random telephone numbers	Telephone	96.10	48.2
5)	Family Survey on AIDS	Married people	18-60	793	Random telephone numbers	Telephone	94.6	47.6
6)	Family Survey on AIDS	Married people	18-60		Random telephone numbers	Telephone	96.3	48.0
7)	Survey of Attitudes toward HIV/AIDS Related Social Services	Social workers	>18	1103	All family, outreaching, and drug-related workers	Mail	94.11	57.9
8)	Survey on HIV/AIDS Training and Patient Care among Health Care Workers	Health care workers	NA		All doctors, nurses, final year medical students, and allied health professionals	Mail	95.7	21.9
9)	Surveys of Education Programs on AIDS in Secondary Schools	Secondary schools principals, teachers, and students	NA	principal	Random schools and classes from Secondary 4 to 7	Mail and self- administratio n	94.4	64.7 for principals 50.0 for teachers

NA: not applicable

Sponsoring or collaborating organizations:

<sup>1)</sup> Hong Kong AIDS Foundation, Hong Kong Polytechnic University; 2), 3) & 4) Council of the Hong Kong AIDS Trust Fund

<sup>5), 6) &</sup>amp; 9) Hong Kong AIDS Foundation; 7) Council of Social Services of Hong Kong

<sup>8)</sup> Scientific Committee on AIDS, Department of Health

#### Interest and concern

Proportions of the public showing interest in knowing more about AIDS prevention staggered around 61.2% to 64.7% in 1994 to 1996 (see Table 2). Interest in joining AIDS-prevention activity, however, appeared in half of these proportions (28.7%-34.7%). Roughly equal proportions (34.5% & 38.7% in 1996 & 1994) found their family members to be concerned about AIDS. Few (5.8% & 7.7% in 1996 & 1994) discussed about AIDS with family members within three months prior to the survey. There was virtually no difference between males and females in the interest and concern. Overall, the findings indicate that the public is less likely to participate in activity that requires more effort. Furthermore, AIDS seems to remain a taboo in the family.

#### Knowledge

Consistently from 1992 to 1996, majority of the public was knowledgeable that one who looks healthy can transmit HIV to others (80.0%-92.5%, see Figure 2), that having ordinary body contact with persons with HIV cannot lead to infection (82.3%-92.5%), that sharing meals with persons with HIV cannot lead to infection (68.3%-84.1%), that injecting with syringes used by AIDS patients can infect one with HIV (95.4% in 1992), and that a female person with HIV can transmit HIV to her fetus during pregnancy or delivery (87.0% in 1992). Somewhat around half of the public knew that one who looks healthy can transmit HIV to others (46.0-66.3%), that using toilet seats used by persons with HIV cannot lead to infection (57.2%-60.0%), and that AIDS patients can transmit HIV to others via coughing or sneezing (58.7%-66.7%). On the other hand, only minority of the public realized that kissing mouth-to-mouth with persons with HIV cannot lead to infection (27.5%-30.2%) and that donating blood to others cannot cause HIV infection (24.6%-38.6%).

There were few sex differences in the likelihood of knowledge, which included females' higher likelihood of knowing that a female person with HIV can transmit HIV to her fetus during pregnancy or delivery but lower likelihood of knowing that using toilet seats used by persons with HIV cannot lead to infection and that AIDS patients can transmit HIV to others via coughing or sneezing. The higher relevance of pregnancy and delivery and toilet seats to females than males might lead females to worry about the risk of transmission through these modes more than males.

None of the knowledge items manifested an increasing trend in the proportion of the public. Rather, a decreasing trend was discernible in knowledge about asymptomatic transmission, that one who looks healthy can transmit HIV to others (92.5% in 1992 down to 80.0% in 1996). By and large, the picture about the level and trend of knowledge seems to be disappointing. Despite having adequate knowledge about the possible modes of HIV transmission, a substantial proportion of the public still holds misconceptions about the risk of casual social contact. Knowledge involving two forms of body fluid, blood and saliva, was especially available only in minority. Removal of the misconceptions from the public is certainty crucial because of positive relationships (odds ratios greater than 1) between the misconceptions of discriminatory attitudes (see Table 3).

**Table 2:** The general public's interest in AIDS-related matters

	1994 <sup>1</sup>				1995 <sup>1</sup>			1996 <sup>1</sup>		
	Male	Female	All	Male	Female	All	Male	Female	All	
	%	%	%	%	%	%	%	%	%	
You are interested in knowing	64.6	65.0	64.7	59.4	62.8	61.2	63.4	61.9	62.6	
more about AIDS prevention										
Your are interested in joining	34.3	30.5	32.2	35.4	34.0	34.7	30.4	27.1	28.7#	
AIDS-prevention activity										
Family members are concerned	39.8	37.6	38.7	na	na	na	33.8	35.2	34.5#	
about AIDS										
Discussed about AIDS with	7.3	8.2	7.7	na	na	na	4.4	7.0	5.8	
family members in the last 3										
months										

na: not available

Table 3: Associations (odds ratios) between misconceptions and discriminatory attitudes from logistic regression models

		Misconceptions	that HIV can be t	ransmitted by	7
Discriminatory attitude	Sharing meals	Toilet seats	Coughing	Kissing	Body contact
Avoid friends	1.98	1.51	1.41	1.38	no
				1.36	ns
Move out from family	1.88	1.56	1.35	ns	1.67
Stay out of school	2.02	1.25	1.43	1.28	1.50
Discontinue work	2.41	1.48	1.38	ns	1.38

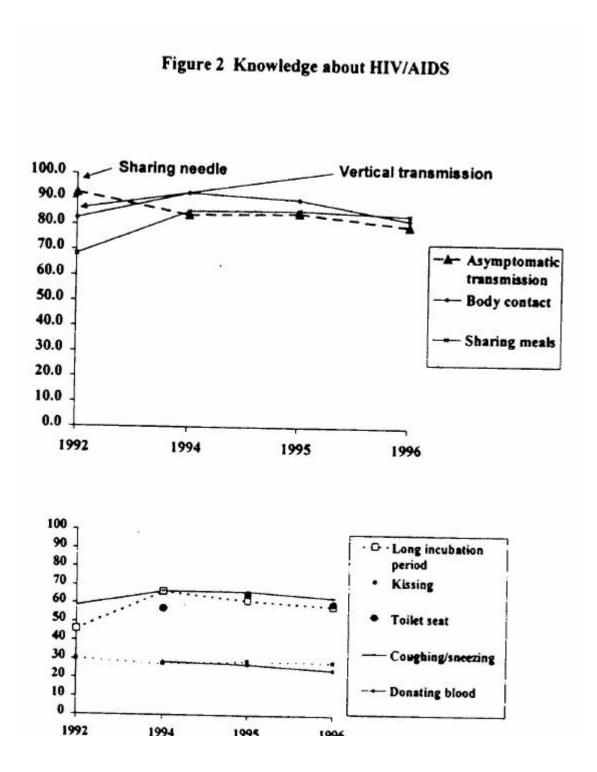
For the original questions of the four items, please refer to Table 5 and Table 6.

All given odds ratios were significant at .05 level

ns: not significant at .05 level

<sup>&</sup>lt;sup>1</sup>: Sources were the 1994, 1995, and 1996 Community Awareness and Family Surveys.

Figure 2

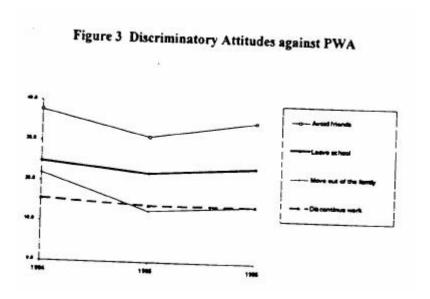


- \* The general public knows well about how AIDS can be transmitted but not about how AIDS could not be transmitted
- \* Knowledge is associated strongly with discriminatory attitudes.

#### Discriminatory attitudes against PWA/HIV

Four items, concerning avoidance and discrimination against infected friends, household members, regular workers, and school students, are common indicators of discriminatory attitudes toward PWA/HIV (Abraham et al., 1995; Ndeki et al., 1994). Discriminatory attitudes appeared among considerable proportions of the public. Avoidance of HIV-infected was most likely (31.2%-37.6%, see Figure 3), followed by objection to infected students' continuous study in their schools (22.1%-24.8%), infected household members' remaining in their families' residences (12.7%-21.8%), and infected persons' going to work regularly (14.1%-15.5%). Clearly, avoidance is most pronounced with regard to infected friends who are close to oneself.

Figure 3



A trend of declining discriminatory attitudes appeared but not pervasively. The trend is most discernible for objection to infected persons' going to work regularly (21.8% in 1994 down to 12.7% in 1995). However, no further decline occurred in 1996 (14.2%). For another, avoidance of infected friends was substantially less common in 1995 than in 1994 (31.2% vs. 37.6%). However, the proportion of the public that would avoid infected friends rebounded in 1996 (35.1%). In all cases, amelioration is not persistent and relapse appears in 1996.

Discriminatory attitudes not only prevail in the public, but also among social workers and health workers. Considerable proportions of social workers would be reluctant to work with colleagues with HIV (39.0%, see Table 4), avoid clients with AIDS (36.6%), avoid clients with AIDS by requesting transfer to other units (35.7%), and avoided infected friends (33.1%). These findings suggest that social workers are as likely to be intolerant as or even more than the public. Discriminatory attitudes were less common among health care workers (16.1%-37.0%). Still, a substantial proportion of them were unwilling to work with HIV-infected colleagues (37.0%).

Table 4: Discriminatory attitudes toward persons with HIV/AIDS expressed by social workers and health care workers (%)

	Social workers <sup>1</sup>	Health care workers <sup>1</sup>
Avoiding HIV-infected friends	33.1	16.1
Avoiding patients/clients with AIDS	36.6	25.8
Avoiding patients/clients with AIDS by requesting transfer to another unit	35.7	24.1
Unwilling to work with colleagues with HIV	39.0	37.0

<sup>1:</sup> Sources were the 1994 survey of social workers and 1995 survey of health care workers.

#### Perceived risk

Consistently few of the public perceived very high, high, or even average risk to contract HIV in future (7.0%-8.0%, see Table 5). Sex differences occurred in both 1994 and 1996 when males perceived higher risk than females. However, substantially higher proportions of the public believed that a woman's risk for contracting HIV from her husband was high (41.0%-43.7%, see Table 6). This discrepancy indicated that the public tends to perceived lower risk for oneself. The tendency refers to the orientation toward personal invulnerability and unrealistic optimism (Perloff, 1987; Reardon, 1989). Another tendency pertaining to personal relevance may explain females's higher likelihood than males to perceive risk for a woman from her husband. Both husbands and wives were highly likely to aver that women should insist on using condoms if they suspected their husbands to have extramarital sex (89.9%-91.6%), although wives were significantly more likely than husbands. By contrast, only modest proportions of married people believed that women can insist on using condoms in practice (53.3%-54.6%). The gulf between desire and practice can be tremendous.

Commercial sex used by Hong Kong people in mainland China was common, according to majority of the public (88.2%-91.1%, see Table 7). Nevertheless, males were slightly but significantly less likely to perceive so than females in 1994 and 1996. Commercial sex in mainland China was risky, according to more than three quarters of the public (78.5%-88.5%, see also Figure 4). By contrast, only modest proportions of the public perceived that commercial sex in Hong Kong was risky (59.1%-66.9%). This discrepancy in perceived risk, however, may not be justifiable in that Hong Kong has recently attracted troops of commercial workers from mainland China and other parts of Southeast Asia where AIDS is far more prevalent.

Figure 4

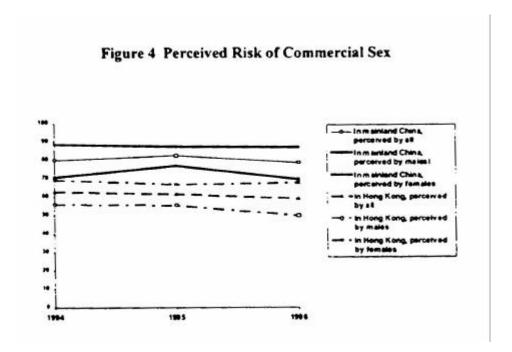


Table 5: The general public's perceived chance of contracting HIV in future

		1994 <sup>1</sup>			1995 <sup>1</sup>			1996 <sup>1</sup>		
	Male	Female	All	Male	Female	All	Male	Female	All	
	%	%	%	%	%	%	%	%	%	
Very high / high / average	8.6*	5.5	7.0	8.0	8.1	8.0	9.2*	5.7	7.4	
Low	10.4	8.8	9.6	8.1	6.9	7.4	10.2	10.5	10.4	
Very low	81.0	85.6	83.4	84.0	85.0	84.5	80.6	83.8	82.2	

<sup>&</sup>lt;sup>1</sup>: Sources were the 1994, 1995, and 1996 Community Awareness Survey of the general public.

Table 6: The general public's perception and attitudes toward women's risk and prevention

		1994 <sup>1</sup>			1995 <sup>1</sup>	1996 <sup>1</sup>			
	Male	Female	All	Male	Female	All	Male	Female	All
	%	%	%	%	%	%	%	%	%
Perceived chance to									
contract HIV from her									
husband									
High / very high	34.2*	52.4	43.7	33.7*	49.1	41.8	29.9	51.7	41.0#
Average	10.0	15.7	13.1	21.6	24.3	23.0	30.8	23.8	27.2
Low / very low	55.8	31.8	43.3	44.7	26.7	35.2	39.3	24.6	31.8
Should insist on using	90.1*	92.9	91.6	na	na	na	86.0*	93.7	89.9
condoms									
Can insist on using	54.9	54.3	54.6	na	na	na	52.2	54.2	53.3
condoms in practice									

<sup>&</sup>lt;sup>1</sup>: Sources were the 1994, 1995, and 1996 Community Awareness and Family Surveys.

<sup>#:</sup> Significant difference among the years (p < .05, by the <sup>2</sup> test for association)

<sup>\*:</sup> Significant sex difference within the year (p < .05, by the <sup>2</sup> test for association)

<sup>#:</sup> Significant difference between the years (p < .05, by the <sup>2</sup> test for association)

<sup>\*:</sup> Significant sex difference within the year  $(p < .05, by the^2 test for association)$ 

Table 7: The general public's perceptions about use of commercial sex

	1994 <sup>1</sup>			1995 <sup>1</sup>			1996 <sup>1</sup>		
	Male	Female	All	Male	Female	All	Male	Female	All
	%	%	%	%	%	%	%	%	%
Hong Kong people's using	85.2*	91.0	88.2	88.3	91.1	89.8	82.9*	89.9	86.5#
commercial sex in mainland									
China is common/very common									
The chance of contracting AIDS	70.6*	88.5	80.0	77.1*	87.4	82.6	69.6*	87.0	78.5#
for a person in mainland China is									
high/very high									
The chance of contracting AIDS	56.1*	69.2	63.0	55.6*	66.9	61.7	49.8*	67.9	59.1
for a person in Hong Kong is									
high/very high									

<sup>&</sup>lt;sup>1</sup>: Sources were the 1994, 1995, and 1996 Community Awareness Survey of the general public.

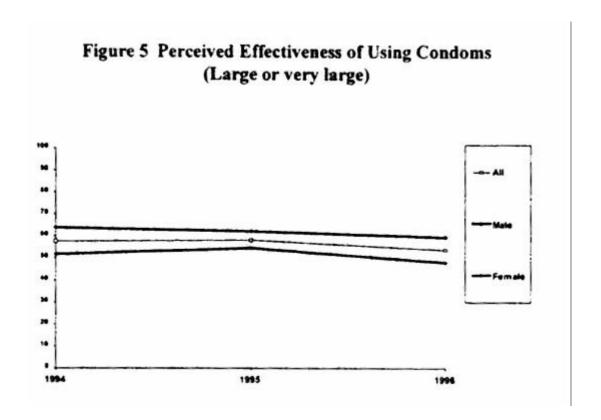
<sup>#:</sup> Significant difference among the years (p < .05, by the  $^2$  test for association)

<sup>\*:</sup> Significant sex difference within the year (p < .05, by the <sup>2</sup> test for association)

#### Perceived efficacy of prevention

Only modest proportions of the public believed that using condoms was effective against HIV infection (53.6%-58.1%, see Table 8 & Figure 5). The proportion was even lower in 1996 than in preceding years. Males were more likely than females to believe in the effectiveness, perhaps because they believed that they could use condoms properly. Conversely, females were less confident in the condom partly because they could not guarantee its proper use by their male partners.

Figure 5



Substantial proportions of the public perceived that AIDS-prevention activities were not effective (34.0%-41.5%, see Table 9), that the Government expended too little effort (51.5%-57.1%), and that nongovernment organizations' effort was too little (57.8%-63.8%). Clearly, an increasing number among the public perceived that the government's effort was too little (51.5% in 1994 to 57.1% in 1996).

Table 8 The general public's perceived effectiveness of using condoms, reducing the number of sex partners

	1994 <sup>1</sup>				1995 <sup>1</sup>		1996 <sup>1</sup>		
	Male	Female	All	Male	Female	All	Male	Female	All
	%	%	%	%	%	%	%	%	%
Effectiveness of using									
condoms									
Large / very large	63.8*	51.7	57.5	62.1*	54.6	58.1	59.7*	47.7	53.6#
Average	15.2	19.8	17.6	27.7	27.0	27.3	26.5	31.5	29.1
Little / very little	21.1	28.5	24.9	10.3	18.5	14.6	13.8	20.8	17.4

<sup>1:</sup> Sources were the 1994, 1995, and 1996 Community Awareness Survey of the general public.

Table 9: The general public's perceived inadequacy in AIDS-related services

	1994 <sup>1</sup>			1995 <sup>1</sup>			1996 <sup>1</sup>		
	Male	Female	All	Male	Female	All	Male	Female	All
	%	%	%	%	%	%	%	%	%
AIDS-prevention activities are	38.7	41.5	40.1	32.8	35.1	34.0	37.0	42.9	40.0#
not effective									
Government's effort is too	48.1	54.7	51.5	52.2	51.4	51.8	55.1	59.1	57.1#
little									
Nongovernment organizations'	63.6	64.1	63.8	59.1	56.6	57.8	58.6	59.4	59.0#
effort is too little									

<sup>&</sup>lt;sup>1</sup>: Sources were the 1994,1995, and 1996 Community Awareness Survey of the general public.

#### Discussion

Since 1994, Hong Kong has witnessed a decline in the perceived seriousness of AIDS in Hong Kong at present and in future, knowledge about HIV/AIDS, especially regarding asymptomatic transmission and the impossibility of HIV transmission via ordinary body contact, slight decline in the perceived risk of using commercial sex in Hong Kong. Because the public's interest in joining AIDS-prevention activity remained relatively low, effort to boost participation in the activity and thereby awareness and knowledge is of foremost importance.

As regards AIDS prevention, promoting the efficacy of using condoms is both necessary and wanting in view of the doubt in almost half of the public. Assuring the public that the condom can prevent HIV infection by impeding direct contact of body fluid, including semen and vaginal fluid, should be important. The public, or especially the male population, should realize that using commercial sex in Hong Kong is equally risky to that in mainland China.

<sup>#:</sup> Significant difference among the years (p < .05, by the <sup>2</sup> test for association)

<sup>\*:</sup> Significant sex difference within the year (p < .05, by the <sup>2</sup> test for association)

<sup>#:</sup> Significant difference among the years (p < .05, by the <sup>2</sup> test for association)

Besides, for health purpose, commercial sex, casual sex, and promiscuity can enhance risk for HIV infection and other venereal diseases because they can interfere with one's chance of practicing safe sex.

Sustaining the decline in discriminatory attitudes is important. Such attitudes are especially pertinent to everyone's daily life, not confined to the sexual life and a life related to risky behavior. Dispelling the public's misconceptions is important because they are responsible for discriminatory attitudes.

Eliminating unnecessary fear is crucial to reduce discriminatory attitudes. Hence, besides dismissing the misconceptions about infection by casual social contact, making AIDS less threatening may be a means to fostering tolerance. An alternative argument for promoting public awareness by fear appeal may not be an ideal approach. Instead, a rational approach demands provision of adequate education to the public for inducing rational thinking that preempts irrational response.

AIDS prevention should not neglect females who are vulnerable to HIV infection through their husbands and particularly at risk when many of them cannot insist on using condoms in practice. Empowering females with the skill and ability to practice safe sex is important for AIDS prevention.

Heavy emphasis on refuting misconceptions about HIV transmission through casual social contact, underwriting the efficacy of using condoms, discouraging use of commercial and unsafe sex, and empowering females for practicing safe sex has not been apparent in past public education programs. It should be a significant part in recurrent campaigns. The likely contribution of misconceptions to discriminatory attitudes reveals the importance of rationality. That is, given reasonable knowledge, the public should be more tolerant for infected persons. Such a linkage essentially champions education programs to enhance the public's knowledge and reasoning.

#### References

Abraham, S.C.S., Rubaale, T.K. & Kim, W. (1995). HIV-Preventive Cognitions amongst Secondary School Students in Uganda. *Health Education Research* 10:2, 155-162.

Andre, Thomas & Bormann, Lynda (1991). Knowledge of Acquired Immune Deficiency Syndrome and Sexual Responsibility among High School Students. *Youth & Society* 22:3, 339-361.

Bandura, Albert (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, Albert (1994). Social Cognitive Theory and Exercise of Control over HIV Infection. In DiClemente, Ralph J. & Peterson, John L. (1994). *Preventing AIDS Theories and Methods of Behavioral Interventions*. New York: Plenum Press, 25-59.

Chan, Tammy P.C., Lau, Joseph Tak-fai, Cheung, Chau-kiu, Lee, S.S. & Chan, Mei-wah (1996). The Evaluation of TV API Featured by a Local Chinese AIDS Patients in Hong Kong. Poster presentation in *The XIth International Conference on AIDS*, Vancouver, Canada..

Connors, John & Heaven, Patrick (1995). Health Beliefs and Attitudes toward People Living with HIV/AIDS. *Journal of Applied Social Psychology* 25:10, 922-931.

Fishbein, M., Trafimow, D., Francis, C., Helquist, M., Eustance, M. Ann, Ooms, Michelle & Middlestadt, Susan E. (1993). AIDS Knowledge, Attitudes, Beliefs, and Practices (KABP) in Two Caribbean Countries: A Comparative Analysis. *Journal of Appled Social Psychology* 23:9, 687-702.

Fisher, Jeffrey D., Fisher, William A., Williams, Sunyna S. & Malloy, Thomas E. (1994). Empirical Tests of an Information-Motivation-Behavioral Skills model of AIDS-Preventive Behavior with Gay Men and Heterosexual University Students. *Health Psychology* 13:3, 238-250.

Hobart, Charles (1992). How They Handle It: Young Canadians, Sex, and AIDS. *Youth & Society* 23:4, 411-433.

Hong Kong AIDS Foundation (1996). *The Knowledge, Attitude, Behavior and Practice Survey on AIDS in Hong Kong 1992*. Hong Kong: Hong Kong AIDS Foundation.

Lau, Joseph Tak-fai (1995). The Change of Public Attitude from 1991 to 1994 in Hong Kong. Poster presentation in The Third International Conference on AIDS in Asia and the Pacific & The Fifth National AIDS Seminar in Thailand, Chiang Mai, Thailand.

Lau, Joseph Tak-fai (1995). 1995 Community Awareness Survey: Reported submitted to the Council of the Hong Kong AIDS Trust Fund, Centre for Clinical Trials and Epidemiological Research, Chinese University of Hong Kong.

Lau, Joseph Tak-fai, Cheung, Chau-kiu & Lee, S.S. (1996). Attitudes and Training of Health Care Workers on AIDS in Hong Kong. Poster presentation in *The XIth International Conference on AIDS*, Vancouver, Canada.

Lau, Joseph Tak-fai, Cheung, Chau-kiu, Ching, Vivian Ka-wai & Chan, Mei-wah (1996). *AIDS and Family Survey (1996): A Follow-up Study*: Report submitted to the Hong Kong AIDS Foundation. Centre for Clinical Trials and Epidemiological Research, Chinese University of Hong Kong.

Lau, Joseph Tak-fai & Lee S.S. (1994). Evaluation of Educational Programs on AIDS in Secondary Schools in Hong Kong. Poster presentation *in The Xth International Conference on AIDS*, Yokohama.

Lau, Joseph Tak-fai & Ma, Prescilia (1994). *AIDS and Family Survey (1994):* Report submitted to the Hong Kong AIDS Foundation. Centre for Clinical Trials and Epidemiological Research, Chinese University of Hong Kong.

Lau, Joseph Tak-fai & Ma, Prescilia (1995). Survey on Knowledge/Attitude among Social Welfare Personnel: Report submitted to the Council of Social Services of Hong Kong. Centre for Clinical Trials and Epidemiological Research, Chinese University of Hong Kong.

Li, P.C.K., Yeoh, E.K. & Leung, F.Y. (1990). *Knowledge of AIDS in a Group of Secondary School Students*. Hong Kong: AIDS Counseling and Health Education Service, Department of Health.

Mahoney, Colleen A., Thombs, Dennis L. & Ford, Olinda J. (1995). Health Belief and Self-Efficacy Models: Their Utility in Explaining College Student Condom Use. *AIDS Education and Prevention* 7:1, 32-49.

Ndeki, S.S., Klepp, K.I., Seha, A.M. & Leshabari, M.T. (1994). Exposure to HIV/AIDS Information, AIDS Knowledge, Perceived Risk and Attitudes toward People with AIDS among Primary School-children in Northern Tanzania. *AIDS Care* 6:2, 183-191.

Perloff, Linda S. (1987). Social Comparison and Illusions of Invulnerability to Negative Life Events. In Snyder, C.R. & Ford, Carol E. (eds.) (1987). *Coping with Negative Life Events: Clinical and Social Psychology Perspectives*. New York: Plenum Press, 217-242.

Reardon, Kathleen K. (1989). The Potential Roles of Persuasion in Adolescent AIDS Prevention. In Rice, Ronald E. & Atkin, Charles K. (eds.) (1989). *Public Communication Campaigns*, 2nd ed., Newbury Park, CA: Sage, 273-289.

Rosenstock, Irwin M., Strecher, Victor J. & Becker, Marshall H. (1994). The Health Belief Model and HIV: Risk Behavior Change. In DiClemente, Ralph J. & Peterson, John L. (eds.) (1994). *Preventing AIDS: Theories and Methods of Behavioral Interventions*. New York: Plenum Press, 5-24.

Ross, Michael W. (1988). Distribution of Knowledge of AIDS: A National Study. *Social Science and Medicine* 27:11, 1295-1298.

Singer, E., Rogers, Theresa F. & Glassman, Marc B. (1991). Public Opinion about AIDS before and after the 1988 U.S Government Public Information Campaign. *Public Opinion Ouarterly* 55, 161-179.

Stiff, J., McCormack, M., Zook, E., Stein, Terry & Henry, Rebecca (1990). Learning about AIDS and HIV Transmission in College-Age Students. *Communication Research* 17:6, 743-758.

Sweat, M.D., Norpkesoon, T., Mastro, T.D., Sangkharomya, MacQueen, K., Pokapanichwong, W., Sawaengdee, Y. & Weniger, B.G. (1995). AIDS Awareness among a Cohort of Young Thai Men: Exposure to Information, Level of Knowledge, and Perception of Risk. *AIDS Care* 7:5, 573-598.

Terry, Deborah (1993). Self-efficacy Expectancies and the Theory of Reasoned Action. In Terry, Deborah J., Gallois, Cynthia & McCamish, Malcolm (eds.) (1993). *The Theory of Reasoned Action: Its Application to AIDS-preventive Behavior*. Oxford: Pergamon, 135-151.

Terry, D., Gallois, C. & McCamish, M. (1993). The Theory of Reasoned action and Health Care Behavior. In Terry, Deborah J., Gallois, Cynthia & McCamish, Malcolm (eds.) (1993). *The* 

Theory of Reasoned Action: Its Application to AIDS-preventive Behavior. Oxford: Pergamon, 1-27.

Tong, Frederick K.S., Lau, Joseph Tak-fai, Cheung, Chau-kiu, Li, P.C.K., Chan, Tammy P.C., Jones, E., Ng, J., Opie-Smith, K. & White, B. (1996). Needs Assessment for Intervention in the Workplace. Poster presentation in *The XIth International Conference on AIDS*, Vancouver, Canada.

Van der Velde, Frank W. & Van der Pligt, Joop (1991). AIDS-Related Health Behavior: Coping, Protection Motivation, and Previous Behavior. *Journal of Behavioral Medicine* 14:5, 429-451.

# **Mobilising Community Participation In The Fight Against AIDS**

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## **Abstract**

Utilisation of community resources has been known in the history of Hong Kong for a long time. In the old days when the British Government started her ruling over the colony, community leaders were invited to help in developing this small island. Development of different services for different target groups were also graced by the assistance from the local community. The same phenomenon was noticed in AIDS specific areas. Using the experience of developing volunteers team in the Hong Kong AIDS Foundation, this paper reviewed the strategies used in mobilising community support in the fight against the disease of the century. Voluntary participation from the local community has been emphasised since the inception of the Hong Kong AIDS Foundation. However, people were less forthcoming in AIDS programme as compared with other types of voluntary services. Severe turnover was also noticed in the Foundation's volunteers team. With support from the Council for the AIDS Trust Fund, we decided to devote more effort in volunteers recruitment and management. A strategic approach in recruiting, training, supervising and motivating our voluntary partners were made. Apart from a tremendous increase in the number of volunteers, our voluntary force also experienced satisfactory personal development and self actualisation. Mobilisation of community participation cannot be successfully if emphasis is merely put on the need of the organisation. A good supply of human resources can be secured when the need of the volunteers in making contribution and in achieving self advancement are satisfied.

#### Introduction

Utilisation of community resources in supporting social services has been known in the history of Hong Kong for a long time. In the old days when the British Government started her ruling over the colony, community leaders were invited to help in developing this small island. Development of different services for different target groups were graced by the assistance from the local community. The same phenomenon was noticed in AIDS specific areas. Using the experience of developing volunteers team in the Hong Kong AIDS Foundation, this paper reviewed the strategies used in mobilising community support in the fight against the disease of the century.

# All Because of AIDS - Difficulties in Securing Community Support

Since the inception of the Hong Kong AIDS Foundation in 1991, emphasis has been put on getting the community involved in the battle against AIDS. Voluntary participation has been perceived as an important element in our work because the most effective way of promoting the knowledge of and the right attitude to AIDS is through community participation and peer education. It is through the general public themselves that the message can be disseminated and penetrated to different levels of society. In addition to these, it is noted that comprehensive programmes and services cannot be achieved by paid staff alone. With all these in mind, the Foundation has started to recruit volunteers soon after it started its services. Unfortunately we experienced quite a number of difficulties in the process of mobilising voluntary participation. Some of the problems are common to all voluntary agencies while some of them are related to the disease - HIV/AIDS.

People in Hong Kong are usually described as being calculative, i.e. they will weight between the cost and the return before they invest their energy. The statement is proved to be true in our experience. From time to time we had feedback from potential volunteers that they joined our Foundation because they could receive special training but they would leave when they finished with the training programmes. Some volunteers would frequently ask for recognition for their services, e.g. certificates, souvenirs or awards. Perhaps being calculative is one characteristic of our culture, but, somehow all these cause undeniable hassles in our volunteers co-ordination programme.

In Hong Kong we have a huge number of voluntary organisations serving different causes and all of them need community support in one way or the other. The demand on volunteers is much higher than the supply. This is especially true when more and more varieties of services are developed like in recent years. Competition among agencies in this aspect is therefore becoming more and more vigorous. AIDS, with the unavoidable stigma, has thus become a lower priority when people plan to devote their time to voluntary work.

Another potential competitor is the busy life style that people in Hong Kong commonly adopt. People may be engaged in part-time study, part -time job ..etc. and this makes people less available for voluntary service. They may take up some voluntary work on ad hoc basis that do not require long term and consistent commitment, but for HIV/AIDS voluntary service, a certain degree of commitment is needed.

From a social point of view, Hong Kong is going through a transitional period with the coming change of sovereignty. To a certain degree, the society is affected. People tend not to have long term plan because they are not certain about the future. Some sociologist described this phenomenon as an 'instant culture". That means people will look for instant return or result. They will not have the patience to wait for years for the fruits of their investment. This mentality will also affect people's determination in joining voluntary services because their input may not be recognised immediately. Without long term commitment and confidence on a society, it is entirely impossible for someone to serve the society on a voluntary basis at all.

As mentioned before, some problems in mobilising community support is related to HIV/AIDS. Form the day when the virus was discovered, this disease has been closely associated with marginalised or even socially unacceptable behaviour. Helping people to adopt a proper attitude over the issue has already been very difficult, not to say soliciting their own participation in the battle against AIDS. Further to this, people usually yield to their own moral judgement. In their mind, people with HIV/AIDS do not deserve sympathy as they should account for their behaviours which lead to the disease. Of course all these can be interpreted as a lack of real understanding on HIV/AIDS and an absence of attitude change which should be targeted at in our educational work.

The incurable nature of the disease also deters people from joining us as they perceived their effort to be useless because they cannot help clients to restore their health. It is sad and agonising to witness someone else to go through the dying process. The sense of helplessness will turn either people away or to the second line in AIDS work where they can be sparred from the sadness.

# Strategies Used in Mobilising Community Support - Experience of the Hong Kong AIDS Foundation

The Hong Kong AIDS Foundation has started volunteers recruitment soon after it started its services. Volunteers registered in our Foundation were grouped under either the Healthy Young Ambassadors or the Service Section. However, from experience, it was noted that

people are not so willing or ready to take up voluntary work in AIDS service agency. Moreover, the issues revolved around AIDS are too complicated to be handled by volunteers unless a comprehensive training and supervision can be provided. It is also observed that the turnover rate of volunteers in both the two groups are quite high. Obviously, an organised system must be established so as to strengthen the voluntary work force.

In the new approach of generating community participation, a home base within the Foundation's Centre is assigned for volunteers. A system in recruiting, training, supervising and rewarding volunteers is also developed. All these were done in order to help the Foundation to secure support from the volunteers on one hand and to help the participating volunteers to achieve a sense of belongings and self-development at the same time.

In recruitment, we understand that it is important, as a first step, to help the community to know what the Hong Kong AIDS Foundation is, what is our mission and what has been achieved. All these is done through publicity and actual work record of the Foundation. In terms of publicity, we try to make use of different channels and agents including poster, pamphlets, print and electronic media etc. to let people know about HIV/AIDS, our Foundation and our need on community support. Through our educational programmes, we help our audiences to have a proper understanding on HIV/AIDS and stimulate their interest in serving on this cause. It was encouraging to notice that some service recipients, e.g. blood test service, became our volunteers afterwards because they found the participation meaningful as from the perspective of the first person being served. We are also much rewarded in having the support of some clients and family members of deceased people with HIV/AIDS. We are much motivated by their participation.

One major strategy in recruitment is by 'the word of mouth'. As volunteers joined us and had rewarding experience, they would share with their peers who would also join us in serving the community. The effect of personal recommendation is much greater than we had expected and this had become one potent sources of volunteers for our Foundation.

Finally we also developed annual work plans in volunteers co-ordination. In this work plan we will assign some resources to run special training programmes so that we can attract specific target groups. Examples include our Healthy Young Ambassadors Scheme which is designed for students of tertiary educational institutes and our Counselling Course which is targeted at health care or social service professionals. Of course we also run training programmes that suit the general community.

An essential element of our volunteers co-ordination is on retention. We had, in the past, experienced severe turn-over on our voluntary work force. The experiences accumulated told us that some strategies must be developed to retain our volunteers or else our service will suffer. In assigning duties to our voluntary workers ,we will ask for their own opinion and assess their potential so that we can have the best match, hence the service is benefited while the volunteers can achieve a sense of satisfaction.

Using the concept of peer support, we tried to assign an experienced and stable volunteer to guide a green one so that the latter can be familiarised with the role under good care while the other will have a sense of achievement. This arrangement proved to be effective not only in securing the loyalty of the volunteers but also in promoting the relationship among the friends of the Foundation.

Regular refresher or advanced training courses are also organised to update the knowledge and skill of the volunteers. These training courses helped our voluntary workers to achieve self-development and self-actualisation. The training programmes also provided a very good venue for volunteers and staff to share with one another and thus enhanced the understanding among them and on the Foundation's work. This is essential in strengthening their commitment to the organisation.

Support groups in the form of sharing sessions were also arranged for volunteers engaged in different service items. In the sharing sessions, members can ventilate themselves and identify solutions to problems encountered in providing service. Responses from the volunteers indicated that this arrangement was important in revitalising them because the service was sometimes so overwhelmed that they felt a pressing need on emotional support from someone who was on the same boat.

In the Chinese culture, we usually join our family at festivals. We treasure the opportunities of meeting our family members and enjoy the occasion. Although these family meetings may not be frequently held, the impact can be far reaching. Enjoyable family meetings can be a potent source of support for the members to go through difficulties and frustration occurred in their daily life. In a big family like the Hong Kong AIDS Foundation we also make use of festival seasons to organise social gatherings during which our volunteers and staff may join and meet one another. Relationship among the participants and the sense of cohesion is strengthened.

Even for the most non-calculative individual, one will definitely be encouraged if appropriate reward for one's effort is given. The same can be applied to our volunteers. Recognition for our voluntary workers is made through the annual outstanding award and opportunities to attend local or overseas conferences or training. As shared by one volunteer who was awarded with a chance of overseas study that 'the more he learnt on HIV/AIDS, the more he would like to contribute", the results of our award system indicated that it is wise to assign resources to develop our volunteers.

#### Results

With support from the Council for the AIDS Trust Fund, a project on central volunteers co-ordination was started in 1995. Apart from constructing a system in co-ordinating the volunteers, there is also a real growth in the number of volunteers and in the range of services provided by our volunteers.

Before August 1995, the number of volunteers registered in our Foundation was 72 of which 30 was actively involved and up to end of September 1996, the number increased to 244, with 150 among them being actively involved. For our Healthy Young Ambassadors, the number increased from 10 to 55 and most of our them are involved in AIDS education programmes.

Apart from assisting us in our regular service programmes like blood test service, helpline; publication work; home and hospital visits, volunteers' support also enriched other areas of the Foundation's programmes. In support services volunteers helped us in running a Christian Fellowship and a spiritual support group; manning our activity centre and providing escort services for clients attending follow-up appointments. In our education section, our volunteers have commenced their participation in conducting school talks; and developing a training manual to be used in our Workplace programme. The Foundation is also proud to have more than 100 volunteers participated in our recent AIDS Awareness and Fund Raising Project - the AIDS Walk. Finally we are also well supported by our volunteers in translation, publication and clerical work.

In terms of self-development, a survey among the Foundation's volunteers indicated that the majority of them experienced personal growth through the process of being trained and of serving others. 92% revealed they had acquired a better understanding on the meaning of life while 89% claimed to have more exposure after joining our Foundation. The most reassuring is that about 90% of them admitted to have self advancement through joining our volunteer team. On the whole they were satisfied with their participation in the Foundation's programme and are willing and ready to recommend the same activity to their friends.

Rome is not built in one day. The same applies in soliciting community support in the battle against AIDS. We may have to work and wait for months and years before we can enjoy the fruit of our effort. However, our Foundation's experiences have demonstrated that the effort spent on mobilising community participation is more than worthwhile. Only if we can plan carefully in recruiting, retaining, training and recognising, coupled with a substantial level of service to the society, we can confidently believe that people will join and support us.

# Social Context of HIV Infection among IDUs in Asia: An Overview of Issues, Programs and Policy Implications

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# **Abstract**

This paper presents an overview of certain social, political cultural and behavioural variables determinant to HIV infection among IDUs in Asia are presented. In the context of uneven resource distribution, ethnic diversity, injection drug use (IDU) and related HIV infection poses a peculiar developmental problem in Asia with specific policy and program implications. Some of the specific issues of selected countries from the region are presented in this paper. Currently among all the cumulative HIV transmission categories in the Western Pacific region, IDUs form 29.3 per cent, which is the single largest category of HIV transmission in the region. Even though IDU/HIV has been reported from Hong Kong and Singapore, majority of IDU/HIV cases from the region belong to ethnic minorities, socially marginalized and poor. Extreme legal sanctions and geographic isolation do not guarantee protection from IDU/HIV in the region. Rampant violation of the basic rights of IDUs with HIV is common in the region in the form of administrative detention, denial of health and social services, blaming of ethnic minorities and migrant workers. There is an urgent need to develop sentinel surveillance survey and ethnographic data on IDU related HIV infection, mechanisms to disseminate the success of intervention experiences among IDUs for HIV prevention in the region.

#### Introduction

Injection Drug Use (IDU) and related HIV infection poses a peculiar developmental problem in Asia. Wide spread injection drug use behaviour often calls for massive resource allocation for drug rehabilitation and related service facilities, in addition to the additional pressure on general health care resources. A comprehensive public health, social welfare and development policy response to injection drug use and injection drug use related HIV transmission is yet to be developed in many Asian countries. Both the cause and the effect of HIV among IDUs and the epidemic in general in Asia must be understood in the context of the social and economic realities of much of the region. Such as poverty, massive unemployment, unplanned growth of cities, poor sanitation and health care facilities, and increasing cross border migration. These factors increase exposure to both the underlying determinants and the consequences of the epidemic; where social and economic deprivation produces an environment especially open to the penetration of HIV (Godwin, 1995).

The present paper presents an overview of certain social, political cultural and behavioural variables determinant to HIV infection among IDUs in Asia. Owing to limited data on injection drug use and the social context of HIV related risk behaviour among IDUs in this region it is extremely difficult to identify all the micro and macro determinants of HIV infection among IDUs. HIV is in general referred to as an infection without boundaries, and often it is difficult to describe the infection in terms of traditional classification of the countries in this region and to identify country specific determinants of the IDU related HIV infection. Even though Australia has reported incidence of HIV infection among IDUs and they have a well developed prevention programs in place a detailed discussion on the Australian experience is omitted from the scope of this paper as the intervention programs are operating in a relatively different historical, cultural and developmental frame of reference from many other Asian countries. Other pacific countries

are also not reviewed in this paper due to extremely limited literature available on IDU related HIV situation from those countries.

As the dynamic interrelationship between the injection drug use and the rapid spread of HIV in the Asian region has forced the researcher and the policy makers to review the practice of Injection Drug use behaviour from the point of view of rapid spread of HIV in this region. In Hong Kong, Malaysia, and Thailand, injecting has become the primary method of consuming non-medicinal opiate drugs (WHO 1989). In Asia as in other regions there has been a marked increase among drug injectors in the incidence of bacterial pneumonia, endocarditis and tuberculosis. These diseases have not always traditionally been recognised as HIV related. As a result current surveillance definitions of AIDS may be underestimating the true prevalence of HIV infection associated with drug injecting behaviour (WHO 1989).

To aggravate the issue several Asian countries lack accurate data on seroprevalence rates and the extent of the injection drug use behaviour. Afghanistan, Bangladesh, Bhutan, Indonesia, Mongolia, Pakistan are some of the countries which fall into this category. Even though injection drug use has been reported from various parts of the region, the rate of infection and the prevalence of HIV infection among IDUs differ from country to country and within each country. As no reliable data are available from the rural areas most of the available data on injection drug use is from urban centres. The wide spread belief among researchers and policy makers that HIV among IDUs is minimal in rural areas may remain yet another popular AIDS related myth. It appears that even the relatively developed territory of Hong Kong has only a "best guess" not accurate data about seroprevalence.

Certain popular form of presentation of data also pose problems in understanding and dealing with HIV among IDUs. Mostly HIV/AIDS data is presented as a spatial classification at a particular time of reference. It is presented as low seroprevalence (0.1% - 4.9 %), median seroprevalence (5% - 24.9%) and high prevalence (25+%) (USAID 1994). In such a presentation of data the specific characters, prevalence and peculiarities of local risk behavior patterns are hidden or swept aside for a generalised characterisation. Most vulnerable population sub groups such as IDUs, sexual partners of IDUs, economically and culturally disadvantage populations, women, migrant populations, ethnic minorities and children are in the danger of receiving little attention or prevention intervention at an appropriate time.

The World Health Organisation (WHO) estimates the annual number of new infection in the region will reach a cumulative total of 55 million cases by the year 2020. The total number of Asians infected with HIV rose from 500,000 to 3.5 million from 1991 to 1994. According to WHO estimates IDU related HIV transmission presents a gloomy picture. As of June 19, 1995, among all the cumulative HIV transmission categories in the Western Pacific region the IDUs consist of 29.3 percent of all the cases which is the single largest category of HIV transmission. Heterosexual transmission accounts only 9.9 percent of all the transmission and the homosexual mode of transmission is less than IDU categories being 27.2 percent of all transmission (WHO 1995).

Asia is gradually becoming a new epicenter for HIV infection. The disease impact on mobile populations, cross border seasonal migrations, ethnic minority and tribal populations and the social context of risk behaviour are some of the key issues which deserves immediate attention. In-depth epidemiological and ethnographic knowledge of injection drug use behaviour and its specific links to HIV infection is another important area of concern, still a neglected area.

Rapid spread of HIV among IDUs in Asia demands an immediate response, to develop realistic prevention strategies. In Asia, drug injection now occurs in countries which are mostly poor and are often either in drug producing areas or along drug trans-shipment routes (WHO 1995).

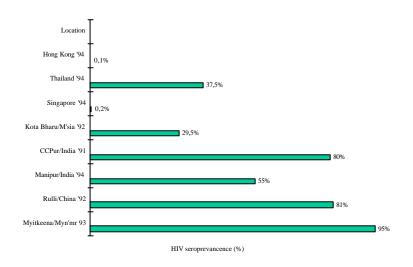
HIV was first identified in Asia among IDUs and homosexual men. Even though today heterosexual transmission is leading cause of HIV transmission in this region injection drug use and blood transfusion play an important role in the spread of HIV. Rapid spread of HIV among IDUs is now occurring in countries which are mostly poor, and are often either in drug producing area or along drug trans-shipment routes (UASID 1994).

Intervention among IDUs presents certain unique epidemiological and ethnographic challenge. When the virus is present among drug injectors and sharing of injection equipment is highly prevalent (which is a common trait among the IDUs) the rapid spread of HIV has been reported from Milan, Edinburgh and New York. In the Asian region such explosive spread of infection has been reported among the IDU population in Thailand, Australia, Myanmar, and from the North Eastern states of India (Sarkar S et al., 1991).

Even though recreational and culture specific drug use and drug sharing is an age old phenomenon in many Asian cultures, diffusion of the injection drug use trait is a relatively new phenomenon. Unlike the United States of America and Canada most of the IDU population in Asia are new recruits to this behaviour pattern. Injection drug use has been reported since 1920 in the USA and Canada. Europe and Australia witnessed the spread of Injection drug use from the late 1960s. In Asia heroin injecting has been prevalent since 1950 and there was widespread injection of amphetamine in Japan between 1946 and 1956. In Thailand injection drug use has increased significantly since the early 1960s followed by a more rapid increase during 1967 and 1975. Increasingly injection drug has become popular in Myanmar, Sri Lanka, Vietnam, North Eastern states of India, Yunnan province and Guanzhou in China, Laos, Malaysia and Nepal since the mid 1980s (WHO 1995, US Bureau of the Census. 1995)

Thailand, Myanmar and North Eastern States of India has reported rapid increase of HIV among IDUs in addition to Yunnan, the southern province of China. In Thailand the rapid increase of HIV among IDU was reported during 1988 and 89. Since the first case of HIV among the IDUs reported in 1988 the prevalence rate has been increasing steadily. The HIV seroprevalence level increased dramatically during 1988, jumping from a low prevalence rate of 1.2 % in January to a very high prevalence of 31.2 % in September. According to the sentinel surveillance data from the Thai Ministry of Health over 35 percent of IDUs are infected with HIV. High levels of HIV infection have been reported from the cities of Mandalay, Myikyeena, Rangoon and Taunggyi in Myanmar. Currently over 80 % of IDUs tested in Mandalay and Mitkyeena are HIV positive and 75% of the IDUs in Rangoon city are HIV positive (US Bureau of Census 1995). In India 8.8 % of the 849 reported cases of AIDS are IDUs. HIV among IDUs is reported from Maharashtra, Tamil Nadu, Mizoram, Manipur, Rajasthan and Karnataka States, and from the cities of Bombay, Bangalore, Pune. IDU related HIV also has been reported from the North Eastern towns of Aizwal, Dimapur, Churachandpur and Imphal. According to the Indian national IDU survey (N=3,521) of 1991 38.4 percent of them were found HIV positive (NACO 1994), (refer to Figure 1 for HIV seroprevalance for IDUs in selected locations in Asia).

Figure 1 IDU related HIV seroprevalence in selected locations in Asia



# **Country Scenarios**

#### Cambodia

Even though the HIV epidemic in Cambodia has reached a critical stage and the key officials are aware of the danger of an HIV epidemic in Cambodia, this ethnic strife torn country severely lacks surveillance data on key risk behaviour patterns such as injection drug use. During the reporting period of 1995 Cambodia has accounted for only two IDU related HIV cases. However it is widely assumed that the severity of the infection is demonstrating a development pattern similar to that of Thailand. A wide disparity rate of HIV prevalence is reported in between the southern and North Western region of the country. HIV prevalence is expected to be significantly higher in the North West because of the proximity of this region to the Thai border. Although HIV is acknowledged as a serious problem, the data on HIV infection is generally available only from blood transfusion centres, commercial sex workers, Dancing girls and sexually transmitted diseases patients (UNAIDS 1995). Based on the cultural affinity of the population and proximity to the injection practice it can be probably be assumed injection drug use has already been introduced to the Cambodia population. Informal discussions with aid workers based in Phnom Penh confirm this assumption. In Cambodia the doubling time of the infection is now (1995) estimated to be approximately six months

Prevention strategies are hampered by the cultural taboo of sexuality discussions. A recent UNICEF initiative to develop health education programs for primary schools from which a program of sexuality education might have evolved met with oppositions because policy makers expected reaction from parents and teachers against such a move. However the basic hygiene comprehension of the population and their ability to comply with base requirements in many areas is such as to make a health education program with HIV/IDU prevention component an urgent societal need in Cambodia

The United Nation's special representative for human rights in Cambodia, Justice Michael Kirby, has made a number of recommendations about human rights aspects of HIV infection. One of his recommendation concerned legal regulation of the use of needles for injections by pharmacists and practitioners of non formal medicine, to advise them about the dangers of using un-sterilised equipment (HIV/AIDS Legal Link 1995).

#### China

During the 1995 reporting period IDU related HIV has increased alarmingly. Seventy three percent of all the reported cases in this period are among IDUs. A concentration of IDU related HIV has been reported from the South China province of Yunnan. Significant risk-factor associated IDU have been reported from Yunnan province (Beesey, He and Liang 1995). A high level of seroprevalence has been reported from Longchuan, Luxi, Rulli and Yingjiang counties in Yunnan. According to the 1992 study the seroprevalence rate of these four counties were 44.6, 5.1, 81.8 and 17.4 respectively. 79 % of all the infections reported in China are from Yunnan province. Dehong is yet another county accounting for very high prevalence of HIV. Until 1993 the seropositivity among the sexual partners of IDUs was 4.6 %. However recently it has increased to that of 10% for the spouses of IDUs (Beesey, He and Liang 1995).

In Yunnan province ethnic minorities from the border region have been disproportionately infected with HIV Dai men make up a majority of IDUs. However many of the Jingpo (Kachin) population are also infected along with the Han Chinese population. Given the relatively small proportion of Jingpo, their communities are in the danger of being eliminated (Beesey, He and Liang 1995). In another survey carried out in Xishuangbanna (bordering Laos and Myanmar) and Dehong prefectures (bordering Myanmar) in Yunnan (N=800) it has been found that 90 per cent of the drug users are IDUs and all of them (100%) share injection equipment. All of the sample interviewed for this study from the drug detention centre have criminal records of arrest or conviction (Armijo-Hussein 1995). More than 80 % of people with HIV/AIDS in China are within the age group of 20-40 years and about 70 % of all the infections are reported from rural farmers (MOH, 1994)

Epidemiological studies shows that drug users in Dehong, four years after the initial epidemic, account for 95 percent of HIV infected cases there and over 70 per cent of all HIV cases in China. HIV transmission in Dehong is still highly restricted among the drug users to a single subtype of strains with predominant Thai genotype B variant (Shao et al., 1995).

The first four Chinese HIV carriers were identified in 1984. Since then the government has been organising local groups to trace more cases hoping that such an approach may help to contain the problem. Detention of drug users is a common feature of law enforcement in China. Even though IDUs are incarcerated they seldom receive any HIV prevention messages or adequate drug rehabilitation services while they are in detention. As drug trafficking attracts capital punishment the drug users are a despised and highly marginalized population.

China has a structure of ministerial and local level departments dealing with public health and health education, however cultural background makes teaching of HIV issues difficult and despite the recent reduction in harshness of response to IDU there is still a very guarded response from IDUs, hence it is difficult to develop a approach strategy for intervention in a society where neither high risk sexual behaviour or IDU are officially recognised. The levels of risk behaviour are not known, it is there for difficult to assess the intervention needs. It must be assumed that a massive need exists, especially in areas such as Yunnan province. Furthermore, apart from the Han Chinese there are over 50 ethnic minority groups in China upon all of whom IDU and HIV will impinge in different ways. China probably needs help to set up inter-ethnic or individual ethnicity study teams with advisers to deal with these remote or culturally separated populations. As in all countries so especially in China, the locality based approach is more likely to be successful than a centrally controlled policy with a single strategy approach.

## **Hong Kong**

Hong Kong has consistently reported a low prevalence of HIV among its reported 30-40,000 injection drug users. This territory can boast probably one of the best surveillance systems in place. The data has been collected through

- a) Voluntary reporting system,
- b) Sentinel surveillance,
- c) Unlinked anonymous screening.

The number of HIV positive cases among the IDUs attending methadone clinics and street IDUs still remains low compared to IDUs from other countries in this region (DOH, GOHK 1995).

According to a recent study (n=2228) a significant decrease has been reported during 1991-94 among the proportion of injection drug users and needle sharing among all drug users admitted to a popular drug rehabilitation centre (Lo et al., 1995). However this data does not give conclusive evidence about whether injections drug use behaviour is reducing overall. According to another study, (n=68) the overall risk perception of the study population was found to be very low. Only two IDU related HIV cases were reported among that study (Chan et al., 1995). Causal links between the low prevalence of HIV among the IDUs and the quality of education programs, cheap and easy availability of syringes and coexistence of drug rehabilitation programs are suggested (Lo et al., 1995), nevertheless to establish this causative link additional data is required and it would be a worth while research as the findings would have immediate applied utility for this region.

However the presence of large numbers of disenfranchised refugees in Hong Kong who are practising injection drug use are often beyond the surveillance mechanism of this territory. This is an area of concern. It is estimated that there are about 800 injection drug users among one group of the 'legally acknowledged' Vietnamese refugees in a Hong Kong refugee camp all of whom interact more or less freely with the local population. Specific intervention programs are yet to be developed to address HIV prevention among this population and their sexual partners.

Hong Kong has set up an IDU and HIV related bureaucracy which, since 1969 and 1987 respectively have involved themselves in preventive strategies (The territory has had a nine year compulsory education program in place for 17 years). The IDU prevention program has progressed through most of the stages seen in developed countries with a tendency to dwell on the admonitory and punitive approaches but with acceptance of drug abuse as a reality and ready availability of clean needles and syringes. (ACAN 1995) HIV is seen as largely a gay and IDU induced problem and interventions with other than identified high risk groups have been piecemeal. Several NGO based programs face bureaucratic difficulties because of an over centralised approach to interventions (Day 1992).

School based sexuality and drugs education suffer from cultural restrictions similar to those in China. Guidelines recommending such interventions have been in place from the Territory's Education Department since 1986 and recognition that such programs are appropriate, such as "family life education programs" in primary schools is only recently developing. One booklet, offering HIV education for parents and primary age children in 1988 probably had a retrograde effect on prevention approaches for the territory and points to the importance of strategic planning for prevention intervention and consideration of minority groups and age relevance together with local adult education levels.

#### India

Studies of HIV infection among IDUs in India has reported various levels of infection. Injection drug use related HIV has been reported from the states of Maharashtra (0.8 %, 1991) Karnataka, Tamil Nadu, Manipur, Mizoram and Nagaland, and from the cites of Bangalore (1.1%, 1991), Bombay (3.3%, 1986-92), Pune (2.8%, 1985-92) (US Bureau of Census 1995) and New Delhi (Dorabjee J. et al., 1995). Injection drug use in India is not unique to Urban centres, small border towns such as Aizwal (10%, 1992) Churachandpur, (80%, 1991) Dimapur and Imphal have also reported IDU related HIV. Studies of HIV infection among IDUs in various areas reported various levels of infection. Yearly HIV prevalence among the IDUs in Manipur has recently increased to 85 percent from the zero prevalence of cases in 1988 (NACO 1994). A 1991 national survey of IDUs (N=3,521) reported a seroprevalence level of 38.4 per cent (US Bureau of Census 1995).

In general the high prevalence of injection drug use related HIV is reported from the ethnic minority tribal areas of the North Eastern States of India. Poverty and lack of opportunities for social mobility are two common factors in this region. Due to the inadequate service facilities, detention of injection drug users is a common practice. Administrative machinery is mostly preoccupied with strategies to contain the ethnic identity aspirations and subsequent rampant social conflict, rather than developing any concerted efforts to contain the epidemic. Inaccessibility, forbidden nature of the region are among the social factors contributing the rapid spread of HIV. However a wide spectrum of intervention initiatives is gradually emerging. Some of the strategies such as peer outreach have subsequently attracted international attention. Certain evolving strategies and community initiatives such as self help groups of IDUs (e.g.; Social Awareness and Social Organization, SASO, Imphal), community education volunteers and volunteer care givers (e.g.; the North Eastern AIDS foundation, NEAF, Churachandpur, Manipur) are yet to be documented, acknowledged and encouraged. These initiatives are part of a broader community coping mechanism response to the epidemic which need to be identified and documented.

IDU related intervention strategies in India have been largely developed by Non Governmental Organisations (NGOs) and Community based organisations (CBOs) Youth focused approaches at school are at a very nascent stage. Community level work with innovative strategies such as street theatre or use of puppets has been seen in India.

## Indonesia

Seroprevalence data from Indonesia is very limited. However, it is widely assumed that Indonesia is at the earlier stages of epidemic with a potential for rapid increase. The government of Indonesia has begun to address the HIV/AIDS issue as a national priority and established a National AIDS Commission. Commercial sex workers and their clients are assumed to be the high risk groups and the heterosexual mode of transmission attracts major intervention resources. However it is widely known that 'shooting galleries' exist in Bali and it appears that since Bali is an international tourist centre certain administrators tend to cover up the problem rather than developing intervention programs specifically focusing on IDUs. There is also recent reporting about transvestite prostitution amongst tourist in Jakarta (SCMP 22.10.95) implying high risk groups similar to those in Thailand.

#### Laos

Laos is slowly emerging from its long isolation and began attracting international investment aid and travellers along with the threat of HIV. Some of the more sexually adventurous travellers and business men are keen to explore the virgin areas of Laos for sexual networking rather than the worn out areas of Thailand, assuming that Laos is free of HIV infection. Laos has a National Committee for the Control of AIDS (NCCA) which spearheads HIV prevention programs along with the WHO Global program on AIDS and other international NGOs. Laos also suffers from the same cultural taboos in dealing with sexuality education and HIV as other Asian countries

Very limited data on IDU are available from Laos. Only one IDU related HIV case been reported among all of the 59 HIV cases reported from Laos so far (Cumulative up to 19 June 1995). Considering the cultural affinity of Laos to the neighbouring injection drug use areas it is important to develop prevention strategies in advance. According to some of the in country aid workers, recently there has been a change of opium consumption to injection drug use. However early surveillance and intervention are urgently required.

#### Malaysia

Even though Malaysia is experiencing an early stage of HIV infection it has reported a rapid spread of HIV among IDUs. During 1991 only 6.9% of all the HIV infection cases were from the IDUs. Recently the percentage of IDU related HIV has escalated 78.1% of the 11,375 cases reported to WHO until June 1995. However the cumulative percentage of heterosexual HIV cases remain at 2.7% of all the cases in the reporting period. The Highest rate of IDU related HIV has been reported from Kota Bharu City, Kelantan State, bordering Thailand.

#### Myanmar

According to WHO estimates there are about 100,000 to 600,000 HIV cases in Myanmar. Myanmar is one of the three countries in Asia with a most serious HIV problem. One of the highest rate of injection drug use in the world is reported from Myanmar (WHO 1994). Myanmar shares international borders with India, Thailand, Laos, and China and IDU related HIV has been reported from all the cross border areas of Myanmar. Links with the main highways and the pattern of the spread of HIV has been established in the North Eastern States of India. Myanmar shares some of those highways. The new transport system being developed in the country linking it to other sub regional countries can increase the spread of HIV unless timely prevention interventions are in place.

A rapid spread of HIV among IDUs has been reported from several towns in Myanmar. IDU related HIV has been reported from Mandalay, Myitkeena, Rangoon and from Tanuggyl. Sentinel surveillance data from these four area shows an infection level ranging from 27 % in Taunggyi to 95 percent in Myitkyeena during 1993 (US Bureau of Census 1995). Very little is reported concerning HIV/IDU education or prevention intervention from Myanmar

#### Nepal

Injection drug users in Nepal have had the unique facility of consistent agency - based harm reduction services for the past four years. The work of the Lifesaving and Life giving Society of Katmandu suggests that with an appropriate and comprehensive harm reduction program, risk of HIV infection among IDUs could be reduced even in less developed countries (Singh et al., 1995). Nepal's pattern is further evidence that concentrated local efforts similar to those reported from Rulli area of Yunnan province of China.

## **Philippines**

The Philippines is showing a relatively low prevalence of HIV. This may be due to inadequate surveillance. Even with the existing passive surveillance there has been a disturbing increase over all in the number of reported HIV/AIDS cases over recent years (Salas 1995). Among the cumulative 618 HIV (19 June 1995) cases only three are IDU related. Philippines HIV/AIDS program managers should be encouraged to develop ethnographic and epidemiological data on injection drug use with an added urgency so that they may be able to avert an epidemic among the IDUs and their sexual partners. However it appears that the work of the National AIDS Council is more focused to the cities such as Metro-Manila, Olongapo, Angeles and Baguio City. Several NGOs and NGO initiatives have emerged in the Philippines in response to the HIV epidemic.

## **Singapore**

There is very limited data available on HIV seroprevalence among IDU from Singapore. This may be due the severe legal sanctions against the use of illegal drugs in the city state Singapore. In such a situation the drug users may be extremely reluctant to come forward to access services, fearing reprisal from the authorities. However there is a small but growing number of IDU related HIV cases reported. In 1992 there was no evidence of HIV among IDUs However, by 1994 HIV infection has been reported from this population. According to WHO

estimates (19 June 1995) there are cumulatively seven IDU related HIV cases reported from Singapore (WHO 1995).

#### **Thailand**

IDU related HIV transmission has dramatically increased in Thailand. Based on the sentinel surveillance data, the Thai Ministry of Health reported that over 30 percent of the IDUs in all the four regions of Thailand are infected with HIV. Since 1990 HIV prevalence levels among IDU in Bangkok have remained high. Thailand is considered to have one of the high prevalence rates of HIV among IDUs. However Thailand has the benefit of a good sentinel surveillance system which tracks the HIV prevalence among military conscripts and women attending antenatal clinics. Significant gaps in knowledge and understanding exist from ethnic minority groups such as Shan, Akha, Yao, Hmong, Lahu, Lisu, Karen, Thin, and Pa Long, and are greater still among women from the ethnic minority groups.

Culture and language specific programs are urgently needed among such groups (Beyer et al., 1995). In a study on HIV prevalence among nine ethnic minority groups in Northern Thailand HIV rates appear to vary considerably between each group. HIV prevention programs may have to focus specifically on Shan, Akha and Yao communities (Suprasert et al., 1995). There is wide development of education intervention in Thailand and a rapid breakdown of cultural barriers in the face of an increasing threat.

#### Vietnam

In common with the pattern of neighbouring Thailand, injection drug use related HIV has dramatically increased in Vietnam. Currently 80.6 % of all the cumulative HIV cases and 96.1 % of all cumulative AIDS cases are IDU related (WHO 1995). Vietnam has reported 2325 HIV and 228 AIDS cases. Most of the cases have been identified from Ho Chi Minh City. According to the estimates of aid workers there could be as many as 79,000 cases of HIV/AIDS in Vietnam. The National AIDS Committee (NAC) estimates that by 1998 there will be cumulatively 570,000 cases of HIV and 7, 000 cases of AIDS. Probably, by then, 15, 000 AIDS related deaths may have occurred. The majority of this population will be injection drug users, their sexual partners and their children.

According to a study carried out by the International aid agency CARE, the use of injection drug use was reported by a larger percentage of respondents in Hanoi than in Ho Chi Minh City and the perception of personal risk is low among the respondents. This year long indepth study also notices parallels to the Thai epidemic (Franklin 1994). Commercial sale of blood is very prevalent in Vietnam. injection drug users selling their blood to sustain their habit is a common occurrence in this region (Franklin 1994).

Vietnam is one of the poorer countries with an infrastructure weakened by war and international isolation, however tt is gradually emerging as a growth area. In spite of the prolonged isolation and infrastructure limitations Vietnam has achieved a creditable level of community health and education. Rapid spread of HIV can undermine these achievements in the area of health and education. Even though intervention programs are slowly evolving the current needs are specific information resources, access to the means of prevention and a program to develop skills appropriate to achieving safer behaviour practices (Bennoun et al., 1995). There is a central will to move forward at policy making levels if the means are made available by

international assistance. There are a number of ethnic groups in Vietnam whose special needs are being addressed but must not be neglected in the IDU/HIV area also.

# Policy and Program Implications

Even though the data presented are from only selected countries and the overall number of persons involved may appear to be small, the greater potential of this problem is often underscored by the socio-cultural complexities associated with this phenomenon However certain clear common themes are emerging with specific policy and programme implications.

The social problems associated with injection drug use is a relatively recent phenomenon in this region and little is know about the contributory factors associated with IDU related infection and injection drug use itself. Cross border population movement, increasing formal, informal and traditional trade links, the growing tourist industry, are some of the contributory factors associated with IDU related HIV in this region.

Growing IDU related HIV in Malaysia and Singapore suggest that extreme legal sanctions against drug use and criminalization of drug users may not necessarily contribute towards an effective prevention mechanism against IDU related HIV.

The experience from India, Myanmar, and Thailand suggest that often poor, ethnic minority and marginalized IDU are at a greater risk of HIV infection than the developed section of the population. Developmental impact of HIV on the poor is an area which requires rapid attention from policy makers and research. Very little is known about gender issues related to HIV infection, particularly about the female partners of IDUs and female injection drug users. In the context of South East Asia the two sub groups of the poor who are most at risk are ethinic, tribal groups and women (Thant 1993)

Rampant violation of the basic rights of IDUs is common in this region. Administrative detention, denial of health care rehabilitation and service facilities, blaming of ethnic minorities, migrant workers, other drug users and marginalization and criminalization of the drug users are some of the common practices. China, Thailand, Myanmar and India offer examples of such extreme community and legal responses to injection drug use behaviour

The experiences from India, Thailand, and China also suggest that tribal/ethnic minorities from the greater Indo-china region are at greater risk of HIV infection and often they are blamed for the rapid spread of HIV among other population groups. Stigmatisation takes place within the community and between communities. Often the relative geographic isolation of ethnic minority or tribal populations are no barrier against HIV infection. Even in a well developed territory like Hong Kong, general population ignorance can lead to conflict when HIV, IDU, social welfare or interventions are attempted. Recently the residents of a housing complex in Kowloon Bay rejected the Hong Kong governments proposal to set up an integrated skin, sexually transmitted diseases and HIV day care and treatment centre (ACA Newsfile Vol 2, No. 9)

Very little ethnographic data is available to assist in understanding of the socioeconomic, temporal and cultural determinants of the widespread practice of injection drug use among the ethnic minorities from the greater Indo-China region. A sense of cultural alienation and its subsequent manifestation through violent assertion of ethnic identity is a common factor. However little is known about the interrelationship between ethnicity, injection drug use and HIV related risk behaviour Emerging patterns of preventive interventions present a wide spectrum of experiences. On one hand certain forms of preventive intervention strategies attract greater financial and technical support from international donor agencies and on the other, indigenous patterns of interventions with limited resources and technical skills evolve as part of a greater community coping pattern to the infection which often receives lesser attention from research and policy makers. Such experiences are far less shared in international forums and peer review settings. There is an urgent need to identify all such prevention initiatives evolving in specific locations and to provide support and acknowledgement to such initiatives. It appears that culture specific and language specific information is lacking among many of the IDU communities who belong to ethnic minorities in this region.

# Education Strategies in Relation to IDU and HIV

In general there has been little development of specific HIV prevention education in Asia mainly because of taboos associated with open discussions of sexual development between young people and adults. Many cultural barriers exist to such necessary discussions and these are not easily broken down even when such a pressing need as HIV awareness development. Furthermore the spread of IDU has also been relatively recent with the change from fume inhaling as the widely preferred method of opiate abuse as late as 1988 in Hong Kong (CRDA 1992).

The connection between IDU and HIV transmission is not established in some countries so that interventions based on such a link are not favoured, whilst in others, both condom use and IDU/HIV links are the main trend for national strategies which are well developed. Hence there is a gradation in the region of policies linking IDU and HIV transmission prevention strategies owing to a lack of resources to develop or carry through such strategies or cultural barriers preventing consideration of such strategies.

Mechanisms should be developed to disseminate the success and failure of intervention experiences among IDUs in the region among the researchers and practitioners. Even though not specifically focused on IDU related HIV, certain broader sub-regional themes are evolving through the work of international development agencies such as Save the Children Fund (SCF), The Red Cross, AIDSCAP and various UN bodies. Greater regional and sub-regional networking and sharing of ethnographic data on injection drug use behaviour are essential for the prevention of the rapid spread of HIV among IDU in this region. International donor agencies and various UN agencies may take note of this situation.

## Conclusion

The global AIDS pandemic is an aggregate of micro epidemics in terms of time, geography and population. Interventions for high risk behaviours such as injecting drug use are important in an overall prevention strategy. While the number of people immediately at risk may appear small, their role in the epidemic is large (WHO 1995). It appears that early implementation of prevention interventions may have stabilised the HIV situation in general in some countries even though the epidemic demonstrates different trends depending on risk factors present in different countries or areas (Sarda and Narain 1995).

In most of the Asian countries there is an urgent need to develop sentinel surveillance, survey and ethnographic data specific to sites and population groups such as IDUs and their sexual partners. Networking to share ideas, developing common themes and cross border collaboration between researchers, policy makers and practitioners are important areas which deserve significant attention. Given the complexity of the problem, traditional policies related to prevention and control of drug injecting need to be re-assessed in terms of their appropriateness, reach and effectiveness.

Enhancing and developing community coping mechanisms may be a most appropriate intervention strategy for the overall prevention and control of HIV. Through this process the community is empowered to identify the major issues, community concerns and to help themselves. The community, families, schools and youth groups should be facilitated to identify and develop appropriate prevention strategies in terms of cultural, linguistic and ethnic needs.

Natural community networks are to be further encouraged to take additional responsibilities for the care of all the people living with HIV/AIDS in each community. This approach would facilitate developing bonds of attachment and commitment. Intervention programs should seek to increase opportunities for the persons living with HIV for participation in community affairs, family and school settings and the social participation profile of the community in general.

Even though the dynamic nature of the infection has not yet shown it's potential destructive ability and it's future course of development, it can be controlled. In conclusion modifications to the observations made by Mann et al. (1992) are proposed. A decade of global experience at the community level has demonstrated that HIV prevention particularly among IDUs is entirely possible, but only if five key elements are in place: information, communication and education, health and social services, a supportive social environment, and a strong commitment to human rights and community participation. A great deal of information and experience exists in this region to be shared amongst participating nations and Territories.

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# References

AIDS Unit, Department of Health. (1995) HIV/AIDS Situation in Hong Kong. Hong Kong Government Printer.

Beesey, A., Cheng, He He & Li, Xiao Liang (1995). Exploring risk factors for HIV in the changing economic conditions of Yunnan. *Poster presented at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Bennoun, et al. (1995). Communities with reduced opportunity and at high risk of HIV infection: The situation in Ho Chi Minh City, Vietnam; future needs and how these may be addressed. *3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Beyrer, C. et al. (1995). HIV/AIDS Knowledge, Attitudes and perceptions among nine ethnic minority groups in Northern Thailand. *Poster presented at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Chan, O. F., Lau, W. L., Lee, Y. H., Chu, K. Y., Chow, N. Y., Kwong, S. C., Cheung, M. T. & Ng, S. L. (1995). Low Perceived Risk of HIV Infection Before Diagnosis. *Poster presentation at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Des Jarlais, D.C. et al. (1992). International epidemiology of HIV and AIDS among injecting drug users. *AIDS* 6, 1053-1068.

Dorabjee, J. et al. (1995). Oral Buprenorphine maintenance Program for Injection Drug users and Heroin Smokers in Delhi Slums. *Poster presented at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Franklin, B. (1994). The risk of AIDS in Vietnam, unpublished manuscript, *CARE*, Vietnam.

Godwin, P. (1995). The Impact of HIV/AIDS Epidemic on Human Development. *Paper presented at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Health studies Branch International Programs Centre Populations Division U.S. Bureau of the Census. HIV/AIDS in Asia. *Research Note No 18 prepared for the 3rd international conference on AIDS in Asia and the Pacific.* Thailand: Chiang Mai.

HIV/AIDS Legal Link, Cambodia. HIV/AIDS and Human Rights. Vol. 6, No 3, June 1995.

Lo, Y. C., Lee S. S., Hollinrake, J. B. & Chen, Y. L. (1995). Trends of AIDS related Behavioural Pattern of Drug Users in Hong Kong. *Poster presentation at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Mann, J., et al. (ed.) (1992). A global report: AIDS in the World. U.S.A: Harvard University Press Cambridge.

Ministry of Health, MOH (1994). AIDS Prevention and Control in China. Beijing: China Pictorial Publishing House.

Nagib, Armijo-Hussein (1995). Knowledge and attitude of Young People in Xishuangbanna and Dehong Prefectures (Yunnan Province, China) about AIDS. *Poster presentation at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

National AIDS Control Organization, Minidstry of Health, New Delhi, India, 1994.

Salas, S. V. (1995). Emphasis on sex-workers leaves other women complacent about AIDS risk. AIDS analysis. *Asia* 1:5.

Sarda, R. and Narain, J. P. (1995). HIV infection and AIDS in Asia and the pacific: An overview. *3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Sarkar, S. et al. (1991). Descriptive epidemiology of intravenous heroin users- a new risk group for the transmission of HIV in India. *Journal of Infection* 23, 201-207.

Singh, M. et al. (1995). Impact of a Harm Reduction Program, in the Prevention of HIV among IDUs in Katmandu, Nepal. *Paper presented at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

South China Morning Post; 22.10.95, Hong Kong

Suprasert, S. et al. (1995). HIV Prevalence among Nine Ethnic minority groups in Northern Thailand. *Poster presented at the 3rd international conference on AIDS in Asia and the Pacific*. Thailand: Chiang Mai.

Terms and reference for UN Agency HIV/AIDS Technical Working Group in Cambodia. *Paper presented at the 3rd international conference on AIDS in Asia and the Pacific.* Thailand: Chiang Mai.

Thant, Myo (1993). The economic implications of AIDS in Southeast Asia: Equity considerations. In Bloom and Lyons (ed.) (1993). *Economic implications of AIDS in Asia*. New Delhi: UNDP.

USAID Responds to HIV/AIDS: A report of the fiscal year 1994 HIV/AIDS prevention programs of the United States Agency for International Development.

WHO (1989). Report of the meeting on HIV infection and drug injecting intervention strategies. Geneva, 18-20 January, 1988.

WHO (1994). *HIV/AIDS in South-East Asia*. IX meeting of National programme Managers, New Delhi, 8-12 March 1993, pp 3. WHO Regional office for South-East Asia, New Delhi.

WHO (1995). AIDS surveillance Report, Western Pacific Region. No. 5 July 1995, Philippines.

WHO (1995). HIV prevention for people who inject drugs. *Planning and coordinating an HIV prevention strategy, Guide for AIDS program managers*. WHO/GPA/RID/PRS/95.1 Geneva.

Yiming, Shao et al. (1995). From Molecular Epidemiology to Vaccine Development. paper presented at the *3rd international conference on AIDS in Asia and the Pacific*, Thailand: Chiang Mai.

# A Study Of Social Work Students' Knowledge Of HIV/AIDS And Their Acceptance Of HIV/AIDS Patients

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#### **Abstract**

The objectives of this study have two folds: (1) To explore social work students' level of knowledge about AIDS and their acceptance level of HIV/AIDS patients. (2) To see if acceptance is related to knowledge, religiosity, family disapproval, responsibility attribution (assigning personal responsibility to HIV/AIDS patients based on whether they are thought to be innocent or culpable in the way in which they acquired the HIV virus) and sense of self-efficacy. A self-administered questionnaire was distributed and a total of 200 final-year students of either diploma or bachelor level from five local universities participating in the research, representing 22.4% of the total social work student population in their final year. knowledge level of the students regarding AIDS was far from satisfactory. On average, students answered less than one-third of the total number of questions correctly. They were relatively knowledgeable about transmission and risk reduction. However, accurate knowledge of diagnosis and treatment was lacking. Students' level of acceptance of HIV/AIDS patients was generally high. The majority of them expressed willingness to maintain social contacts with HIV/AIDS patients and serve them in their jobs. Students' acceptance level was found to be correlated with some aspects of medical knowledge, family disapproval and responsibility attribution. The strongest predictor was responsibility attribution. Age and prior attendance at seminars on AIDS were also found to be related to acceptance. Given the possibility for social work students' involvement in AIDS-related issues after graduation, the lack of medical knowledge about AIDS is worrying. The overall high level of acceptance towards HIV/AIDS patients seems to suggest the success of social work socialisation. The significant though weak relation between medical knowledge and acceptance suggests that besides a sound knowledge base, social work students' level of acceptance is affected by other factors. This research is also able to identify other significant variables such as family disapproval and responsibility attribution as contributing to the different levels of acceptance towards HIV/AIDS patients. Responsibility attribution was found among all other variables as the strongest predictor of both personal and professional acceptance. It seems to suggest that acceptance of HIV/AIDS patients is affected by people's moral judgement (as in this study, the way in which respondents perceived how HIV/AIDS patients had contracted the disease) more than the amount of knowledge about AIDS the respondents possessed.

# Introduction

Acquired immunodeficiency syndrome (AIDS) has become one of the deadliest and fastest-spreading diseases in the twentieth and probably the twenty-first century. Consistent with the social work profession's history of providing services to people who are disadvantaged and socially marginalized, social workers have a major role to play in providing counselling and other services to clients with HIV infection and their families. Research findings in the West have suggested several salient factors that might affect social workers' decisions as to whether they would take on the challenge of serving HIV/AIDS clients<sup>1-2</sup>. Among them, medical knowledge about AIDS was consistently shown to be one of the major determinants<sup>3-8</sup>. This is consonant with the knowledge-attitude-behaviour paradigm which suggests that people's actions are influenced by their knowledge and attitudes about the subject concerned. A review of the literature also suggests that factors like knowledge, support from significant others, the sense of self-efficacy, attribution of responsibility and personal beliefs (such as cultural, religious or social work beliefs) might also influence a social worker's willingness to serve HIV/AIDS clients<sup>9-17</sup>.

Though the disease has been around in Hong Kong for more than a decade, only a handful of research on social work and AIDS has been conducted. As of now, no local research has been done on how prepared social work students are in handling AIDS-related issues. Neither has there been any study of how immune social work students are to the general trend of discrimination and stigmatization of AIDS patients. Thus research is designed to answer the following questions:

- 1. What is the social work students' level of knowledge about AIDS?
- 2. What is their level of acceptance of people with HIV/AIDS?
- 3. Are their levels of knowledge and levels of acceptance related to each other? And if so, in what direction?
- 4. Are students' levels of acceptance related to other variables namely family disapproval, religiosity, attribution of responsibility for the disorder and self-perceived efficacy in helping HIV/AIDS patients?

It is hoped that answers to the questions would provide useful insights to the understanding of the current preparation of social work students in facing the challenge of AIDS and to the betterment of the social work curriculum.

## Methodology

#### **Research Instrument**

The research instrument was a self-administered questionnaire which was composed of a set of statements measuring knowledge, acceptance, family disapproval, attribution of responsibility and self-perceived efficacy. Thirty-one questions were constructed to measure students' medical knowledge about AIDS. Answers were structured along a three-point scale (0 = I don't know, 1 = False and 2 = True). All questions and the assumptions about whether they are correct are adapted from various authoritative sources<sup>1,4,18-20</sup>. Likert-type statements were structured along a five-point scale for measuring acceptance (both personal and professional acceptance), family disapproval, and attribution of responsibility. The statements concerning personal acceptance were adapted mainly from a study on discrimination on the grounds of sexual orientation<sup>21</sup>. The rest were the researcher's own formulations with reference to the relevant literature.

Based on the responses of the Hong Kong sample, all the sub-scales were constructed with a high degree of reliability as all of them had a Cronbach Alpha coefficient of 0.7 or above. Hence, it is reasonable to assume that the measuring instrument constructed is quite a reliable one.

## **Data Collection**

Data collection took place in early 1996. Subjects were defined as those who were final year full-time or part-time students of either the Diploma of Social Work or Bachelor of Social Work course in any of the six universities in Hong Kong. The selection of final year students as the study population was guided by the consideration that these students had completed the majority of their course work by the spring semester, 1996 and it was therefore suitable to explore the extent to which they were prepared by the current social work training to handle AIDS-related issues in their forthcoming social work practice.

A total of 200 questionnaires from five schools were returned. According to the Hong Kong Council of Social Service, the total number of social work students (Diploma and Bachelor Degree) graduating in September 1996 is 891, hence the sample represents a response rate of 22.4%.

#### Results

#### **Characteristics of the Sample**

Relatively more students from the City University participated in the research. Most of the respondents in this sample were female aged below 25. There were slightly more bachelor students than diploma students. Most of the respondents were Christians having no work experience, nor had they attended any seminars about AIDS before filling out the questionnaire.

## Medical Knowledge

All medical knowledge items (a total of 31 items) were assigned on an a priori basis and divided into to five domains: definition, transmission, diagnosis, treatment, risk reduction. Individual items were scored on the basis of whether they were mainly 'true" or "false" given the information available during the survey period. A "don't know" category was also included for each item. The average number of correctly answered questions for the sample was 10.27, slightly less than one-third of the total number of questions measuring medical knowledge. 50% of the respondents answered 10 or fewer questions correctly. Among the five domains measured, respondents were more knowledgeable about risk reduction and transmission. For the former domain, over 90% of the respondents answered correctly in one out of two items and with transmission, 7 out of 15 items were answered correctly. The respondents seemed to be least knowledgeable in the domain of diagnosis as none of the questions was answered correctly by more than 90% of the sample. A more detailed presentation of the constituent items of the five knowledge domains and the percentages of respondents giving correct, incorrect, and don't know responses are shown in Table 1.

## Acceptance

Acceptance is conceptualised as comprising personal and professional acceptance. Seven statements were designed to measure the respondents' level of personal acceptance of people with HIV/AIDS which is understood as the social distance the respondents predict they would like to keep in their daily contacts with the HIV-infected. The means and the standard deviations of the statements as well as the reliability coefficient are presented in Table 2.

Statements		Respondents correctly answer (%)	Respondents incorrectly answer (%)	Don' t know (%)
Defin	iition			
Q1.	AIDS is caused by a kind of bacteria.	48	38.5	13.5
Q8.	When someone is infected with HIV, this means that s/he has AIDS.	60.5	24	15.5
Q29	AIDS causes the body to lose its ability to fight off infections.	95.5	2.5	2
Tran	smission			
Q4.	A person can be infected if s/he is injected with a syringe which has been used by an AIDS patient.	97	1.5	1.5
Q7.	It is possible that a person could be infected with HIV through a French kiss (i.e. kissing with both mouths open and contact of tongues).	24.5	64.5	11
Q10	It is possible for a female AIDS carrier to transmit the infection to her baby during her period of pregnancy.	95.5	3.5	1
Q11	A person looks healthy even when infected with HIV for a long time.	89	5	6
Q12	The chance of a healthy-looking person being an HIV/AIDS carrier is very low.	91.5	4	4.5
Q13	AIDS is not transmitted by sharing food, drink, or eating utensils.	95.5	3	1.5
Q15	It is possible for AIDS to be passed from men to women through sexual contact.	77	21.5	1.5
Q17	Under proper sterile procedures, a person could still be infected by donating blood to other people.	42	44.5	13.5
Q20	A person can get HIV from using the toilet seat which has been used by an HIV-infected person.	89	1	10
Q24	Some people have got HIV by swimming in the same pool as someone with AIDS.	56	3.5	40.5
Q25	AIDS can be spread by sharing razors and toothbrushes.	47.5	35	17.5
Q26	Sneezing and coughing can spread AIDS.	92.5	2.5	5
Q28	AIDS can be transmitted by mosquito bites.	61	23	16

		Hong Kong AIDS Conference 1996				
Q30	A person can get HIV through shaking hands or hugging someone who is infected.	96	3	1		
Q32	HIV can be passed on through only one sexual contact.	95.5	3	1.5		
Diag	nosis					
Q2.	The presence of rare and/or unusual infections is used to diagnose AIDS.	9	82.5	8.5		
Q6.	It is not possible for an HIV-infected person to know about his/her infection without a blood examination.	84	6.5	9.5		
Q16	AIDS-related dementia is only associated with the final stages of AIDS.	16	12.5	71.5		
Q18	The incubation period (i.e. time from exposure to showing symptoms) for AIDS is two to three years.	67	15.5	17.5		
Q21	Over 75% of people with HIV infection have developed AIDS within 5 years of becoming HIV antibody positive.	14.5	32	53.5		
Q27	A positive result on the AIDS Antibody Test means that a person has AIDS.	45	43	12		
Q31	After being infected by HIV, it can take up to one month before antibodies can be detected in the blood.	30	23.5	46.5		
Q33	If a person is HIV-positive, s/he may not develop AIDS for up to 10 years after contracting HIV.	52	18.5	29.5		
Treat	tment					
Q3.	Treatment is not available for managing complications (such as tumours) associated with AIDS.	48	22.5	29.5		
Q5.	Currently, there is no cure for AIDS.	96	3	1		
Q22	A vaccine for preventing AIDS will be available within a year.	21	4.5	74.5		
Risk Reduction						
Q9.	Wearing a mask over your mouth and nose will help lower your chance of being infected by the HIV virus.	88.5	4	7.5		
Q19	Using condoms reduces the risk of getting AIDS.	96.5	2.5	1		

 Table 2
 Personal Acceptance

(Cronl	oach Alpha = 0.8355)	Mean	Standard Deviation
Q57.	Maintain friendship with a person with	4.320	0.825
050	HIV/AIDS	4.240	0.072
Q59.	Shake hands with a person with HIV/AIDS	4.240	0.973
Q61.	Be willing to have a workmate with	4.080	0.904
0.70	HIV/AIDS		0.074
Q50.	Be willing to have a neighbour with HIV/AIDS	4.075	0.956
Q52.	Have dinner with people with	4.055	0.903
	HIV/AIDS		
Q49.	Handle objects handled by persons	3.550	1.001
Q55.	with HIV/AIDS  Be willing to live with someone with	3.205	0.968
<b>Q</b> 33.	HIV/AIDS	3.203	0.700
Total		27.525	4.642

The results revealed that all statements were responded to positively, indicating that respondents generally were willing to engage in social contacts with HIV-infected people. Five out of seven statements had a mean score above 4 (mid-point = 3) which showed quite a strong degree of acceptance.

Professional acceptance aims to measure whether prospective social work practitioners would refuse to provide services for people with HIV/AIDS. A total of seven statements were constructed. As shown in Table 3, the mean scores of all the seven statements were above the mid-value of the scale indicating general professional acceptance of HIV/AIDS clients. Two statements, 'HIV/AIDS patients are as deserving as other groups with special needs (e.g. single elderly, unwed mothers, the disabled) to receive public resources" and 'advocate on behalf of HIV/AIDS clients like other groups with special needs" even had a mean score above four, revealing that the respondents in general were anti-discrimination and anti-oppression as far as the rights of HIV/AIDS clients to use public resources were concerned. At a macro-level, the respondents thought that public resources should be available to these clients. The only statement that had a mean score below 3.5 was feel uncomfortable if I served HIV/AIDS patients" indicating that their prediction of their comfort level in serving HIV-infected people was just fine.

 Table 3
 Professional Acceptance

(Cronl	pach Alpha = 0.7628)	Mean	Standard Deviation
Q43.	HIV/AIDS patients are as deserving as other groups with special needs (e.g. single elderly, unwed mothers, the disabled) for public resources.	4.315	0.767
Q54.	Give direct service such as personal counselling to HIV/AIDS clients.	4.135	0.849
Q53.	Advocate on behalf of HIV/AIDS clients like other groups with special needs.	4.085	0.907
Q58.	Avoid providing counselling service to family members of persons with HIV/AIDS if I am given a choice.	3.920	1.024
Q56.	Accept a job whose main duty is to provide front-line service, like personal counselling to HIV/AIDS infected people.	3.750	0.971
Q51.	Try to refer the case to someone else if I am asked to offer counselling to a person infected with HIV/AIDS.	3.690	1.029
Q60.	Feel uncomfortable if I served HIV/AIDS patients.	3.315	1.049
Total		27.210	4.260

#### **Other Variables**

For family disapproval, item analysis showed that overall, the respondents predicted that their family would be very concerned and would be inclined to disapprove of their decision to serve HIV/AIDS clients. This is understandable as the general public still holds fairly negative attitudes towards HIV/AIDS patients (which is indicated in a massive survey by the Hong Kong AIDS Foundation in 1992<sup>22</sup>). Such a prediction is congruent with this phenomenon.

For responsibility attribution, three statements (with a mid-value of 3) were constructed to measure the extent to which respondents assigned personal responsibility to the HIV-infected people for their disorder. Three most commonly stigmatized groups of people: homosexuals, the promiscuous and drug-addicts were chosen as the target of responsibility attribution. The results, as indicated in Table 4, showed a general attribution of responsibility to HIV/AIDS patients who contracted the disease through socially unacceptable means (mean = 3.384). The group that was assigned more personal responsibility was the one that engaged in promiscuous sexual activities. This was demonstrated by the statement 'HIV/AIDS patients should be held personally responsible for contracting such a disease when they choose to be involved in promiscuous sexual behaviour" which had the highest mean score of 3.450. This is understandable as society as a whole is very much against promiscuity (at least, in most of the public statements made by people). The homosexual group was assigned the least degree of personal responsibility and the mean score of the statement was just 3.080 which was slightly above the mid-value. This is

possibly due to the increasing acceptance of homosexuality, especially among the educated. When homosexuality is not seen as problematic in itself, people who contract AIDS through this means will not be thought of as blameable.

 Table 4 Attribution of Personal Responsibility

(Cronl	oach Alpha = 0.8178)	Mean	Standard Deviation
Q38.	HIV/AIDS patients should be held personally responsible for contracting such a disease when they choose to be involved in promiscuous sexual behaviour.	3.450	1.337
Q44.	Drug-users contracting HIV/AIDS through sharing syringes should be held personally responsible for getting their disease.	3.240	1.253
Q40.	Those who were infected with HIV/AIDS by choosing to engage in homosexual behaviour should be held personally responsible for contracting such a disease.	3.080	1.361
Total		9.770	3.384

For self-efficacy, a great majority of the respondents (97%) believed that they required specific training to work with HIV/AIDS patients and a similar percentage of respondents (96.9%) did not think that their current university program was providing them with this training. These findings suggest that the respondents' self-perceived competence and hence efficacy, in serving HIV/AIDS was fairly low as the kind of training they deemed necessary in working with HIV-infected people was not offered to them.

#### **Relationships Between Variables**

# 1. Medical Knowledge and Acceptance

The 31 items measuring the medical knowledge of the respondents were treated as independent variables and correlation analyses were performed between the individual items and the index of personal and professional acceptance. Only 2 out of the 31 items were found to be significantly related to personal acceptance, and 3 to professional acceptance.

The two items found to be correlated positively with personal acceptance were: 'AIDS is not transmitted by sharing food, drink, or eating utensils" (r= 0.1444, p= 0.0413) and 'If a person is HIV-positive, s/he may not develop AIDS for up to 10 years after contracting HIV" (r= 0.1673, p= 0.0179). That means those who answered these two questions correctly tended to show more personal acceptance of HIV/AIDS patients. Yet the correlations were very weak. Item 13 could account for only 2% of the variance in personal acceptance and item 33, only 2.8%.

The three items that were found to be positively correlated with professional acceptance were: item 9, "wearing a mask over your mouth and nose will help lower your chance of being infected by HIV virus" (r= 0.1875, p= 0.0079), item 10, "it is possible for a female AIDS carrier to transmit the infection to her baby during her pregnancy" (r= 0.1583, p= 0.0252) and item 22, 'a vaccine for preventing AIDS will be available within a year" (r= 0.1421, p= 0.0448). Those who answered these questions correctly tended to show more professional acceptance of the HIV-infected. However, the correlations though significant, were again very weak. Item 9 could only explain 3.5% of the variance of professional acceptance, item 10, 2.5% and item 22, 2% only.

# 2. Family Disapproval and Acceptance

Regression analysis on family disapproval and personal acceptance was not found to be significant (r= 0.1275, p=0.0720). However, family disapproval was found to be negatively correlated with professional acceptance (beta= -0.1764, p= 0.0124), meaning that the stronger the disapproval from family, the less likely the respondent would serve HIV/AIDS clients. However, the relationship between the two was very weak. Only 3.1% of the variance of professional acceptance was explained by the variance of family disapproval.

# 3. Responsibility Attribution and Acceptance

Regression analyses showed that responsibility attribution was negatively correlated with both personal acceptance (beta = -0.17428, p= 0.0136) and professional acceptance (beta = -0.27164, p= 0.0001). That means the more the respondents attributed personal responsibility to HIV/AIDS patients, the more social distance the respondents wanted to keep from the patients and the less willing they were to provide services for the patients.

# 4. Religiosity, Self-efficacy and Acceptance

Neither religiosity nor self-efficacy was related to personal or professional acceptance. Differences in religiosity (defined as Christians vs. non-Christians) were not found to be related to difference in personal or professional acceptance. Similarly, whether the respondents felt they required and had already received specific training to work with HIV/AIDS patients was not significantly related to acceptance.

# 5. Demographic Variables and Acceptance

Only two demographic variables – age and attendance at an AIDS seminar, were found to be significantly related to professional acceptance. Those who were aged 25 or above showed significantly more professional acceptance than those aged 24 or below (F=7.3543, d.f. = 1,197, p = 0.0073). This seemed to suggest that respondents who were more mature tended to be more willing to serve HIV/AIDS clients. Also, those who had attended a seminar on AIDS outside of their social work program were found to show significantly more professional acceptance towards the HIV-infected (F= 14.8104, d.f. = 1,198, p = 0.0002).

## **Predictors of Acceptance**

Multiple regression and analysis of variance were performed for both personal and professional acceptance to identify which variable was the strongest predictor of acceptance. The results are shown in Table 5 and 6

In both analyses, responsibility attribution was consistently found to be the strongest predictor of both personal (beta = -0.15844, p = 0.0230) and professional acceptance (beta = -0.20240, p = 0.002).

 Table 5
 Regression Analysis of Personal Acceptance

Multiple R	.26486	F = 4.92896
R Square	.07015	Signif $F = .0025$
Adjusted R Square	.05592	

Variables in the Equation Variable В SE B Beta T Sig T RQ13 2.69950 1.54713 .12086 .0826 1.745 RQ33 .14994 .0314 1.38964 .64103 2.168 **RESPATT** -.21730 .09480 -.15844 -2.292 .0230 (Constant) 26.34740 1.84120 14.310 .0000

 Table 6
 Analysis of Variance of Professional Acceptance

Source of Variation	Mean Square	F	Sig of F		
WITHIN+RESIDUAL	14.77				
REGRESSION	90.56	6.13	.000		
AGE1	41.20	2.79	.097		
SEMINAR	132.81	8.99	.003		
AGE1 BY SEMINAR	22.76	1.54	.216		
	Sum of	d.f.	Mean	F	Sig. of F
	Squares		Square		
(Model)	787.52	8	98.44	6.67	.000
(Total)	3593.37	198	18.15		
(1otal)	3593.37	198	18.15		

R-Squared = .219 Adjusted R-Squared = .186

Regression analysis for WITHIN+RESIDUAL error term Dependent variable .. PROFESS Professional Acceptance

COVARIATE	Beta	t-Value	Sig. of t	
DO10	14710	2 262	025	
RQ10	.14712	2.263	.025	
RQ9	.15850	2.433	.016	
RQ22	.09916	1.504	.134	
RESPATT	20240	-3.092	.002	
<b>FAMILY</b>	14801	-2.264	.025	

# Discussion

One of the goals of the research is to assess the knowledge that social work students possess about all areas related to HIV infection. Given the possibility of their involvement in AIDS-related issues after graduation, one might expect a somewhat more sophisticated level of knowledge among prospective social work practitioners. However, what was found was that the respondents correctly answered less than one-third of the total number of questions concerning medical aspects of the disease (including transmission, diagnosis, etc.). Just like the general public, respondents' most informed areas of knowledge were about transmission and risk reduction. However, in more advanced knowledge areas such as the domain of diagnosis, respondents were not at all well-informed. These knowledge gaps have to be filled because accurate knowledge is one of basic requisites of quality service.

AIDS struck the world less than two decades ago. Thus existing knowledge about it, and its influence on social work and social work practitioners, is scarce. This research sheds lights on what part of our social work education is successful and what is lacking. The overall high level of acceptance towards HIV/AIDS patients seems to suggest the success of social work socialisation.

The significant, although, weak relation between medical knowledge and acceptance suggests that besides a sound knowledge base, social work students' level of acceptance is affected by other factors. This research has been able to identify other significant variables such as family disapproval and responsibility attribution as contributing to the different levels of acceptance towards HIV/AIDS patients.

Responsibility attribution was found among all other variables as the strongest predictor of both personal and professional acceptance. It seems to suggest that acceptance of HIV/AIDS patients is affected by people's moral judgements concerning the way in which respondents perceived how HIV/AIDS patients had contracted the disease and that this is more significant than the amount of knowledge about AIDS the respondents possessed. When the patients were infected through socially unacceptable means, social work students tended to be less accepting of them. This seems to contradict what social work training aims to achieve, that is, to train students to be non-judgmental and value-free. At least, with this sample of final-year social work students, this was not happening. At one level, the research did find that the students were generally willing to work with HIV/AIDS patients. But underneath that, students seemed to be more willing to work with those they believed to be innocent than with those they believed to be morally culpable.

# Implications for Social Work

This study does suggest several salient avenues for enhancing social work's capacity to respond to the AIDS epidemic. First, and most obviously, factual information should be disseminated. In the absence of accurate and up-to-date information, images and myths will shape practice. Within this context, it was particularly disturbing to find that the majority of the student participants had quite a poor level of medical knowledge. To compensate for this, educational activities should vigorously present data on the nature of the disease and all currently known methods of transmission, risk reduction, diagnosis and treatment. This does not imply that all social workers have to become AIDS experts. However, our training must be able to address

the fallacies about the nature of HIV contraction and instil knowledge and techniques that will allow students to act in ways consistent with professional values.

Social work educators can focus specifically on the knowledge gaps identified in this study. For example, misinformed areas concerning deep kissing, rare infections used as diagnostic signs, blood donation, etc. and uninformed areas such as AIDS-related dementia, the "window period" and current treatment of AIDS, etc. can be given emphasis.

As moral judgement (understood in this study as responsibility attribution) was found to be one of the most important variables in influencing students' levels of acceptance, moral attitudes should not be ignored in designing training programs or developing a curriculum for social work education. Social work educators should place more emphasis on students' awareness of their own moral values and how these values might possibly influence their practice. Seminars on controversial issues like homosexuality, abortion, promiscuity and AIDS, etc. could be included in the curriculum so that personal prejudices, attitudes, or biases that may affect the quality of services can be identified.

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#### **Footnotes**

- 1. Wexler, S. (1989). Social welfare students and AIDS: A survey of knowledge, attitudes, and professional preparation. *Journal of Teaching in Social Work* 3:1, 131-149.
- 2. O' Donnell, L. and O' Donnell, C.R., Pleck, J.H., Snarey, J. & Rose, R.M. (1987). Psycho-social responses of hospital workers to AIDS. *Journal of Applied Social Psychology* 17:3, 269-285.
- 3. Shi, L., Samuels, M.E., Richter, D.L., Stoskopf, C.H., Daker, S.L. & Francisco, S.S.Y. (1993). AIDS-related knowledge and attitudes of social workers in South Carolina. *Health & Social Work* 18:4, 268-280.
- 4. Lau, J. & Ma, P. Survey on Knowledge/Attitude Among Social Welfare Personnel, Final Report March 1995. Unpublished Paper: The Hong Kong Council of Social Service.
- 5. Dworkin, J., Albrecht, G. & Cooksey, J. (1991). Concern about AIDS among hospital physicians, nurses and social workers. *Social Science and Medicine* 33:3, 239-248.
- 6. Gillman, R. (1991). From resistances to rewards: social workers' experiences and attitudes toward AIDS. *The Journal of Contemporary Human Services*, 593-601.
- 7. David, R., Dhooper, S.S. & Hatch, L.R. (1987). Undergraduate and graduate students' attitudes towards AIDS. *Psychological Reports* 60, 1185-1186.

- 8. Wiener, L.S. & Siegel, K. (1990). Social workers' comfort in providing services to AIDS patients. *Social Work*, 18-25.
- 9. Fishbein, M. & Ajzen, I. (1975). *Belief, Attitude, Intention And Behaviour: An Introduction to Theory and Research*. London: Addison-Wesley Publishing Company.
- 10. Ajzen, I. (1988). Attitudes, Personality, and Behaviour. Chicago: The Dorsey Press.
- 11. Fisher, J. D. & Fisher, W.A. (1992). Changing AIDS-risk Behaviour. *Psychological Bulletin* 111:3, 445-474.
- 12. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review* 84, 191-215.
- 13. McDonell (1993). Judgements of Personal Responsibility for HIV Infection: An Attributional Analysis. *Social Work* 38:4, 403-410.
- 14. Tsang, A. (1987). Sexuality: the Chinese and the Judeo-Christian Traditions in Hong Kong. *Bulletin of the Hong Kong Psychological Society* 19/20, 19-28.
- 15. Hui, C. H. (1991). Religious and Supernaturalistic Beliefs. In Lau S.K. et al. (1991) (eds.) *Indicators of Social Development: Hong Kong 1988*. Hong Kong: The Chinese University of Hong Kong.
- 16. Fei, X.T. (1992). *From The Soil: The Foundations of Chinese Society*. Berkeley: University of California Press.
- 17. Lau, S.K. (1981). Chinese Familism in an urban-industrial setting: The case of Hong Kong. *Journal of Marriage and the Family*, 977-992.
- 18. AIDS Concern (1994). A Family Guide to HIV & AIDS in Hong Kong. Hong Kong: AIDS Concern.
- 19. Education Department of Hong Kong. (1993). *Facts About AIDS*. Hong Kong: Hong Kong Government Printer.
- 20. Central Health Education Unit (1988). *The More Sexual Partners You Have, The More Chance Of Being Infected.* Hong Kong: Medical & Health Department.
- 21. Hong Kong Government (1996). Equal Opportunities A Study on Discrimination on the Ground of Sexual Orientation– A Consultation Paper, 1996. Hong Kong: Hong Kong Government Printer.
- 22. Hong Kong AIDS Foundation (1996). *The Knowledge, Attitude, Behaviour and Practice Survey on AIDS in Hong Kong 1992*. Hong Kong: Hong Kong AIDS Foundation.

# **Awareness among Secondary Schools**

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#### **Abstract**

The presentation identified secondary school students and teachers' awareness and knowledge of HIV/AIDS, including its transmission, symptomatology, prevention, and education activities. It also assesses students' existing and future risk for AIDS. Data came from a mail survey of 864 teachers of 50 randomly selected school in 1993 and a field survey of 1,190 students in 1994 from 12 schools randomly drawn from the 150 schools. Misconceptions about infeasible modes of transmitting HIV were relatively salient among both students and teachers. However, they were mostly knowledgeable about feasible modes of transmission and asymtomatology. Only 44.3% of students believed the efficacy of condoms was quite low. Teachers were more knowledgeable than students. Most students (88.5%) found television to be a source of knowledge. There was certain risk for contracting AIDS in future among secondary school students, particularly the boys. Most notably, 18.0% of male students and 6.7% of female students would have risky sexual practice and would not use condoms. In particular, 8.68% of male students believed that one had no need to use condoms and would have sex with many partners before marriage. 20.5% of students had sexual experience and 27.2% of these students did not use condoms more than once during intercourse. 11.5% of students regarded using condoms as distrust of their partners. Regarding the chance of contract AIDS, 14.7% of students expected the possibility in near future 10.3% expected a high chance in 10 years. Many of them approved premarital sex, and remarkably, 50.5% agreed that it was acceptable nowadays. On average, they estimated that 22.2% of their friends had sexual experience and 15.4% approved premarital sex. A significant proportion of teachers and students were ignorant about HIV/AIDS. Considerable proportions of secondary school students were at risk for contracting AIDS both currently and in future. One-fifth of them had sexual experience and so did a similar proportion of their friends. Risk for AIDS is certainly a problem felt also by students themselves.

#### Introduction

Having sex without using condoms is a very important indicator for AIDS risk. Because the self-report of unsafe sex is likely to be valid, it has become a popular subject for studies (Schopper et al., 1993). In the United States, many studies have documented the high risk behavior of secondary school students (Slonim-Nevo et al. 1991) and the risk seems to be in an increasing trend (Holtzman et al. 1995). A high proportion of the students are sexually active and adolescent mortality due to AIDS is increasing (DiClemente 1990). Such high risk behavior may be related to their ignorance of HIV/AIDS, regarding its transmission and prevention. For instance, secondary school students may not know that sexual intercourse is a major way of transmitting HIV and that using condoms can minimize the risk of HIV infection. Without such proper knowledge, they may engage in risky sexual behavior without using condoms. Secondary school students' high risk especially invites hosts of school-based preventive programs (Siegel et al., 1995), of which, some have proven to be effective for reducing students' risk (Holtzman et al., 1995).

Conceivably, secondary school students in Hong Kong are not immune from the threat of HIV infection. Although Hong Kong Chinese youngsters are traditionally less sexually active than their Western counterparts, the contemporary young generation is much more sexually active than its predecessors (Ho 1995). Westernization may play a role in fostering adolescents' experimentation with premarital sex. However, premarital sex among adolescents is still a taboo in Hong Kong society. As a result, adolescents who practice sex stealthily, would refrain from acquiring and using condoms so as to avoid others' attention. This practice adds to their risk of contracting HIV.

Exposure to risk for contracting AIDS via sexual activities actually comprises two behavioral components: (1) sexual intercourse, and (2) failing to practice safe sex that very often means not using condoms. Most of previous studies considered either of the two components as high risk (Raffaelli et al., 1991; Biglan et al., 1990; Metzler 1994; Walter et al., 1992). However, this consideration may not be an adequate description of the actual risk. The present study considers both aspects by defining the practice of risk as either the experience of unsafe sex or the joint consideration of future intention for sexual activities and reluctance to use condoms.

# **Objectives**

The present study attempts to give a descriptive account of Hong Kong's secondary students' risk for contracting AIDS and knowledge, beliefs, and evaluation about HIV/AIDS and related activity. It also gauged the knowledge of secondary school teachers to compare with students' knowledge.

# Methods

#### Sample

A total of 1,190 senior form secondary school students completed questionnaires for this study in 1994. They were either Form 4 (50.8%), Form 5 (17.1%), or Form 6 (32.0%) students in classes randomly selected from each form in each of the 12 randomly selected secondary schools. These schools represented a stratified random sample of all schools according to their source of finance (private versus government or government-aided) and involvement in teaching about AIDS. Knowledge about the schools' involvement in AIDS came from a pilot survey of principals of secondary schools. There were 283 (23.8%) students studying in either one of the three sampled private secondary schools and 907 (76.2%) students studying in either one of the nine government or government-aided secondary schools. Exactly half (50.0%) of the students were male and the other half were female. Their average age was 17.4 years (SD = 1.33). The distribution of their fathers' education was: 12.0% below primary, 40.6% primary, 40.0% secondary, 5.8% postsecondary, and 1.5% postgraduate levels. According to their fathers' occupation, 74.2% of the students were from the working class (ordinary and skilled workers), 13.7% were from the middle class (clerical and technical workers), and 12.1% were from the upper class (professionals and managers). About two-third (67.1%) of students had lessons about AIDS in any one of the six subjects, biology, human biology, social studies, religious studies, ethics, and others. Around one-third of students had attended seminars on AIDS (31.7%) and participated in AIDS-preventive activities (39.4%).

Another survey through mail received completed questionnaires in 1993 from 864 teachers of 46 secondary schools, out of 50 randomly selected schools. The teacher respondents consisted of 52.0% female and 48.0% male teachers. Their average age was 33.6 years. Married teachers comprised 52.5% of the sample and unmarried teachers comprised 41.5%.

#### Measures

Questionnaires for students and teachers contained closed-end questions with some rating scales to score the responses. A scoring procedure measured the percentage of respondents who answered correctly or affirmatively for an knowledge or attitudinal item respectively. Most items measuring knowledge, attitudes, and behavior came from past KABP studies (Andre and Bormann 1991; Barling and Moore 1990; Boyd and Wandersman 1991; Fishbein et al., 1993; Moore and Rosenthal 1991; Raffaelli et al., 1991; Roche 1986; Slonim-Nevo et al., 1991). The current risk variable was the experience of having sex without using condoms. The future risk variable was the mean of (multiplicative) products of two sets of variables, 3 measuring intention to have sexual intercourse and 2 measuring reluctance to use condoms.

# Results

Most secondary school students were knowledgeable about feasible modes of transmitting HIV (78.6%-91.1%, see Table 1). Fewer students knew about infeasible modes of transmitting HIV (35.9%-75.8%). Students were mostly knowledgeable that only blood testing can detect HIV infection (79.4%) and a person with HIV/AIDS looks healthy (77.7%). Less than half of students realized that a person with HIV/AIDS need not die because of AIDS (40.5%). Male students were less likely than female students to know about pregnancy (79.3% vs. 85.2%) and casual sex (76.6% vs. 81.8%) as modes of transmitting HIV. On the other hand, more male students than female students were knowledgeable about toilet seats (58.1% vs. 49.1%) and mosquito bites (41.2% vs. 30.8%) as modes of transmitting HIV and persons with HIV/AIDS need not die because of AIDS (44.9% vs. 36.9%).

Table 1 Knowledge about HIV/AIDS (%)

		Students			Teachers	
	Male	Female	All	Male	Female	All
HIV can be transmitted by:						
Syringe / needle	90.8	92.6	91.1	90.0	90.2	90.1
Pregnancy	79.3*	85.2	81.5	86.6	87.6	87.0
Healthy PWA	82.6	78.9	80.1	88.6*	81.5	84.9
Casual sex	76.6*	81.8	78.6	-	-	-
Breast milk	-	-	-	38.2*	47.0	42.8
HIV cannot be transmitted by the doing						
following activities involving a PWA:						
Touch the body	76.6	76.3	75.8	92.1	94.8	91.9
Wearing clothes	69.7	64.9	67.2	85.2	86.2	85.7
Sharing tableware	67.9	67.2	67.0	80.0	80.8	79.7
Swimming	63.6	58.7	60.8	-	-	-
Breathing the cough	54.6	55.3	54.3	74.8	75.6	75.2
Using toilet seats	58.1*	49.1	54.0	-	-	-
Kissing	36.3	37.4	37.0	48.1	52.8	50.7
Receiving mosquito bites	41.2*	30.8	35.9	55.0*	46.6	50.6
Donating blood	-	-	-	52.5	50.5	51.1
Others						
High risk of intercourse without using a condom	-	-	-	95.8	97.3	93.1
Only blood testing can detect HIV infection	77.1	82.5	79.4	73.6	76.3	74.8
PWA looks healthy	76.8	78.9	77.7	72.2	71.2	71.9
Window period	_	-	-	55.9	50.1	52.7
Prevention by cleaning needles with	_	_	_	39.7	35.7	37.7
bleach						
Adequacy of knowledge judged by teachers	-	-	-	11.6	11.5	11.7
PWA need not die because of AIDS	44.9*	36.9	40.5	_	_	-

<sup>\*:</sup> significant different between the male and female at .05 level by the  $\chi^2\ test$ 

Secondary school teachers were also mostly knowledgeable about feasible modes of transmitting HIV (84.9%-90.1%), except that through breast milk (42.8%). Most teachers were knowledgeable that brief body contact, clothes, tableware, and coughing do not transmit HIV (75.2%-91.9%) and that high risk results from intercourse without using a condom (93.1%), only blood testing can detect HIV infection (74.8%), and a person with HIV/AIDS looks healthy (71.9%). Yet, only about half of teachers knew about the window period (52.7%) and that kissing, mosquitoes, and donating blood do not transmit HIV (50.6%-51.1%). Less than half of teachers knew that cleaning needles with bleach prevents HIV infection. More male teachers than female teachers knew that healthy persons with HIV/AIDS can transmit HIV (88.6% vs. 81.5%) and mosquito bites do not transmit HIV (55.0% vs. 46.6%). However, the situation was reversed regarding knowledge about transmitting HIV through breast milk (38.2%)

vs. 47.0%). On the whole, proportionately more teachers knew about HIV/AIDS than students and few teachers regarded students' knowledge adequate (11.7%).

Students' major sources of knowledge about HIV/AIDS were television (88.5%, see Table 2) and newspapers (67.0%). At least 13% of students learned about HIV/AIDS from the sources ranging from government offices to mass media. Fewer male students than female students learned it from hospitals (35.3% vs. 42.8%) and the Hong Kong AIDS Foundation (12.4% vs. 17.7%).

Table 2 Students' sources of knowledge about HIV/AIDS (%)

	Male	Female	All
Television	89.1	88.4	88.5
Newspapers	69.4	65.3	67.0
Radio	54.5	57.2	55.7
Friends	44.8	40.0	42.8
Hospitals	35.3*	42.8	39.2
Red Cross	29.6	30.2	29.9
Clinics/doctors	25.4	28.8	27.2
Hong Kong AIDS Foundation	12.4*	17.7	15.6
Government Offices	13.6	11.9	13.3

<sup>\*:</sup> significant different between the male and female at .05 level by the  $\chi^2$  test

Whereas most (76.2%, see Table 3) students acknowledged the risk for youth to have sex without using condoms less than half (44.3%) believed in the effectiveness of condoms for preventing AIDS. Fewer female students than male students believed that condoms were effective (37.7% vs. 51.4%).

Table 3 Percent of students who believe the efficacy of condoms

	Boys	Girls	All
Perceived efficacy of condoms			
a65 It is risky for youth to have sex without using condoms	77.7	76.8	76.2
a46 Condoms are effective for preventing AIDS	51.4*	37.7	44.3

<sup>\*:</sup> significant different between the male and female at .05 level by the  $\chi^2$  test

Considerable proportions of students would have sex requested by loved persons (28.4%, see Table 4), with more than one before marriage (20.6%), and in the coming year (16.5%). More male students than female students indicated such likelihood (19.0%-43.8% vs. 12.2%-13.2%). A certain proportion (17.1%) of students thought that one need not use a condom when having sex though fewer students (6.0%) indicated no need to use a condom when having sex. Male students appeared more reluctant to use condoms than female students (7.6%-20.2% vs. 4.2%-13.5%). A significant proportion (12.7%) of students were at risk for HIV infection when they would have sexual intercourse for any reason without using condoms. Male students were more likely at risk than female students (18.0% vs. 6.7%). Male students were

mostly at risk when having sex requested by loved persons and perceiving no need to use condoms (11.5%).

Table 4 Percent of students having future risk for AIDS

		Boys	Girls	All
	Intention to have sexual intercourse			
1	Going to have sex when requested by a loved person	43.8*	13.2	28.4
2	Going to have sex with more than one person before marriage	30.0*	12.2	20.6
3	Going to have sex in the coming year	19.0*	12.8	16.5
	Reluctance to use condoms			
4	One need not use a condom when having sex	20.2*	13.5	17.1
5	Because the change of getting AIDS is low, I have no need to use	7.57*	4.15	5.97
	a condom when having sex			
	Risk for contracting AIDS			
14	Going to have sex in the coming year and one has no need to use	5.95*	2.88	4.60
	condoms			
24	Going to have sex when requested by a loved person and one has	11.5*	3.07	7.42
	no need to use condoms			
34	Going to have sex with many persons before marriage and one	8.68*	2.71	5.64
	has no need to use condoms			
15	Going to have sex in the coming year and I have no need to use	2.16	0.901	1.53
	condoms			
25	Going to have sex when requested by a loved person and I have	5.77*	1.62	3.67
	no need to use condoms			
35	Going to have sex with many persons before marriage and I have	4.14*	1.44	2.81
	no need to use condoms			
	Presence of any risk (when any of the above 6 products applies)	18.0*	6.67	12.7

<sup>\*:</sup> significant different between the male and female at .05 level by the  $\chi^2\ test$ 

About one-fifth (20.5%, see Table 5) of students had sexual experience and there was no significant discrepancy between the male and female (21.2% vs. 18.9%). This self-report figure was higher than teachers' judgment which led to an estimate of 12.2% of students who were sexually active. More than a quarter (27.2%) of those having sexual experience failed to use condoms more than once. The failure did not differ significantly between boys and girls (22.2% vs. 35.5%).

Table 5 Students' existing risk for AIDS (%)

	Boys	Girls	All
Past sexual experience	21.2	18.9	20.5
Sexually active as judged by teachers	-	-	12.2
Having sex in the past 3 months	4.14	5.60	4.94
Not using condoms more than once during intercourse among all	4.70	6.72	5.57
students			
Not using condoms more than once during intercourse among those	22.2	35.5	27.2
having sexual experience			

<sup>\*:</sup> significant different between the male and female at .05 level by the  $\chi^2\ test$ 

More male students (18.1%, see Table 6) than female students (12.1%) perceived a chance of getting AIDS in near future. The two sexes exhibited no difference in estimating a high chance of getting AIDS in future 10 years (9.37% vs. 10.1%).

Table 6 Percent of students having high susceptibility to AIDS

	Boys	Girls	All
Probably getting AIDS in near future	18.1*	12.1	14.7
Having a high chance of getting AIDS in 10 years	9.37	10.1	10.3

<sup>\*:</sup> significant different between the male and female at .05 level by the  $\chi^2\ test$ 

Approval of premarital sex was common when 50.5% of students regarded it as acceptable nowadays (see Table 7). More male students approved premarital sex than female students (57.8% vs. 43.6%).

Table 7 Sexual permissiveness (%) among students

	Boys	Girls	All
Nowadays, premarital sex is acceptable	57.8*	43.6	50.5
Youth waste time by not having sex	10.3*	4.0	7.50
Youth can have sex before marriage	31.2*	14.3	22.0

More than one-tenth (11.5%, see Table 8) of students worried that using condoms during sex was distrust of one's partner and 5.97% of students considered using condoms as stupid. More male students held such negative attitudes than female students (7.6%-15.0% vs. 4.2%-7.6%).

 Table 8
 Percent of students having unfavorable attitudes toward condom use

	Boys	Girls	All
Using condoms during sex is distrust of the partner	15.0*	7.6	11.5
Stupid to use condoms during sex	7.57*	4.15	5.97

<sup>\*:</sup> significant different between the male and female at .05 level by the  $\chi^2$  test

#### Discussion

Every piece of evidence indicates that secondary school students are at a certain extent of risk for HIV infection. Some to many of students were ignorant of the sexual transmission of HIV, showing distrust and disfavor to condoms, likely to be and already at risk due to their approval of premarital sex, and therefore recognized their own risk. Male students were at higher risk than female students. Mass media, as major sources of students' knowledge,

should play an active role in developing young audiences' knowledge about HIV/AIDS. On the other hand, this study concurs with those in other places (Boscarino and DiClemente 1996) in the finding that teachers tend to be knowledgeable about HIV/AIDS.

# References

Andre, Thomas & Bormann, Lynda (1991). Knowledge of Acquired Immune Deficiency Syndrome and Sexual Responsibility among High School Students. *Youth & Society* 22:3, 339-361.

Barling, Norman R. & Moore, Susan M. (1990). Adolescents Attitudes towards AIDS Precautions and Intention to Use Condoms. *Psychological Reports* 67, 883-890.

Biglan, A., Metzler, Carol W., Wirt, R., Ary, D., Noell, J., Ochs, L., French, C. & Hood, D. (1990). Social and Behavioral Factors Associated with High-Risk Sexual Behavior among Adolescents. *Journal of Behavioral Medicine* 13:3, 245-261.

Boscarino, Joseph A. & DiClemente, Ralph J. (1996). AIDS Knowledge, Teaching Comfort, and Support for AIDS Education among School Teachers: A Statewide Survey. *AIDS Education and Prevention* 8:3, 267-277.

Boyd, Brian & Wandersman, Abraham (1991). Predicting Undergraduate Condom Use with the Fishbein and Ajzen and the Triandis Attitude-Behavior Models: Implications for Public Health Interventions. *Journal of Applied Social Psychology* 21:22, 1810-1830.

DiClemente, Ralph J. (1990). Adolescents and AIDS: Current Research, Prevention Strategies, and Policy Implications. In Temoshok, Lydia & Baum, Andrew (1990) (eds.) *Psychosocial Perspectives on AIDS: Etiology, Prevention, and Treatment*. NJ: Hillsdale, Lawrence Erlbaum, 51-64.

Fishbein, M., Trafimow, D., Claudette, F., Helquist, M., Eustance, M. Ann, Ooms, Michelle & Middlestadt, Susan E. (1993). AIDS Knowledge, Attitudes, Beliefs, and Practices (KABP) in Two Caribbean Countries: A Comparative Analysis. *Journal of Applied Social Psychology* 23:9, 687-702.

Ho, Chi-on. (1995). Report of Attending the International Conference on HIV/AIDS and Social Work, Denmark, Copenhagen. Hong Kong: AIDS Trust Fund.

Holtzman, Deborah, Mathis, Mary P., Kann, L., Collins, Janet L. & Kolbe, Lloyd J. (1995). Trends in Risk Behaviors for HIV Infection among U.S. High School Students, 1989-1991. *AIDS Education and Prevention* 7:3, 265-277.

Metzler, Carol W., Noell, J., Biglan, A., Ary, D. & Smolkowski, Keith (1994). The Social Context for Risky Sexual Behavior among Adolescents. *Journal of Behavioral Medicine* 17:4, 419-438.

Moore, Susan M. & Rosenthal, Doreen A. (1991). Condoms and Coitus: Adolescents Attitudes to AIDS and Safe Sex Behavior. *Journal of Adolescence* 14, 211-227.

Raffaelli, M., Campos, R., Merritt, A. P., Siqueira, E., Antunes, C. M., Parker, R., Greco, M., Greco, Dirceu & Halsey, Neal (1991). Sexual Practices and Attitudes of Street Youth in Belo Horizonte, Brazil. *Social Science & Medicine* 37:5, 661-670.

Roche, John P. (1986). Premarital Sex: Attitudes and Behaviors by Dating Stage. *Adolescence* 21:81, 107-121.

Schopper, Doris, Doussantousse, Serge & Drav, John (1993). Sexual Behaviors Relevant to HIV Transmission in a Rural African Population. *Social Science & Medicine* 37:3, 401-412.

Siegel, D., DiClemente, R., Durbin, M., Krasnovsky, F. & Saliba, Patricia (1995). Change in Junior-high School Students' AIDS-related Knowledge Misconceptions, Attitudes, and HIV Preventive Behaviors: Efforts of a School-based Intervention. *AIDS Education and Prevention* 7:6, 534-543.

Slonim-Nevo, V., Ozawa, Martha N. & Auslander, Wendy F. (1991). Knowledge, Attitudes, and Behaviors Related to AIDS among Youth in Residential Centers: Results from an Exploratory Study. *Journal of Adolescence* 14, 17-33.

Walter, Heather J., Vaughan, Roger D., Gladis, Madeline M., Ragin, Deborah F., Kasen, Stephanie & Cohall, Alwyn T. (1992). Factors Associated with AIDS Risk Behaviors among High School Students in an AIDS Epicenter. *American Journal of Public Health* 82:4, 528-532.

# Needs for Education Programs on AIDS in the Workplace

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#### **Abstract**

The study explores in the workplace (1) any existing policy dealing with HIV/AIDS, (2) knowledge about the Disability Discrimination Ordinance and the Hong Kong Community Charter on AIDS, (3) plausible reactions to an HIV-infected employee, (4) felt need for AIDS policy and education programs for employees, and (5) suitable modes of education programs. The study involved a mail survey of all the 1,786 commercial establishments (excluding retailing and wholesaling stores) in Hong Kong which had more than 100 employees in May, 1996. It approached the head of the personnel department of each target company to complete a structured questionnaire and return it by a selfaddressed envelope. This study then analyzed data obtained from 299 companies, which represented a response rate of 16.7%. Only 5.4% of companies had some existing policies to deal with HIV/AIDS and 10.7% planned to have such policies. Most (62.5%) of the existing policies dealt with recruitment. Only 1.0% screened employees and 1.3% screened prospective employees for HIV infection. Most (60.2%) companies would not disclose the identity of an infected employee and a higher proportion (69.2%) believed that they could keep the identity confidential in practice. Whereas 25.8% would dismiss the infected employee, 61.7% would provide counseling to the employee. Majority (81.9%) expected that some employees would panic at the infected colleague. Many (35.8%) thought that an infected employee would undermine work performance. Only 18.7% were aware of the Hong Kong Community Charter on AIDS and 10.0% were aware of legislation concerning AIDS. Only 30.8% found education programs on AIDS necessary to them. Yet, 54.8% to 75.9% desired education on ways to deal with HIV/AIDS and external assistance for implementing the programs. Only 39.8% would participate in activities launched by the Hong Kong AIDS Foundation. 30.8% assigned staff members responsible for AIDS issues. Although companies were not enthusiastic to participate in AIDS-education activities, their need for assistance and education in various aspects was prominent. Whereas majority did not screen employees for HIV infection, a considerable proportion would dismiss infected employees. Education programs are clearly necessary to promote a positive attitude in the workplace.

# Introduction

AIDS continues to corrode the most energetic part of the Hong Kong working population. To prevent its damage, education and intervention in the workplace are extremely important. In this connection, the Hong Kong Community Charter on AIDS and the Disability Discrimination Ordinance should play an important part.

The Hong Kong Community Charter on AIDS was launched in December 1994 to encourage companies and organizations to set up AIDS policies and introduce AIDS education in the workplace. For a year since the introduction of the Charter, 39 companies/organizations have signed it, however, only 7 were companies from the business sector.

In August 1995, the Government of Hong Kong passed the Disability Discrimination Ordinance (DDO), which makes it illegal to discriminate against people with disability, including persons with HIV/AIDS, in employment and other settings.

# **Objectives**

This survey aims at collecting information from human resource managers of companies with 100 employees or more in Hong Kong on the following about their companies':

1. existing policy, if any, on employment of people with HIV/AIDS;

- 2. knowledge about the Disability Discrimination Ordinance and the Hong Kong Community Charter on AIDS;
- 3. plausible reactions to an HIV-infected employee;
- 4. any felt need for AIDS policy and education programs for employees;
- 5. the suitable modes of education programs.

#### Methods

The study involved a mail survey of all the 1,786 commercial establishments in Hong Kong which had more than 100 employees in May, 1996. The sampling frame was provided by the Census and Statistics Department of the Government of Hong Kong. The survey asked the head of the personnel department of each target company to complete a structured questionnaire and return it by a self-addressed envelope. By mid June, 299 completed questionnaires were returned, representing a response rate of 16.7% of the target population. Because of the low response of the industry of wholesaling, retailing, and catering, the companies of this industry were not included in the analysis (4.3%, 16 out of 372).

#### Results

# **AIDS** policy

Only a small proportion (5.4%, see Table 1) of companies had some existing policies to deal with HIV/AIDS, and additionally 10.7% of companies planned to have such policies. This proportion suggests that 191 companies of all 1,786 plan to have a policy.

Table 1 Decision concerning AIDS policy

	%	n
Have an existing policy that deals with HIV/AIDS	5.4	16
Have no policy but plan to have a policy that deals with HIV/AIDS	10.7	32
Have no policy and have no plan to have one to deal with HIV/AIDS	72.9	218
Have no policy but not sure about the plan to have one	11.0	33
Total	100.0	299

#### Screening employees for HIV status

Screening employees and prospective employees for HIV infection was very uncommon (1.0% & 1.3%, see Tables 2 & 3) among companies. Only a small number of companies indicated that they would screen employed and prospective employees in future as well (0.7% & 1.3% of all companies).

Table 2 Screening employees for HIV infection

	%	n
Screen employees for HIV infection currently	1.0	3
Will screen employees in future	0.7	2
Will not screen employees in future	85.6	256
Not sure about screening employees in future	11.7	35
Not know about screening employees currently	1.0	3
Total	100	299

 Table 3
 Screening prospective employees for HIV infection

	%	n
Screen prospective employees for HIV infection currently	1.3	4
Will screen prospective employees in future	1.3	4
Will not screen prospective employees in future	87.0	260
Not sure about screening prospective employees in future	9.7	29
Not know about screening prospective employees currently	0.7	2
Total	100	299

# Disclosure about HIV-infected employees' identities

If there were an HIV-infected employee, the company was most likely to disclose the identity of the infected employee to no one (60.2%, see Table 4). On the other hand, 29.4% of them expected to disclose to somebody in the companies. Whereas a relatively small proportion (4.7%) of companies would disclose the identity of the infected employee to all staff, slightly above 24.7% (10.7% plus 14.0%) of companies expected to disclose the identity to the superior of infected-employees or senior staff. The former finding implies that 84 companies may disclose identities of their HIV-infected employees.

Table 4 Disclosure of the identity of the HIV-infected employee

	%	n
Disclosing the identity of the infected employee to no one	60.2	180
Disclosing the identity of the infected employee to all staff	4.7	14
Disclosing the identity of the infected employee to all senior staff only	14.0	42
Disclosing the identity of the infected employee to the infected employee's	10.7	32
superior only		
Don't know	10.4	31
Total	100.0	299

A moderately high proportion of companies expected that they could keep the identities of HIV-infected employees confidential in practice (69.2%, see Table 5).

Table 5 Confidentiality of the identity of the HIV-infected employee

		%		
	Yes	No	NR	Base N
Likely that identities of HIV-infected employees will be	69.2	22.7	8.0	299
kept confidential in practice				

# Expected reactions of the company to the HIV-infected employee

A substantial proportion (25.8%, see Table 6) of companies expected to dismiss HIV-infected employees. More than half (57.9%) of them would redeploy infected employees to jobs suitable for their physical health condition whereas a considerable proportion (13.7%) expected to transfer the infected employees to other posts against their wills.

Table 6 Expected reactions to the HIV-infected employee

		%		
	Yes	No	NR	N
Will dismiss the infected employee	25.8	64.5	9.7	299
Will transfer the infected employee to another post against	13.7	72.9	13.4	299
his or her will				
Will redeploy the infected employee to a job suitable for	57.9	28.4	13.7	299
his or her physical health condition				

# Expected support for the HIV-infected employee

A moderately high proportion (61.7%, see Table 7) of companies would provide counseling to the infected employee and a lesser proportion (19.0%) of them would provide the infected employees with additional medical support.

Table 7 Expected support for the HIV-infected employee

		%		
	Yes	No	NR	N
Will provide counseling to the infected employee	61.9	29.4	8.7	299
Will provide the infected employee with additional medical	18.4	67.9	13.7	299
support				

# Expected reactions of staff to the HIV-infected employee

Majority (81.9%, see Table 8) of companies expected some employees to panic as a result of the presence of HIV-infected colleagues. Substantial proportions (35.8% & 34.4%) expected to encounter deterioration in work performance and expected some of their employees to resign because of the infected colleagues.

Table 8 Expected reactions of staff to the HIV-infected employees

		%		
	Yes	No	NR	N
Some other employees will panic	81.9	7.4	10.7	299
Work performance will deteriorate	35.8	40.1	24.1	299
Some other employees will resign	34.4	42.5	23.1	299

# **Awareness of the Disability Discrimination Ordinance**

Only about one-tenth (10.0% & 9.0%, see Table 9) of companies were aware of legislation concerning AIDS or knew about the name of the ordinance.

Table 9 Awareness of the AIDS ordinance

		%		
	Yes	No	NR	N
Being aware of any legislation concerning AIDS	10.0	86.6	3.3	299
Knowledge of the name of the ordinance concerning AIDS	9.0	91.0	0.0	299

# Awareness of the Hong Kong Community Charter on AIDS

The proportion of companies that were aware of the Hong Kong Community Charter on AIDS was low (18.7%, see Table 10). Few companies had signed the Charter (3.7%) or would sign it in near future (1.0%). One-tenth were yet undecided.

Table 10 Awareness of the Hong Kong Community Charter on AIDS

	%		n	
Aware of the Hong Kong Community Charter on AIDS	18.7		56	
Has signed the Charter		3.7		11
Will sign the Charter in near future		1.0		3
Has not yet decided		10.4		31
Will not sign the Charter		0.3		1
Not sure		3.3		10
Not aware	80.9		242	
Not know about awareness	0.3		1	
Total	100.0		299	

Among those companies being aware of the Charter, relatively few (30.4%, see Table 11) knew about the content of the Charter.

 Table 11
 Knowledge about the content of the Charter

		%		
	Yes	No	DK	N
Know about the content of the Charter	30.4	51.8	17.9	56

# Need for education programs

A relatively low proportion (30.8%, see Table 12) of companies found education programs on AIDS necessary to them.

**Table 12** Need for education programs

	%	n
Educational programs on AIDS:		
Very necessary	4.0	12
Quite necessary	26.8	80
About average	45.8	137
Not necessary	19.4	58
Not at all necessary	2.3	7
Don' t know	1.7	5
Total	100.0	299

Furthermore, high proportions (54.8% to 75.9%, see Table 13) of them needed education in ways to deal with colleagues with HIV/AIDS, removal of common misconceptions, medical knowledge, and legal aspects in descending order.

Table 13 Aspects of education programs required

	%	n
Aspects of education programs (selected to be) required		
Ways to deal with colleagues with HIV/AIDS	75.9	227
Removal of common misconceptions	72.6	217
Medical knowledge	69.6	208
Legal aspects	54.8	164
Others	4.0	12
Total	100.0	299

A substantial proportion (62.5%, see Table 14) of companies needed external assistance for implementing AIDS programs. They were most likely to need assistance in providing educational materials and speakers (51.8% & 50.5%).

Table 14 Need for external assistance for implementing AIDS programs

	%		n	
Need for external assistance for implementing AIDS programs	62.5		187	
Providing educational materials		51.8		155
Providing speakers		50.5		151
Formulating AIDS policy		39.5		118
Briefing management staff		34.4		103
Training key resource personnel		30.1		90
No	32.1		96	
Don't know	5.4		16	

Total	100.0	299
Total	100.0	4))

A considerable proportion (30.8%, see Table 15) of companies had assigned or intended to assign staff members to handle issues of HIV/AIDS. The bulk (90.2%) of those having assigned or intended to assign staff members would send the staff member to receive the training.

Table 15 Staff responsible for HIV/AIDS

	%			
	Yes	No	NR	N
Having assigned or intended to assign a staff member to handle issues of HIV/AIDS	30.8	63.5	5.7	299
Will assign and send a staff member to receive proper training on	90.2	6.5	3.3	92
AIDS-related knowledge and skills				

#### Conclusion

Based on the surveyed sample, only a very small proportion (5.4%) of companies in Hong Kong had existing policies to deal with HIV/AIDS. The actual proportion is likely lower provided that proportionately fewer companies that did not respond to the survey had such a policy than surveyed companies. However, it is anticipated that 10.7% more companies will set up one in future. For the majority which are reluctant to have one, efforts to provide them adequate knowledge about the policy and to dispel their worry and misconceptions about it are necessary. Specifically, knowledge about the seriousness of HIV/AIDS issues in the workplace and about maintaining a nondiscriminatory HIV/AIDS policy is helpful.

Although some of companies expressed supportive attitudes toward the infected employee, their attitudes as a whole were mixed. Screening for HIV infection is unlikely among the companies. Rather, companies are likely to discriminate against HIV-infected employees by dismissal or job transfer against their wills. Most companies which expected to dismiss HIV-infected employees justified their actions by avoiding staff unrest. This is consistent with the finding that the majority of companies expected that their employees would panic at infected-colleagues. On the other hand, few companies were aware of legislation and the charter concerning AIDS. In view of these findings, education programs for companies are obviously necessary. Unfortunately, a lesser proportion of them anticipated to participate in activities launched by the Hong Kong AIDS Foundation. Such discrepancy calls for need for promoting for the Foundation.

Relieving employees' anxiety about AIDS should be the most urgent aim for educational programs on AIDS. Another important aim is the promotion of companies' awareness of legislation concerning AIDS because only a small proportion of companies were aware of it.

In this connection, smaller companies, with staff size below 200, should be particularly targets of educational programs because they both lacked legal knowledge about AIDS and were likely to dismiss HIV-infected employees. Furthermore, education programs should cater for the higher need of companies which provide customer services.

# The Evaluation of a TV API Featured by a Local Chinese AIDS Patient in Hong Kong

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#### **Abstract**

Public acceptance of announcement for AIDS prevention by a person with AIDS versus other forms is a subject for inquiry. Through a telephone survey in 1995, the study completed interviews with a random sample of 1,275 Hong Kong Chinese adults with a structured questionnaire. In the sample, 52% were female. Interviewees expressed their opinion on a recent public announcement shown on television by a person with AIDS who advocated for more care for AIDS patients, more use of condoms, and less promiscuity, and clarified ways of HIV transmission. Acceptance of an announcement by a person with AIDS was high. There were 41.6% of interviewees finding persons with AIDS, among other categories of people, most effective to announce about AIDS prevention. Most interviewees (79.2%) considered it good to continue to display the announcement on television. Those who had watched the announcement more frequent was more favorable on this item. This announcement also fared better than other announcements on impact and clarity. It appeared to raise concern for AIDS (81.2%) and acceptance of AIDS patients (67.7%) in large portions of interviewees. The general public in Hong Kong highly accepts a person with AIDS to announce about AIDS prevention in Hong Kong. Announcement by a person with AIDS may also be more effective in promoting AIDS prevention. The study, employing a real-life design and survey of the general public, offers findings similar to experimental studies of students in other countries (Dennehy et al., 1995).

# Introduction

Evaluation of perceived effects and acceptance of a television announcement of public interest (TV API or PSA [public service announcement]) communicated by an AIDS patient for AIDS prevention in the local context of Hong Kong is important. It is because (1) TV APIs are a prominent and efficient means used for raising public awareness (Gunter et al., 1993); and (2) whereas studies tend to underline the effectiveness of TV API communicated by persons with HIV/AIDS (e.g., Magic Johnson, [Pollock 1994; Tesoriero et al., 1995]), no study has conducted such analysis in Hong Kong. The time for such a study came when the Government of Hong Kong issued a TV API communicated by an AIDS patient in 1995.

#### The TV API communicated by an AIDS patient

The TV API, commonly known as J.J.'s API, was communicated by an AIDS patient, called J.J. J.J. was a male disc jockey, aged 35, and was not a celebrity prior to presenting the API. He was one of the two late AIDS patients who had disclosed their identities in Hong Kong. His API was a black-and-white monologue conveying messages that (1) daily activities could not make one infected with HIV; (2) one should reduce promiscuity and use condoms in order to prevent AIDS; (3) one should care for and should not discriminate against persons with AIDS (PWAs). The whole monologue engendered three versions of the API, each lasting from 30 seconds to 1 minutes. They were alternately shown on television from April 1995 to January 1996. This was the first API in Hong Kong that employed a PWA as a communicator although there had been more than twenty TV APIs made in the previous decade. These prior APIs used various approaches to communicate themes on AIDS prevention, including employing movie stars as communicators.

# **Objectives**

Public acceptance and evaluation of J.J.'s API as compared with other APIs recalled comprise the research question of the present study. In further detail, this study aims at revealing the Hong Kong public's: (1) perceived effects of J.J.'s API on AIDS prevention and awareness, (2) acceptance and perceptions of its effects as compared with other APIs recalled, and (3) acceptance of J.J.'s API and APIs communicated by PWAs in general.

#### Methods

By using telephone numbers randomly drawn in residential telephone directories, a telephone survey successfully interviewed 1,275 residents aged 18 to 60 years. It randomly selected a respondent in a household by interviewing the one in the age range whose past birthday was closest to the date of the interview. The interviews took place in evenings from November 29 to December 29, 1995. The survey had a response rate of 51.6%. The sample was representative of the adult population of Hong Kong (see the profile in the Appendix).

Using a structured questionnaire, a survey interview on average required 10 minutes to complete. The questionnaire contained questions regarding viewing behavior, perceived impacts and effectiveness of J.J.'s API and other TV APIs recallable, evaluation of various approaches of APIs, and some background information.

# Results

Most of the public regarded J.J.'s API as having positive effects on AIDS prevention and relatively few of them regarded it as having a negative effect. The highly endorsed positive effects included increasing the individual's concern for AIDS (81.2%), acceptance of PWAs (67.7%), and use of condoms (56.8%) (see Table 1). The lowly perceived negative effect was the inducing of fear about contact with PWAs (21.5%). Relatively low proportions of respondents found J.J.'s API to reduce their numbers of sex partners (33.5%) and to make them test blood for detecting HIV infection (26.9%). This might be because of their low likelihood to have multiple sexual partners and low perceived risk for AIDS (0.5%).

Table 1 Perceived effects of J.J.'s API

	%
J.J.'s API increases your concern for AIDS	81.2
J.J.'s API makes you accept PWAs	67.7
J.J.'s API makes you use condoms more	56.8
J.J.'s API reduces the number of your sex partners	33.5
J.J.'s API makes you test blood for detecting HIV infection	26.9
J.J.'s API makes you fear about contact with PWAs	21.5

J.J.'s APIs fared significantly better than other recalled APIs in terms of public acceptance and evaluation. Specifically, more of the public found J.J.'s message to be clear (86.4% vs. 58.1%) and good for continual showing on television (79.2% vs. 71.4%) than those perceiving other APIs on average (see Table 2). Furthermore, more of the public perceived J.J.'s message as clear than those perceiving the two most frequently recalled APIs. More than half (60.5%) of the public perceived J.J.'s API to have a greater effect than other APIs.

Table 2 Comparative effects perceived and acceptance of J.J.'s API and other APIs

	J.J.	Others	Most	Second most
			frequently	frequently
			recalled API	recalled API
APIs' messages are clear	86.4	58.1*	62.2*	62.1*
APIs can continue showing on TV	79.2	71.4	76.7	84.1
J.J.'s API has a greater effect than other APIs	60.5	-	-	

<sup>\*:</sup> significantly different between from that of J.J.'s API by Wilcoxon's signed rank test

Public acceptance of J.J.'s API and APIs communicated by PWAs was evident. A majority of the public (74.7%) found J.J.'s API to be suitable for those aged 19 to 45 years, who, presumably were sexually active and targets of J.J.'s API. Moreover, many (73.4%) regarded the frequency of its displays on television as just right (see Table 3). Many (48.1%) of the public regarded J.J.'s API as suitable for both men and women. The proportion of the public finding AIDS patients to be the most effective communicator of APIs was the greatest (48.1%) among the 4 other categories of people (entertainment stars, medical staff, ordinary people, and politicians). Furthermore, the proportion of the public finding that the patient-self-presentation approach is most effective was highest (30.7%) among four other approaches featuring daily life, cartoon, warning, and medical knowledge.

Table 3 Acceptance of APIs communicated by AIDS patients

	%
J.J.'s API is suitable for those aged 19 to 45 years	74.7
The frequency of displays of J.J.'s API is just right	73.4
J.J.'s API is suitable for both men and women	48.1
People who communicate the most effective APIs:	
AIDS patients	41.6
Medical staff	12.8
Entertainment stars	11.5
Ordinary people	7.1
Politicians	2.0
Most effective approach:	
Patient-self-presentation	30.7
Medical	26.9
Warning	7.7
Daily life	7.6
Cartoon	3.5

# Conclusion

Public acceptance and endorsement of positive effects of J.J.'s API for AIDS prevention are obvious. In both absolute and relative terms, J.J.'s API scored highly on public evaluation. Hence, J.J.'s API appears to be most effective in increasing public concern for AIDS and acceptance of PWAs. Its message was clear and its presentation was appropriate. Using

AIDS patients as communicators and presenting their own situation tends to be the most favorable approach appealing to the public. Whereas other studies have espoused the effectiveness of PWAs as communicators for AIDS prevention, the present study supports the generalization of this proposition to the Chinese society of Hong Kong.

# References

Gunter, B., Sancho-Aldridge, Jane & Moss, Robin (1993). Public Perceptions of the Role of Television in Raising AIDS Awareness. *Health Education Journal* 52, 19-27.

Pollock, Philip H. III. (1994). Issues, Values, and Critical Moments: Did Magic Johnson Transform Public Opinion on AIDS. *American Journal of Political Science* 38:2, 426-446.

Tesoriero, James M., Sorin, Martin, D., Burrows, Karen A. & ÿ LaChance-McCullough Malcolm L. (1995). Harnessing the Heightened Public Awareness of Celebrity HIV Disclosures: "Magic" and Cookie" Johnson and HIV Testing. *AIDS Education and Prevention* 7:3, 232-250.

# Appendix: Sample profile

	n	%		n	%
Age			Sex		
18 - 20	147	11.5	Male	606	47.6
21 - 25	196	15.4	Female	668	52.4
26 - 30	249	19.6	Marital status		
31 - 35	233	18.3	Single	408	40.7
36 - 40	200	15.7	Married	588	58.6
41 - 45	117	9.2	Divorced	5	0.5
46 - 50	73	5.7	Widowed	2	0.2
51 - 55	18	1.4	Occupation		
56 - 60	40	3.1	Administrative	54	5.4
Education			Professional	47	4.7
No formal	21	1.7	Technical	105	10.5
Primary 1 - 6	141	11.1	Clerical	182	18.2
Secondary 1 - 3	210	16.5	Sales	71	7.1
Secondary 4 - 5	502	39.5	Ordinary worker	232	23.2
Secondary 6 - 7	108	8.5	Unemployed	28	2.8
Postsecondary	289	22.7	Student	98	9.8
			Homemaker	185	18.5

# Attitudes of Health Care Workers on AIDS in Hong Kong

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# **Abstract**

This presented study aims at (1) assessing levels of the avoidance attitude of various health care professions in Hong Kong, (2) scrutinizing variation in the attitude due to professional groups, and (3) determining effects of perceived susceptibility at work, knowledge about AIDS, confidence in providing services, training on AIDS, and endorsement of professional duty on the avoidance attitude. A mail survey collected data from 4,615 health care workers in various professions in 1995 and medical students in 1996. This sample represented an overall response rate of 21.9% and included 1,266 (27.4%) doctors (including 579 public doctors, 248 private doctors, and 92 medical students), 1949 (42.2%) nurses, 689 (14.9%) medical laboratory technicians, 191 (4.1%) occupational therapists, 247 (5.4%) radiographers, 216 (4.7%) physiotherapists, and 57 (1.2%) optometrists. Around 20.6% to 24.1% of health care workers (including medical students) were unwilling to take care of HIV/AIDS patients, reluctant to have physical contact with them, and likely to ask for a transfer to avoid taking care of them. Among them, medical students were most likely (38.8%) to be reluctant to have physical contact with HIV/AIDS patients. One-third of health care workers, especially medical students (44.2%), perceived themselves to have a high chance of contracting HIV in the job. Majority of them had proper knowledge about HIV transmission, except about the unfeasibility of transmission through mouth-to-mouth kissing (47.8%). However, fewer of them knew about antiretroviral drug treatment (24.3%), especially occupational therapists (8.2%) and perceived themselves to have good knowledge (12.6%). Relatedly, few (27.3%) of them, especially among occupational therapists (14.2%) were confident to manage HIV-infected patients. High amounts of knowledge and experience with AIDS and training on AIDS were associated with willingness to take care of HIV/AIDS patients. Some health care workers were unwilling to take care of AIDS patients. Training that promote health care workers' knowledge and confidence would be necessary to dispel the unwillingness.

# **Problems**

Health care workers' (HCW) avoidance of persons with HIV/AIDS has been a common concern both in the field of medical services and in the research literature. Such an attitude is not uncommon in Western countries (Dworkin et al., 1991; Kunzel and Sadowsky 1993). The attitude is problematic because it undermines effective and nondiscriminatory medical services, as well as being contradictory to the professional ethic of caring for AIDS patients (Kunzel and Sadowsky 1993). As a result, HCW's avoidance of AIDS patients will be detrimental to those who need the services (Dworkin et al., 1991). To assess and dispel the discriminatory attitude among HCW in Hong Kong, the present study examines the plausible causes of the attitude of avoidance, including perceived susceptibility to HIV infection at work, lack of knowledge, training, and experience in caring for AIDS patients (Fishbein et al., 1993; Kunzel and Sadowsky 1993; Van der Velde and Van der Pligt 1991).

# **Objectives**

Taking account of the aforementioned problem, the present investigation has objectives to: (1) assess levels of the avoidance attitude of various health care professions in Hong Kong, (2) scrutinize variation in the attitude due to professional groups, and (3) determine effects of perceived susceptibility at work, knowledge about AIDS, confidence in providing services, training on AIDS, and endorsement of professional duty on the avoidance attitude. Through clarifying the role of knowledge, training, and other variables, this study offers useful implications for improving health care workers' services provided to persons with HIV/AIDS.

# Methods

From March 1995 to July 1995\*, the study employed a mail survey of 21,068 health care workers (HCW) in Hong Kong by sending them questionnaires and self-addressed and stamped return envelopes. The target HCW represented whole populations of HCW registered in the relevant professional bodies. There were 4,615 valid questionnaires returned. This sample represented an overall response rate of 21.9% and included 1,266 (27.4%) doctors (including 579 public doctors, 248 private doctors, and 92 medical students), 1949 (42.2%) nurses, 689 (14.9%) medical laboratory technicians, 191 (4.1%) occupational therapists, 247 (5.4%) radiographers, 216 (4.7%) physiotherapists, and 57 (1.2%) optometrists. Among them, 60.3% were female, 81.7% working in public institutions, 48.9% aged between 21 to 30 years, 34.6% aged between 31 to 40 years, 35.4% having 1 to 5 years of postgraduation experience, 24.3% having 6 to 10 years, 20.7% having 11 to 20 years, and 10.5% having more than 20 years of postgraduation experience.

The measurement of the avoidance attitude involved seven five-point Likert-type items. The composite score of the these three dimensions attained a high level of reliability ( = .758). The measurement of knowledge about HIV transmission or lack of common misconceptions was a composite of six five-point Likert-type items ( = .540, with standardized scores). The measure of confidence in providing AIDS-related services was based on two five-point Likert-type items ( = .694). Measures of knowledge about management and the progression of AIDS, the perceived adequacy of knowledge, perceived susceptibility to HIV infection at work, endorsement of professional duty to care for AIDS patients, number of AIDS patient having been cared in the previous year, and the total length of training on AIDS were based on single items.

# Results

About one-third (33.1%) of the HCW in the sample had taken care of some AIDS patients in the previous year (see Table 1). Among all HCW in the sample, one-fifth (20.6%) of HCW were not willing to take care of HIV/AIDS patients. Multiple comparison tests (by the Student-Newman-Keul test) showed that compared with public doctors, laboratory technicians (difference on the five-point scale = 0.55), nurses (0.50), optometrists (0.47), radiotherapists, and private doctors (0.22) were more unwilling to care for AIDS patients. Avoidance of AIDS patients was even higher in terms of their reluctance to have physical contact with AIDS patients (25.8%) and likelihood to ask for a transfer to another unit due to the requirement to care for AIDS patients on a regular basis (24.1%).

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<sup>\*</sup> Questionnaires were sent to medical students in March 1996

Table 1 Avoidance, susceptibility, and knowledge about AIDS (%)

	Public doctors	Private doctors	Medical students	Nurses	Lab. techni- cians	Occupational therapists	Radio- graphers	Physio- therap- ists	Opto- metrist	Total
Avoidance of AIDS patients										
I am not willing to take care of HIV/AIDS patients	13.1*	21.5	29.9	22.0	27.1	16.3	22.3	12.5	23.2	20.6
I am reluctant to have physical contact with HIV/AIDS patients to whom I provide the care	20.9*	29.9	38.8	24.8	30.1	18.6	37.4	20.5	28.1	25.8
I would have to ask for a transfer to another unit if I had to care for an HIV/AIDS patient on a regular basis	18.7*	26.7	35.5	27.9	23.5	13.8	23.3	16.3	26.8	24.1
Susceptibility: I have a high chance of getting HIV through managing/ caring HIV-infected patients  Knowledge that HIV cannot	22.1*	22.0	44.2	41.4	38.5	23.4	31.8	25.6	14.0	33.4
be transmitted through										
Hand-shaking	99.4	99.5	100.0	99.5	98.8	99.5	99.2	100.0	100.0	99.4
Eating together	98.8	98.6	100.0	97.6	96.9	98.4	97.9	97.1	97.1	97.9
Swimming in the same pool with someone with HIV/AIDS	92.7*	88.0	88.6	82.2	85.6	89.4	82.8	82.3	91.2	85.5
Coughing	88.3*	82.9	83.3	79.6	73.2	85.6	77.9	72.9	78.9	80.3
Mosquito bites	81.4*	79.9	88.9	68.7	64.5	69.1	65.3	59.7	80.7	71.1
Mouth-to-mouth kissing	51.0*	41.2	55.1	47.9	47.8	53.5	40.0	50.7	43.9	47.8
Knowledge about										
management of AIDS										
Procedures for avoiding hepatitis B infection and HIV infection are similar	87.1*	83.7	82.0	73.6	74.2	55.4	64.3	61.1	43.9	74.6
The chance of being infected by an HIV-contaminated needle- stick injury is less than 1%	73.1*	52.1	81.4	40.3	36.9	42.0	29.5	32.0	29.6	45.8
Antiretroviral drug treatment for AIDS patients can improve their prognosis	36.9*	39.1	36.4	20.9	22.4	8.2	15.7	11.2	14.3	24.3
Perceived knowledge about	20.2*	18.6	10.3	11.7	11.4	3.7	5.3	4.3	7.0	12.6
AIDS: Good or very good										
Confidence in providing										
AIDS-related services										
My knowledge of HIV/AIDS is sufficient to give advice on the infection to patients' families and friends	56.2*	53.1	40.9	31.0	23.9	12.2	19.7	18.1	21.1	34.1
I feel that I have adequate skills/knowledge to manage HIV-infected patients	35.3*	26.6	35.4	28.5	24.6	14.2	24.3	21.8	15.8	27.3

<sup>\*:</sup> significantly different among professional types at the 2-tailed .05 level by Kruskal-Wallis's test

The overall level of avoidance seemed to be high and inconsistent with the high proportion of HCW who endorsed professional duty to care for AIDS patients (89.8%). Multiple comparison tests showed that compared with public doctors, laboratory technicians (difference on the five-point scale = 0.48), optometrists (0.42), radiographers (0.42), nurses (0.38), and private doctors (0.18) expressed higher avoidance. Moreover, compared with private doctors, laboratory technicians (difference on the five-point scale = 0.30), radiographers (0.27), and nurses (0.20) showed higher avoidance. Besides, laboratory technicians displayed more avoidance than nurses (difference on the five-point scale = 0.10), physiotherapists (0.35), and occupational therapists (0.41).

Although most HCW (80.2%) were knowledgeable about the low chance of HIV transmission through daily contact, they were less knowledgeable about management of AIDS (see Table 1). Regarding the latter, less than half of HCW knew about the function of antiretroviral drug treatment (24.3%), the progress of AIDS (43.1%), and the chance of being infected by an HIV-contaminated needle-stick injury (45.8%). Even fewer HCW (12.6%) perceived their knowledge about AIDS as good. Their confidence in providing AIDS-related services was not high, in terms of managing AIDS patients and giving advice to their families. In fact, the majority (71.2%) of HCW had attended less than 3 hours of training on AIDS (see Table 2).

Table 2 Self-perceived adequacy of knowledge about AIDS, training, and the number of AIDS patients cared (%)

Self-perceived adequacy	Public doctors	Private doctors	Medical students	Nurses	Lab. techni-	Occupa- tional	Radio- graphers	Physio- therap-	Opto- metrist	Total
					cians	therap-		ists		
Endorsement of professional	93.7	94.3	90.1	86.5	88.7	ists 94.1	91.1	92.9	94.3	89.8
duty for caring: Health care										
workers have professional duty										
to care for HIV/AIDS patients										
Total hours of training										
< 3	68.2	64.1	47.5	70.7	69.1	90.6	80.8	83.2	87.2	71.2
3 - 10	20.7	24.8	46.3	22.3	22.8	7.1	14.1	14.7	12.8	21.3
> 10	11.1	11.1	6.2	7.0	8.1	2.3	5.1	2.1	0.0	7.5
Number of AIDS patients										
cared										
0	58.4	83.8	78.6	66.0	64.3	93.0	37.1	74.6	85.5	66.9
1 - 2	28.2	13.2	20.2	24.2	14.3	4.8	31.6	18.3	12.7	21.2
3 - 4	6.4	1.9	1.2	5.9	6.0	0.5	13.5	4.7	0.0	5.8
5 - 6	2.1	0.0	0.0	1.7	1.7	0.5	3.4	1.9	1.8	1.6
> 6	3.0	1.1	0.0	2.1	13.8	1.1	14.3	0.5	0.0	4.4

<sup>\*:</sup> significantly different among professional types at the 2-tailed .05 level by Kruskal-Wallis's test

#### Correlates of avoidance attitudes

Correlation analysis showed that higher avoidance and unwillingness to care for AIDS patients were associated with higher perceived susceptibility, not having cared for AIDS patients, less knowledge about HIV transmission, less knowledge about management of AIDS, and poorer self-perceived knowledge, less confidence in providing AIDS-related services, and having attended less training on AIDS (see Table 3). Perceived susceptibility displayed the

strongest association with the avoidance attitude among the correlates. Next came knowledge about HIV transmission or lack of common misconceptions.

Table 3 Significant correlates (p < .001) with avoidance and unwillingness to take care of AIDS patients

	Avoidance	Unwilling to
	of AIDS	care of
	patients	AIDS
		patients
Knowledge about HIV transmission (Few common misconceptions)	317	233
Knowledge that procedures for avoiding hepatitis B infection and HIV	138	124
infection are similar		
Knowledge that the chance of being infected by an HIV-contaminated	171	143
needle-stick injury is less than 1%		
Knowledge that antiretroviral drug treatment for AIDS patients can improve	089	096
their prognosis		
Perceived knowledge about AIDS is good	200	183
Confidence in providing AIDS-related services	292	271
Perceived susceptibility to HIV infection at work	.403	.305
Endorsement of professional duty	178	181
Having cared for AIDS patients in the previous year	058	067
Total length of training on AIDS	159	140

# Conclusion

Considerable proportions of HCW in Hong Kong expressed avoidance attitudes toward caring for AIDS patients. The avoidance attitude appears to correlate with insufficient knowledge, especially knowledge about management of AIDS, training, inadequate self-perceived knowledge, low confidence in providing AIDS-related services, and perceived susceptibility, to the avoidance attitude. To reduce avoidance among HCW, it is necessary to change the preceding factors leading to the attitude by removing the anxiety of self-perceived susceptibility. This effort should be achieved by providing training to promote knowledge about management of AIDS and HIV transmission, their self-confidence in managing HIV/AIDS. Special attention should also be paid to particular groups of HCW, such as nurses and laboratory technicians.

# References

Dworkin, J., Albrecht, Gary & Cooksey, Judith (1991). Concern about AIDS among Hospital Physicians, Nurses, and Social Workers. *Social Science and Medicine* 33:3, 239-248.

Fishbein, M., Middlestadt, Susan E. & Hitchcock, Penelope J. (1994). Using Information to Change Sexually Transmitted Disease Related Behaviors: An Analysis Based on the Theory of Reasoned Action. In DiClemente, Ralph J. & Peterson, John L. (eds.) (1994). *Preventing AIDS Theories and Methods of Behavioral Interventions*. New York: Plenum Press, 61-93.

Kunzel, Carol & Sadowsky, Donald (1993). Predicting Dentists' Perceived Occupational Risk for HIV Infection. *Social Science and Medicine* 36:12, 1579-1586.

Van der Velde, Frank W. & Van der Pligt, Joop (1991). AIDS-Related Health Behavior: Coping, Protection Motivation, and Previous Behavior. *Journal of Behavioral Medicine* 14:5, 429-451.

# Symposium D:

Prevention & Education

# How Much Do Hong Kong and Asia Pacific Travellers Understand About HIV/AIDS Risk? The Need for Effective Intervention.

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#### **Abstract**

The primary aim of this project is to estimate HIV/AIDS related knowledge, attitudes and self reported risk behaviour among travellers departing from Hong Kong and to develop a profile of risk behaviour during travel on the basis of their response, to support the design of interventions in continuing health promotion. 438 (87% acceptance rate) travellers were interviewed at the Departure Lounge of Kai Tak International Airport between May and June 1996. A structured pre-tested questionnaire was used during interview. A systematic sampling method was used in selecting the samples. Additional information about responders and non-responders was obtained from interviewers during debriefing sessions. Among the subjects 23% were ethnic Chinese, 45 % were Caucasian, 31% were other Asians and 1% Africans. 35% of the travellers were single and 57% were married; 37% of the participants were business travellers, 28% were tourists, 33% were transit passengers with 2% in other categories. Those (90%) who had travelled within the last 12 months travelled mainly to China, USA, Singapore, Thailand, Taiwan and Philippines. Travel destinations were related to reported high risk sexual behaviour during travel. 44% of those who travelled within the last 12 months had sex during their travel either with a local person, another tourist or with prostitutes. Only 47% of all the subjects reportedly use a condom always, while 16% use them sometimes or often and 37% do not use a condom. 53% of the travellers think that certain individuals travel abroad for sexual entertainment and 31% were neutral on this point. A proportion of respondents have inadequate knowledge about the route of transmission of HIV infection. Travellers are frequently involved in high risk sexual behaviour during their travel which is associated with various factors such as, availability of services, affordability and the personal intention of having sex with people of different race/ethnicity. Inadequate knowledge about HIV/AIDS and inappropriate attitudes are also associated with high risk sexual behaviour. In Hong Kong and the Asia Pacific, there is an urgent need to target travellers in any strategy to prevent HIV/AIDS in the region.

#### Introduction

Travel is considered as an important vector in the spread of HIV infection in the Asia Pacific region as elsewhere in the world. Studies conducted elsewhere (2,3,6,9,13) indicated significant relationships between travel, sexual behaviour and being infected with HIV. Studies conducted among Japanese tourists in Thailand (14) and among sub-continent travellers in Hong Kong (1) indicated high risk sexual behaviour with commercial sex workers. There is considerable evidence that problems associated with sex during travel should be a high priority in preventive strategies for HIV in the region. All of this recognises sex as an issue during travel which definitely carry potential risk for HIV infection.

From the early stages of the HIV epidemic, Hong Kong initiated a range of HIV control and prevention programmes with the potential to benefit its citizens. However, one important area in the prevention of HIV/AIDS has been relatively neglected. That is travel and its relationship to HIV/AIDS. Nothing has been done to target travellers in Hong Kong, in contrast to the targeting of travellers in the prevention strategies of HIV/AIDS in many other countries of the world.

Hong Kong as an international hub, entertains a large number of both business and holiday travellers each year. The high per capita incomes of the Hong Kong population, limited local entertainment facilities and the availability of hospitality services in neighbouring countries encourages a large number of local people to travel out of Hong Kong. The demand for overseas travel is increasing everywhere in the world and Hong Kong residents made over 34 million

overseas visits in 1995, which is a 42% increase compared to 1990 (Hong Kong Tourist Association).

This report describes preliminary investigations by this Department to explore the HIV/AIDS related risk behaviour in Hong Kong travellers.

#### Methods

Travellers (those who travel between Hong Kong and other countries either for business or tourism) were interviewed in the departure lounge of Kai Tak International Airport by trained multi-lingual interviewers between May and June 1996. A structured questionnaire which was presented in either Chinese or English was used to obtain information on demographic characteristics, knowledge of routes of HIV transmission, recognition of high risk groups, general knowledge about HIV/AIDS, preferences for travel destinations, self-efficacy towards condom use and risk behaviour, substance use, safe sex practice and travel history over the previous year. The questionnaire was interpreted into other languages (including Mandarin, Japanese, Hindi, Bengali, French & German) by interviewers during the interview, if it was necessary.

# Results

A total of 504 participants were approached and 438 (87% response rate) agreed to be interviewed. Among the subjects 45% were Caucasian, 23% were Chinese, 31% were other Asians and 1% were Africans. 17% of the travellers were in the age range 18-25 years; 65% were 26-45 years and 18% were 46-65 years. Seventy-five percent were male and 25% were female; 57% were married, 35% were single and 8% were separated/divorced/cohabiting. Most (72%) of the participants were University or college graduates. About 90% (383/438) of the respondents had travelled at least once within the previous year (figure 1). Forty four percent (169/438) of those who had travelled within the previous year had sex with strangers (local people, commercial sex workers or another tourist whom they knew while travelling) with or without payment (figure 2).

Figure 1 Percentage of travellers travelled within the previous year (n=438)

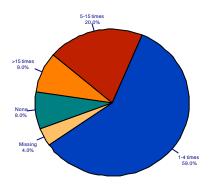
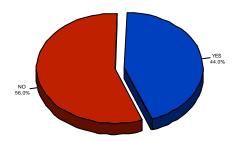
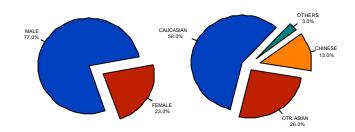


Figure 2 Sex with strangers during travel within the previous year (n=383)



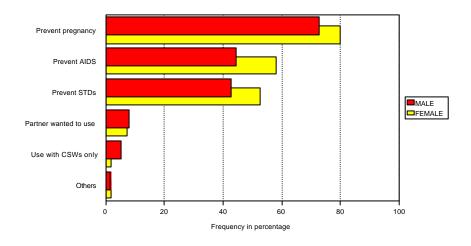
Of those who had sex while travelling 77% were male, 58% were Caucasian and 13% were ethnic Chinese (*figure 3*).

Figure 3 Distribution of gender and ethnicity among those who had sex during travel (n=169).



The usual practice of condom use varied among those who had travelled within the previous year and had sex, those who had travelled within the previous year and did not have sex and those who did not travel within the previous year (*table 1*). Most of the respondents (>75 %) generally use condoms, mainly to prevent pregnancy (*figure 4*).

Figure 4 Reasons for using condoms among male (n=324) and female (n=109)



Of those who had sex during travel and reportedly do not use condom in general: 82% were male, 76% were married, 68% were Caucasian and 50% were within the age range of 26-45 (*table 2*).

Table 1 Usual practice of condom use among the subjects (%)

	during travel within the	Those who did not have sex during travel within the previous year (n=212)	travel within the
Yes	65	52	44
No	30	38	36
Not applicable	5	10	20

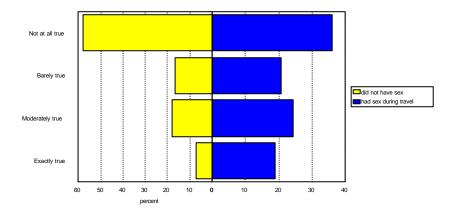
Table 2 Demographic characteristics of those who had sex during travel within the previous year and usually do not use condoms (n=50).

Gender:		Marital status	s:
Male 82%		Married	76%
Female 18%		Single	16%
		Others	8%
Ethnicity:		Age distribut	ion:
Caucaisian	68%	18-25	12%
Chinese and other Asians	28%	26-45	50%
Africans	4%	46-65	38%

More than 90% of the respondents had adequate knowledge in identifying high risk groups (intravenous drug addicts, prostitutes, people who have multiple sexual partners). Knowledge about the routes of HIV transmission were not adequate among the respondents in certain activities. A proportion of respondents believed that shaking hands (4%), kissing (32%), using the same toilet (19%), sharing eating utensils (27%), using the same swimming pool with other people (17%) and mosquito bites (35%) carry a medium to very high risk in transmitting HIV infection. Six percent of respondents thought that there is a medical cure for AIDS and 12% did not know that prevention is currently the only solution to the HIV/AIDS problem.

Of the respondents, 41% had an HIV antibody test and 77% are afraid to some extend of getting infected with HIV (barely true to exactly true). This perception (afraid of getting infected with HIV) decreased to 48% among those who had sex while travelling and reportedly do not use condoms (n=50). Perceptions of having multiple sexual partners were higher among those who had sex while travelling (n=169) compared to those who did not have sex.

Figure 5 Acceptability of having multiple sexual partners among those who did not have sex during travel (n=212) and those who had sex during travel (n=169).



#### Discussion/Conclusion

This study demonstrated high acceptance (87%) of this kind of enquiry and approach among travellers. The result of the study suggested that a considerable proportion (44%) of travellers do have sex with strangers during travel. Our findings are comparable with studies conducted elsewhere (4,5,7,8,10-12) and also indicated low perceptions of risk among the high risk travellers, that is those who have sex during travel and generally do not use condoms, those who are mainly male, married and medium aged travellers and those who carry a potential for the spread of the infection through cross-sectional transmission. The lower rates of sexual activity reported by Chinese travellers may be related to (i) conservative in disclosing their behaviour on sexual issues (ii) lack of confidence about the anonymity of the study and (iii) low actual rates of sexual contact during travel. Further studies are warranted to define the factors which are associated with perceptions of risk and both low and high levels of risk behaviour in travellers in the region.

#### Acknowledgements

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# References

- 1. Abdullah, ASM, Hedley, AJ & Fielding, R. (1995). Knowledge, attitude, behaviour and beliefs about HIV/AIDS among sub-continental travellers in Hong Kong. *Proceedings of the workshop on "HIV/AIDS and Mobility"*, *Dhaka, Bangladesh, December 3-5*, 1995.
- 2. Allard, R, & Lambert G. (1992). Knowledge and beliefs of international travellers about the transmission and prevention of HIV infection. *Canadian Medical Association Journal* 146:3, 353-359.
- 3. Carswell, JW, Lloyd, G & Howells, J. (1989). Prevalence of HIV-1 in east African lorry drivers. *AIDS* 3, 759-761.

- 4. Frei, M. & Baltes, R. (1990). AIDS: risk for tourists and assistants in developing countries. *Therapeutische Umschau (Bern)* 47:10, 819-26.
- 5. Hawkes, S., Hart, GJ, Johnson, AM, Shergold, C., Ross, E., Herbert, KM, Mortimer, P, Parry, JV & Mabey, D. (1994). Risk Behaviour and HIV prevalence in international travellers. *AIDS* 8:2, 247-252.
- 6. Hawkes, S. & Hart, GJ (1993). Travel, migration and HIV. *AIDS Care* 5:2, 207-214.
- 7. McGurk, MD. (1991). AIDS and the international traveller. *Occupational Health-Lond* 43:3, 74,76,78.
- 8. Mann, J. (1988). AIDS information for travellers. *Bulletin of the International Union Against Tuberculosis and Lung Disease* 63:2, 29-30.
- 9. Merino, N., Sanchez, RL, Munoz, A., Prada, G., Garcia, CF & Poik, BF. (1990). HIV-1, Sexual practices and contact with foreigners in homosexual men in Colombia, South America, *Journal of AIDS* 3:4, 330-334.
- 10. Mulhall, BP, Hu, M., Thompson, M. & Lin, F. et al. (1993). Planned sexual behaviour of young Australian visitors to Thailand. *Med J Aust* 158, 530-535.
- 11. Oya, A. (1992). Potential for spread of HIV in Japan. Nippon-Koshu-Eisei-Zasshi. *Japanese Journal of Public Health* 39:4, 193-5.
- 12. Von Reyn, CF, Mann, JM & Chin, J. (1990). International travel and HIV infection. *Bulletin of the World Health Organization* 68:2, 251-259.
- 13. Vittecoq, D., May, T. & Roue, RT (1987). AIDS after travelling in Africa: an epidemiological study in seventeen Caucasian patients. *Lancet* 1, 612-614.
- 14. Vorakitphokatorn, S. & Cash, R. (1992). Factors that determine condom use among traditionally high users: Japanese men and commercial sex workers in Bangkok, Thailand. *Poster presented at the VIII International Conference on AIDS/III STD World Congress, Amsterdam 19-24 July 1992*.

# **Delivering AIDS Education via Computerised Hot-line System**

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#### **Abstract**

This paper will give a brief overview of the general features of the computerised AIDS Hot-line under Department of Health and to review its effectiveness in delivering health education to the general public. It is a retrospective analysis based on findings of previous reports, i.e. the computerised reports of the AIDS Hot-line; the IVPS Post-Implementation Progress Evaluation, the Clients' Satisfaction Survey and the Traffic Measurement Report in early 1996. The toll-free system has made easy the accessibility of the AIDS Hot-line and the HIV antibody test to the public. Responses/statistics of reports indicated that the line number and the counsellors capacity are sufficient to meet the demand. AIDS related crisis/activities help to enhance public awareness. Also reports on the distribution of calls per message can provide information valuable to management. The foreign language lines attend to the needs of the ethnic minority groups. Counsellors are adequately trained and emotionally supported in their work. The quality of the messages are guaranteed by frequent updates. For more rigorous research to take place, it would be necessary to upgrade the AIDS Hot-line to tell the demographic variables of its callers. More sophisticated training for the workers is needed to cope with the evolving AIDS information. Epidemiological data and public concern on safer sex highlight the need to add women specific messages.

#### Introduction

The AIDS Hot-line[(852) 2780 2211], since its formal establishment in 1987, has been complementary to other AIDS services and education. It serves also as an intermediary between the general public and the HK AIDS programme. Evaluation of its effectiveness has implications for programme planning, quality assurance and staff training. The objectives of this paper are to give a brief overview of the general features of the computerised AIDS Hot-line under the public health system, and to evaluate its effectiveness in delivering health education to the general public.

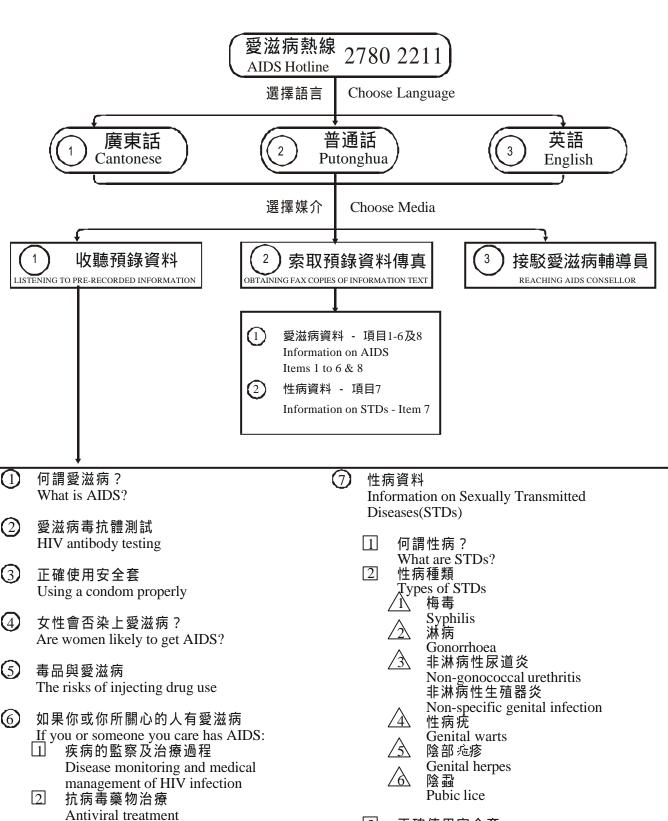
# Methodology

The evaluation is a <u>retrospective analysis</u> based on findings of the following:

- The Post-Implementation Progress Evaluation 1994-a quantitative report, done by the Efficiency Unit, which measured the distribution of hourly telephone traffic in percentage of daily total calls over a 10 weeks period from May to July 1993 and a 7 month period from Sept. 93 to March 94.
- The Clients' Satisfaction Survey-a qualitative approach to review the service delivery from the callers' perspective, done between 10.10.95 and 9.1.96, henceforth referred to as the Survey. Its study population was those who attended the HIV antibody testing.
- The Traffic Measurement Report-prepared by the HK Telecom, a technical report which randomly measured the hourly successful and failure calls from 21.4.96 to 27.4.96.
- The in-house statistics from Jan 96 to Aug 96-computerized monthly records of the total number of calls, the breakdown number of calls for each message in each hour, and distribution of fax requirement for each message.

# General Features of the AIDS Hot-line

- It is a combination of the computerised recorded messages system and direct-access to counsellors system since April 93 via four hunting lines.
- 2 Texts of recorded messages can be sent by fax on demand.
- 3 Callers are allowed the choice of three languages, i.e. Cantonese, Putonhua or English.
- 4 Counsellors working hours are from 8 am to 8 p.m. weekdays, while the recorded messages are available 24 hours every day.
- Another prime number [(852) 2359 9112] with four hunting lines delivers recorded messages in Tagalog, Vietnamese or Thai.
- 6 The Hot-line workers are all Nursing Officers of the AIDS Unit.
- 7 Maintaining confidentiality or caller anonymity is a key feature of the AIDS Hot-line.
- The AIDS Hot-line is also a means for at-risk members of the public to request free HIV Antibody Test and face-to-face counselling.
- At present, there are 11 messages on AIDS and 10 on Sexually Transmitted Diseases on the AIDS Hot-line. (see details of hot-line contents on attached list)



3

5

機會性感染的預防及治療

opportunistic infection

HIV/AIDS

Treatment and prophylaxis for

帶病毒者/愛滋病患者要注意的事項

Supporting people living with HIV/AIDS

Some basic issues for people with

給帶病毒者/愛滋病患者的支持

- ③ 正確使用安全套 Using a condom properly
- 氧生署社會衛生科診療所地址及診症時間 Addresses and consultation hours of Social Hygiene Clinics, Department of Health
- 8 外遊人士與愛滋病 AIDS and Travellers

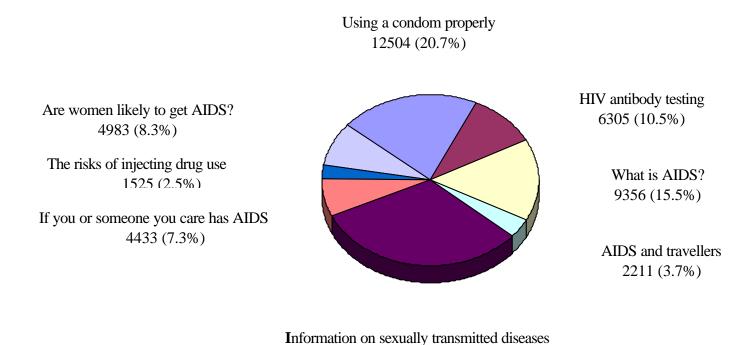
#### Results

#### **Effectiveness**

- The toll-free telephone system and the availability of telephones in HK ensure the
  accessibility of the AIDS Hot-line and subsequently, the HIV antibody test to the public in
  need.
- According to the Post-Implementation Progress Evaluation, the computerised system is
  effective in evenly spreading the telephone traffic across the day, ensuring the consistency of
  information delivered, and providing valuable management information about the distribution
  of calls per hour.
- In the past year, the AIDS Hot-line received an average of 8,000-10,000 calls per month. At times, however, wider fluctuation in number of calls were observed. For example, there were nearly 17,000 calls in Aug 96, which might reflect changes in level of public awareness following the launching of the Dr. Sex Hot-line in July 96.
- Operational effectiveness may be reflected by the Survey which indicated that most clients (63.4%) find the operation of the computerised AIDS Hot-line relatively easy. Prolonged and frustrating re-dialling were uncommon, with the majority (83.3%) only needed to make one or two attempts to reach the counsellors. The Traffic Measurement Report also showed that an average of 98% callers are successfully connected to the AIDS Hot-line.
- The interests of the ethnic minority groups and migrant populations are being served by the Putonghua and the foreign language line of the AIDS Hot-line.

#### Quality

The recorded messages on the Hot-line are subject to frequent updates to address the changing needs of the community. STD messages were added in Dec. 94, the 'AIDS and Travellers' in May 95 and 5 messages about care of HIV seropositive people under the topic 'If you or someone you care has AIDS' in July 96. Messages on 'Using a condom properly' and 'Addresses and registration hours of social hygiene clinics' were also amended twice recently. (details of hot-line contents refer attached list) The message on 'using a condom properly' has been the most popular, comprising an average of 20% total message calls from Jan to Aug 96. (Figure 2). Public interest on the condom message highlights the importance of sexual health, the main theme of the recently installed Dr. Sex Hot-line.



19009 (31.5%)

Fig. 2 Utilization of Pre-recorded Messages of AIDS Hotline (Jan – Aug 1996)

All statistics are not based on total number of calls but total number of messages accessed.

The AIDS Hot-line is manned by experienced and medically qualified Nursing Officers as counsellors. Apart from local training, some of them have received AIDS specific training overseas. Moreover, back-up for the nurse counsellors as the ease of access for good information from physicians or in the resource library is available within the clinic. The hand-over sessions, unit meetings and social events further provide an important forum for them to share experiences and feelings with one another.

### **Operational Problems**

- The lack of visual clues in the interaction process and the one-off contact basis may affect the quality of counselling.
- Regarding methodological issue, demographic characteristics are not currently recorded and some clients may be reluctant of releasing such information.

#### Discussion

Statistic indicating operational effectiveness also suggested that the line number and counsellor capacity are sufficient to cater for the current demand. Accessibility of the HIV antibody test via the AIDS Hot-line is necessary for obtaining accurate epidemiological data, an important public health measure. Ease of access ensures the effectiveness of the AIDS Hot-line, but also opens it to misuse which is inevitable for most services to the public. For more rigorous research to take place, demographic variables of callers are needed to determine the profile of the existing users and the extent to which target audiences are using the AIDS Hot-line. Public concern on safer sex and the changing epidemiological data highlight the need to address women specific issues, for example, the use of female condom. However, care must be taken to exclude the commercial element that goes with the female condom message. Moreover, to cope with the evolving global AIDS information, it is necessary for the nurse counsellors to have ongoing, updated and intensified training. This has to be adapted, however, in the context of busy medical settings. Ongoing publicity activities are essential to maximise the extent to which the service is used to capacity. The AIDS Hot-line would continuously be of use as an evaluation tool of other activities, in the same way as the Survey enlisted clients' feedback on the time and schedule of the HIV antibody test.

On the whole, the responses/statistics shown in the Survey/reports are both positive and encouraging. We are reasonably certain that, within the constraints of its operational problems, the AIDS Hot-line would continue to be a service to which the public look for guidance and support in the future.

#### References

AIDS Unit, Department of Health (1996). *Clients' Satisfaction Survey: In-house Report.* Hong Kong: AIDS Unit, Department of Health

AIDS Unit, Department of Health (1996). *The AIDS Hotline Monthly Computerized Reports* (1995/96) *In-house Report*. Hong Kong: AIDS Unit, Department of Health.

Frutchey, C., Christen, P. & Rittinger, D. (1987). *The Hot-line Training Manual*. San Francisco: AIDS Foundation.

Health Promotion Wales (1995). Analysis of the Operation of HIV/AIDS Help-lines in the European Union.

IVPS Post-Implementation Progress Evaluation Health Department: AIDS Counselling (1994) Department of Health

Telephone Counselling for People with HIV. (1991) Focus: A Guide to AIDS Research and Counselling. Vol. 6 No.9

Traffic Measurement Report for Department of Health 21.4.96 - 27.4.96 HK Telecom.

# Street Addicts Surveys and Out-reaching Harm Reduction

Ch' ien James, Lo, B.C. & Mau, F.C., Pui Hong Self-Help Association

#### **Abstract**

Since 1988, the author has chaired a Working Group on Drug Abuse & AIDS of CEPAIDS, composed of Government and Non-Governmental Organisations involved with drug rehabilitation to stimulate HIV/AIDS awareness and reduce drug induced risks and harms among drug users in Hong Kong. Street surveys have been conducted annually since 1991 to ascertain the trend of narcotic addicts' risk behaviour. Members of the Pui Hong Self Help Assn. were recruited and trained to serve as out-reaching street workers for interviewing active addicts at large, offering peer counselling, collecting saliva samples, retrieving abandoned syringes and demonstrating harm reduction measures. Data gathered in the past four years are analysed and compared for professional reference. According to the pre-and-post intervention tests conducted at seminars/workshops as well as the street survey findings, drug users have shown an increasing awareness of unsafe drug use and sex. Increasingly the majority respondents had received multi-media communication on HIV/AIDS and to a lesser degree participated in educational activities. A slow increase in proper cleansing of needles or changing to non-injecting mode of use is also observed. Significantly needle sharing IDUs decreased from 36.3% among 1992 samples to 10.5% in 1995 and the low risk group of heroin smokers rose from 17.8% to 29.6%. Out of some 20,000 body fluid samples screened by the Dept. of Health by end of June 1996, 14 were found to be HIV+ including four cases of full blown AIDS. We submit that the ready availability of treatment slots, the easy access to cheap disposable syringes, the combination of macro information campaigns as well as micro intervention and the interdisciplinary approach in mobilising human resources for harm reduction have all contributed to keep the prevalence rate of HIV/AIDS below 0.1% among drug users in Hong Kong. Recommendations are made to keep the HIV prevalence among drug users as low and as long as possible.

# Background & Objective

Ever since 1991, annual surveys of street addicts' knowledge, awareness, attitude, behaviour and practice concerning HIV/AIDS have been conducted by the Working Group on Drugs and AIDS of CEPAIDS in Hong Kong with the support of SARDA and PHSHA<sup>1</sup>. The fifth street survey took place in December 1995 with an aim to ascertain the general trends of KABP and levels of risk taking among addicts currently not under residential treatment. For the past four years, trained street workers also rendered informal counselling and peer intervention to reduce harms and health risks associated with heroin addiction.

# Methodology

For the first street survey in 1991, a set of questionnaires was designed on the basis of the authors' experience since 1988 in conducting K.A.B.P. surveys among drug abusers under treatment and aftercare<sup>2</sup>. This was subsequently revised to a guideline format early in 1992 to facilitate informal street interviews which has been adopted for the past four years<sup>3</sup>. For 1995, a total of 20 former drug users who were members of the PHSHA, were recruited as interviewers. They attended an orientation course beforehand and learned how to deal with the possible resistance of the potential interviewees and conducted the interviews skilfully in a manner of casual conversation. Recordings were done between interviews. As to out-reaching harm reduction, the team of PHSHA volunteers who each carried an educational kit, went out to distribute its contents including pamphlets, samples of disposable syringe, bleaching solutions etc. and collected saliva samples for testing as well as abandoned syringes for incineration.

# Case finding and Responses

For 1995, a total of 500 active drug users including 12 women were identified and approached by 20 volunteer interviewers on the 10th of December on the streets of 15 territorywide districts which were similarly surveyed previously. The interviewers focused largely on known copping areas or around certain methadone clinics. Recording was done immediately following each interview. Of the 500 drug abusers approached during the 1995 survey, 361 responded co-operatively after learning that the survey was meant to help reduce the risks of HIV infection among their peers. The response rate of 72.2% was similar to previous surveys and perhaps higher than similar exercises conducted elsewhere<sup>4,5</sup>.

# Classification of Respondents According to Different Risk Levels

The 361 respondents were classified as very high risk, high risk, medium risk and low risk groups according to the following behavioural criteria: -

Very High Risk Group (VHRG) 38 or 10.5% of the respondents admitted

injecting heroin regularly and sharing needles with others in the past three months prior to the

survey.

High Risk Group (HRG) 94 (26.0%) injecting drug users (IDUS)

claimed to have ceased or suspended sharing of needles in the past three months prior to the survey, plus 7 (2.0%) who shared needles with others previously but ceased to practise heroin injection at the time of survey. Altogether they

accounted for 28.0% of the sampled subjects.

Medium Risk Group (MRG) 106 (29.4%) IDUS never shared needles plus

9 (2.5%) who changed to other modes of heroin consumption at the time of survey. Altogether they accounted for 31.9% of the sampled

subjects.

Low Risk Group (LRG) 107 (29.6%) drug abusers never injected

heroin before the survey, but were still at risk of HIV infection on account of their life styles and the possibility of advancing from smoking to the

more direct mode of injection.

Table 1 Distribution of Four Risk Levels among Sampled Street Addicts in the Past Four Years

	<u>1995</u>		<u>1994</u>		<u>1993</u>			<u>1992</u>		
VHRG	38	{10.5%)		{22.8%}		{19.8%}		{36.3%}		
HRG MRG	101 115	,	75	{29.2%} {18.5%}	102	{29.2%} {20.6%}	7	{22.0%} {23.9%}		
LRG	107	{29.6%)	119	{29.5%}	151	{30.4%}	56	{17.8%}		
	361	(100%)	404	{100%}	496	{100%}	314	{100%}		
		$X^2 = 87.35$		df = 9		p < 0.001				

Remarks:

The proportions of the VHRG had been declining significantly over the past four years whereas the proportions of LRG had been increasing correspondingly since 1992. This trend of improving awareness and reducing risks will be discussed later in this report.

# Age, Sex & Risk Groups

Of the total 361 respondents, 350 (97.0%) were males and 11 (3.0%) were females, whose mean ages were 32.3 and 28.2 respectively with an overall mean age of 32.1.

Table 2 Risk Levels by Age Groups in 1992, 1993, 1994 & 1995

		VH	RG			<u>HI</u>	RG			MI	RG			LF	<u>RG</u>			Total	
Age Groups	95	94	93	92	95	94	93	92	95	94	93	92	95	94	93	92	95	94	93
Young Persons <30	10	16	24	24	22	21	32	16	56	37	44	23	68	66	59	22	156	140	159
Young Adults 30- <40	10	41	59	62	49	58	71	33	45	23	37	20	16	22	41	9	120	144	208
Adults 40-<50	12	26	14	23	23	33	35	14	12	12	11	24	9	20	16	14	56	91	76
Middle Aged & the Elderly 50 & over	6	9	1	4	7	5	7	6	2	3	10	7	14	10	35	11	29	27	53
Unknown	-	-	-	1	-	1	-	-	-	-	-	1	-	1	-	-	-	2	-
Totals	38	92	98	114	101	118	145	69	115	75	102	75	107	119	151	56	361	404	496
Mean Ages	37	37	33	34	36	35	35	35	30	31	36	36	29	31	36	37	32	34	35

Remarks:

The annual overall mean age had declined from 35.3 in 1992 to 32.1 in 1995, which is in line with the changing age trend reported by CRDA (Central Registry of Drug Abuse) of all known drug abusers in Hong Kong. According to the age distribution of the first two years, we hypothesised that the younger subjects tended to engage in higher risk activities. However based on the evidence of the last two years this hypothesis has to be nullified. In fact our data suggests that younger persons seemed to be more amenable now to change from higher risk to lower risk behaviour.

#### Marital Status

As to marital status, 171 (47.4%) were single, 116 (32.1%) were either married or cohabiting and 74 (20.5%) were of unknown status. Coincidentally the CRDA's 37th Report indicated also 32.1% of old cases married or cohabiting in 1995.

Table 3 Marital Status by Risk Groups

Marital					1995		Con	mparisons	
Status	VHRG	HRG	MRG	LRG	Totals		1994	1993	1992
Single	15	45	59	52	171	(47.4%)	{42.1%}	{60.9%}	{70.1%}
Married/ Cohabiting	13	36	35	32	116	(32.1%)	{32.7%}	{34.9%}	{27.7%}
unknown	10	20	21	23	74	(20.5%)	{25.2%}	{4.2%}	{2.2%}
	38	101	115	107	361	(100%)			

Remarks: Proportionally, the very high risk members registered the lowest singleton rate (39.5%) as compared to the total average of (47.4%) among four risk groups.

# Registered Methadone Patients

# A slight increase in the proportions of respondents who claimed to have been registered with various methadone clinics was observed over the past four years.

Methadone					199	(	Comparisons			
Regis.	VHRG	HRG	MRG	LRGTotal	ls	1994	1993	<u> 1992</u>		
Yes	37	99	109	101	346	(95.8%)	(96.0%}	(95.2%){92.0%}		
No	1	2	6	6	15	(4.2%)	{4.0%}	{4.8%} {8.0%}		
	38	101	115	107	361	(100%)				

# Previous Residential Treatment and Exposure to AIDS Education

Of the 350 male respondents, 280 (80.0%) claimed that they had been admitted to Shek Kwu Chau whereas 9 (81.8%) out of 11 women had been admitted to the Women's Treatment Centre of SARDA. Previously 75.5% of 1994 samples, 69.6% of 1993 and 72.3% of 1992 had done so. As to religious organisations which offered spiritual rehabilitation, the proportions of prior admissions declined slightly from 33.8% to 30.2% in the past four years. The Working Group on Drugs & AIDS had been conducting AIDS prevention and education programmes with both Methadone Clinics' and SARDA clientele annually since 1988. Their rising number among annual survey samples could reflect an increasing exposure to harm reduction measures.

# Prevalence of Heroin Injection and Needle Sharing

Of the total 361 respondents in 1995, 254 or 70.4% {70.5% in 1994, 69.6% in 1993 and 82.2% in 1992 surveys} were IDUs, of whom 139 or 54.7% {73.7% in 1994, 70.4% in 1993 and 70.9% in 1992} had shared needles with others and 38 or 27.3% out of the 139 sharers {43.8% in 1994, 40.3% in 1993 and 62.3% in 1992} admitted doing so in the past three months. The apparent decline of active needle sharers indicates that more street addicts have become aware of the risk of sharing needles through mass media publicity or face to face counselling.

# Current Needle Cleansing Practice by IDUs

Of the 254 IDUS, 238 or 93.7% {94.4% in 1994, 94.5% in 1993 and 96.5% in .1992 surveys} admitted that they were still injecting heroin at the time of survey of whom 109 {119 in 1994, 195 in 1993 & 109 in 1992} used disposable needles, 44 {47 in 1994, 34 in 1993 & 59 in 1992} had private syringes for repeated use and 85 {103 in 1994, 97 in 1993 & 81 in 1992} used both types of instruments. Of the 129 respondents who used private syringes &/or disposable ones, 128 (99.2%) reported their needle cleansing methods. Two had never bothered with any cleansing before;  $\underline{110}$  simply rinsed their needles with tap water, 43 sterilised with boiling water, 24 used alcohol,  $\underline{5}$  used detergents and 1 bleaching solution. Hence the ratio of unsafe vs. safe practice is: - 117 or 63.2%  $\underline{(2 + \underline{110} + \underline{5})}$ : 68 or 36.8% (43 + 24 + 1).

# Risk Taking Practice of Needle Sharing

Of the 254 IDUs, 139 (54.7%) admitted that they had shared needles with others, of whom 131 gave their reasons of doing so as follows:-

Table 4 Reasons Given by IDUs for Needle Sharing Practice

	No.	of 1995	Comparisons				
Non-exclusive Reasons	Res	oonses	1994	1993	<u> 1992</u>		
No needles were available while suffering from withdrawal symptoms (incl. 21 unable to buy needles at night )	75	(57.3%)	{74.0%}	{54.4%}	{29.3%}		
For the sake of convenience	54	(41.2%)	{24.5%}	{36.9%}	{27.1%}		
Injecting heroin with several friends and sharing needles in "safe surroundings" (incl. 12 who specified the enjoyable feeling of togetherness)	23	(17.6%)	{20.4%}	{20.9%}	{47.9%}		
Unaware that sharing	6	(4.6%)	{4.6%}	{5.8%}	{9.3%}		

needle could contract HIV or unafraid of it					
No money to buy syringes	4	(3.1%)	{3.1%}	{1.9%}	{0.7%}
Relying on others to help with injecting	2	(1.5%)	{5.6%}	{5.3%}	{5.0%}
Imprisonment	2	(1.5%)	{2.6%}	-	-
Could not buy needle in China		-	{2.0%}	-	-
Sharing with trusted spouse or siblings		-	{1.5%}	{1.6%}	{0.7%}

Remarks: As in previous years, unavailability of syringes" remained the most common reason given by the respondents for ever sharing of needles in the 1995 survey, which was followed by "for convenience sake" whereas the social reason of "sharing needles with friends for togetherness" had declined since 1992. When reasons given by 38 VHRG members for continued needle sharing were analysed separately, similar distribution of responses were observed.

# Cessation or Suspension of Needle Sharing by HRG Members

Table 5 Reasons Given by 96 HRG Members for Giving up High Risk Practice

Non-exclusive Rea	No. of 19 asons Respo		Compariso <b>1992</b>	ns
Aware of the-risk of sharing needles or afraid of contracting infectious diseases	57 (59)	4%) {69.4%	{46.9%}	{31.8%}
Disposable syringes are cheap and easy to buy	44 (45.5	8%) {55.0%	{51.7%}	{54.5%}
To use both disposable and private syringes	35 (36	5%) {28.8%	{32.4%}	{16.7%}
For the sake of sanitation or safety	16 (16.	7%) {3.6%}	{5.5%}	{10.6%}
Availability and exclusive use of a private syringe	15 (15.0	5%) {14.4%	{6.2%}	{27.3%}
Injecting alone in privacy	9 (9.4	%) {2.7%}	{4.8%}	{9.1%}
Learned to inject heroin	2 (2.1)	%) {3.6%}	{1.4%}	{1.5%}

and no longer relying on other's help

No need to share any more	1 (1.0%)	{1.8%}	-	-
after imprisonment				
Blood vessels being	-	$\{0.9\%\}$	{2.1%}	-
shrunk or scarred				
because of long time injection				

Remarks:

Like previous years' findings, cognitive persuasion and economic enabling seemed to have caused the positive change in harm reduction. Interestingly, 109 MRG members gave similar reasons to explain why they had never shared needles with others before.

# Behaviour of LRG Members & Methadone Maintenance

Of the total 361 respondents, 101had never injected heroin prior to the survey. Their modes of drug use are given in Table VI below:-

Table 6 Modes of Non-Injecting Drug Use

	No. of 1995		Compa	risons
<b>NIDU Methods</b>	Respondents	1994	1993	1992
Chasing dragon (fume inhalation)	56 [52]	64 [61]	91 [85]	28 [21]
Smoking by cigarettes	43 [41]	39 [37]	48 [48]	19 [19]
Sniffing	2 [2]	2 [2]		2 [1]
Taking methadone only	6	13	7	5
Taking "soft drug" only	-	1	-	-
Unspecified heroin intake	-	-	5 [5]	2 [2]

Remarks:

Figures in [ ] denote the number of respondents who were also taking methadone intermittently. Combining those who had switched to non-injecting drug use (NIDU) in HRG and MRG, we find a total of 13 respondents purely maintained on methadone and 110 taking methadone intermittently. This substantial proportion of 123/361 or 34.1% of the 1995 samples who were methadone clinic attendants, did reduce their risks of HIV infection by abandoning heroin injection.

# Knowledge & Awareness about Risks of Sexual Transmission

Awareness against									
promis-					1995	(	Compariso	ons	
cuity	VHRG	HRG	MRG	LRG	Totals	1994	1993		992
Yes	34	101	112	100	347				
	(89.5%)	(100%)	(97.4%)	(93.5%)	(96.1%)	(93.8%)	(95.8%)	{82.8	% }
No/Not	4	_	3	7	14				
Sure					(3.9%)	{6.2%}	{4.2%}	(17.2	% }
	38	101	115	107	361 (100%)				
Knowled- ge of									
condom					1995		Compa	risons	
use	VHRG	HRG	MRG	LRG	Totals	19	94	1993	1992
Yes	35	98	109	99	341				
	(92.1%)	(97.0%)	(94.8%)	(92.5%)(	94.5%){93.	8%} {93.89	%} (77	.7%}	
No/Not Sure	3	3	6	8	20 (5.5%)	{6.2%	o} {6.	2% }	{22.3%}
	38	101	115	107	361 (100%)				

Remarks: As a whole the awareness of safe sex has increased steadily in four years.

# **Condom Use or Requiring Partners to Wear Condoms**

Excluding those who did not answer this question, and those who had no sexual contacts in the past 12 months, 282 male and 9 female respondents reported on their condom use as follows:

Male	1995	Comparisons		
Condom Use	Totals	1994	1993	1992
Never	29 (10.3%)	{20.9%}	{37.5%}	{32.9%}
Sometimes	181 (64.2%)	{63.4%}	{42.3%}	{52.6%}
Regularly	72 (25.5%)	{15.7%}	{20.2%}	{14.5%}

Female				
Partners'	1995	Comparisons		
Use	Totals	1994	1993	1992
Never	-	$\{20.0\%\}$	{33.3%}	{57.1%}
Sometimes	6 (66.7%)	{40.0%}	{20.0%}	{28.6%}
Regularly	3 (33.3%)	{40.0%}	{46.7%}	{14.3%}

Remarks: Obviously there has been a steady increase in condom use but female sample size has always been too small to draw any conclusions.

Among 291 men and women who reported on condom use, only 75 (25.8%) did so regularly. Presented below are the reasons volunteered by the minority 26 men who had never used condoms:

	No. of 1995		Comparisons			
Non-exclusive Reasons	Resp	onses	1994	1993	1992	
Trusted sexual partners (e.g. spouses/intimate boy/girl friends)	17	(65.4%)	{49.0%}	{46.4%}	{56.9%}	
Using condoms would result in diminished pleasure	4	(15.4%)	{43.1%}	{39.3%}	{13.7%}	
Using condoms was inconvenient and unnecessary	4	(15.4%)	{21.6%}	{9.8%}	{13.7%}	
Not afraid of contracting HIV	1	(3.8%)	-	{8.0%}	{5.9%}	
No money to buy condoms		-	-	{0.9%}	{3.9%}	

Remarks:

Apparently, economic reasons against condom use no longer applies in Hong Kong. It seems that both enabling and persuasive approaches through education, counselling and demonstration are needed to encourage more regular use.

# Sources of AIDS awareness

Over the 'years, television has been the leading source of information and the ranking order of other sources remained largely the same. It is perhaps gratifying to note that the frequency of face to face counselling or advice had increased three fold in four years.

Table 7 Ranking of Sources of Education Information

Source of Information	1995 Frequency	1994	Comparisons 1993	1992
TV (Announcements for public interest)	324	375	468	285
Newspaper/magazine	147	180	218	164
Radio	134	127	152	116
Campaign posters	125	158	195	165
Educational pamphlet	96	110	175	66
Social Work/Health Personnel	77	72	32	25
Seminars	9	16	5	3
Friends & peers	4	5	6	-

#### Discussions and Conclusions

In line with the demographic trend indicated by the Central Registry of Drug Abuse<sup>6</sup>, the mean ages of our sampled subjects (both male and female) have continued to decline in the past four years. Also the majority of our respondents have remained single in a similar proportions of the CRDA data. While the male and female ratio of individuals reported to CRDA annually declined from 11:1 in 1992 to 7.4:1 in 1995, our gender ratios declined from 38.3:1 to 31.8:1 in the said period. Obviously there has been an under-representation of women in our street samples which was probably caused by the fact that the overwhelming majority of our voluntary interviewers were men who might not feel comfortable to approach female addicts to ask intimate questions.

The percentages of registered methadone patients among our samples increased steadily from 92% in 1992 to 95.8% in 1995 and of those with previous admissions into SARDA's treatment programmes increased from 72.3% to 80.1%. The numbers with prior experiences in religious programs remained relatively low. it seems that among our addict samples, very few had not received some form of treatment before, which may reflect the comprehensiveness of Hong Kong's multi-modality approach in demand reduction. On the other hand, the lack of significant progress on sterilisation of needles and practices of safe sex indicates the need to strengthen our education on risk and harm reduction.

Distribution of four risk levels in four consecutive surveys indicates a reduction of very high risk group (active needle sharing) from 36.3% to 10.5% and a simultaneous increase of low risk group (non-injecting users) from 17.8% in 1992 to 29.6% in 1995. In fact, the overall prevalence of intravenous injection among the annual samples declined from 82.2% in 1992 to 70.4% in 1995 which seemed to run parallel with CRDA's declining trend of the injection route ever since 1988<sup>(6)</sup>. Nevertheless for ideology or cultural belief, some sectors of our community still consider the demonstration of safe drug use and safe sex as unacceptable. Therefore a clear

cut policy statement from the Government and community education on risk/harm reduction appear to be overdue.

While street addicts' awareness level of the risks of promiscuity and unsafe sex and of the benefit of regular condom use have remained high since the first survey, we saw a slow decline of "never use" of condoms by the male respondents from 32.9% in 1992 to 10.3% in 1995. Both regular and occasional male condom users increased from 14.5% in 1992 to 25.5% in 1995 and 52.6% in 1992 to 64.2% in 1995 respectively. Although the smaller female samples showed a more significant reduction of never-use and a corresponding increase of regular use, its sample size is too small for us to draw firm conclusions. Perhaps a separate study on drug using sexual workers is required.

Section 13 shows that more than one third of our respondents reduced their risk behaviour while attending methadone clinics. Whether they were maintained purely on methadone or using methadone and heroin intermittently, their exposure to counselling and harm reduction measures are obviously bearing fruits. Ironically, long term ambulatory methadone substitution for heroin dependence with many patients lingering in occasional heroin use is often cited with scepticism by the press and even some public reports<sup>7</sup>. Clinical management problems such as loitering around and littering of its premises at-e also the source of frequent complaints by neighbouring residents. We found that by structuring counselling and peer role-modelling, these problems can be minimised and its contribution to demand and harm reduction should never be overlooked. By end of 1995 and among some 11,700 urine specimens taken at 21 methadone clinics for HIV screening from 1992 - 1995, only four tested positive, which indicated a very low infection rate among methadone patients <sup>8</sup>.

For unlinked anonymous screening 400 - 500 saliva samples have been collected from the street addicts annually since 1993 and so far none has tested HIV+. Out of 20,000+ body fluid samples (blood, urine and saliva of drug users) screened by end of June 1996, only 14 positive tests including four cases of full blown AIDS were reported, yielding an infection rate of about 0.1% in Hong Kong<sup>9</sup>. We believe that the combined effort of governmental and NG0s programs in demand and risk/ harm reduction are keeping HIV/AIDS prevalence at bay among drug users of all nationalities here including the residents of the Vietnamese Boat People Camps. An experimental needle exchange programme has also been established at the Pillar Point Camp by the Medecins Sans Frontieres, which process and outcomes are being closely monitored for public interest<sup>10</sup>.

The incidence rate of IDUs testing positive has averaged about two new cases p.a. among all drug users in the past 6/7 years in Hong Kong. We have seen the HIV/AIDS prevalence growing alarmingly among IDUs in the Asia Pacific Region especially around the infamous Golden Triangle areas<sup>11</sup>. On the other hand we are gratified to note that also by employing the service of peer helpers, our public health colleagues in Australia have been able to maintain the lowest seroprevalence rate in comparison with all OECD countries<sup>12</sup>. We believe that by converting former recipients of rehabilitation services into fellow service providers for outreaching prevention and education, we can contain the spread of blood borne diseases (notably HIV/AIDS) among IDUs.

#### **Footnotes**

1. Ch'ien, James M.N., Lo, B.C. & Mau, F.C. (1992). Report on the Street Addicts Survey on AIDS Awareness 1991. published in 1992 by the United Nations Development

Programme, New Delhi under the title of Development Implications of HIV/AIDS in the N.E. States of India, Proj. RAS/90/021, where the principal author was an invited speaker in Jan 1992.

- 2. Ch'ien, James & Lo, B.C. (1990). Evaluation Reports on AIDS Prevention for Residential and Recovering Addicts, 1989 & 1990 (covering 1988-89 and also 1989-90).
- 3. Ch'ien, James M.N., Lo, B.C. & Mau, F.C. Reports on the Street Addicts Survey on AIDS Awareness and Risk Behaviour, 1992, 1993 & 1994.
- 4. Kleinman, P.H. et. al. (1990). Knowledge about and behaviours affecting the spreading of AIDS: a street survey of IDUs and their associates in NYC. *International Journal of the Addictions* 25:4, 348-361.
- 5. Weibel, J. & Senay, E. (1990). Changing High Risk Behaviour among Street Intravenous Drug Users in Chicago. *National Institute of Drug Abuse*.
- 6. Hong Kong Government, Narcotics Division (1995). *Central Registry of Drug Abuse,* 37th Report 1986 1995. Hong Kong: Government Printer.
- 7. Research & Library Service Div., Secretariat of Legislative Council (1996). Methadone Treatment Program in Hong Kong & Selected Countries. Hong Kong: Hong Kong Government.
- 8. Jarlais, Des & Wong, K.H. et. al. (1996). Maintaining low HIV seroprevalence among injecting drug users. *JAMA* 275:8.
- 9. Based on quarterly reports from the Special Prevention Unit and Methadone clinics of the Dept. of Health as well as the total number of saliva sampling, the authors estimated the HIV prevalence among drug users as  $14/16000 \times 100\% = 0.0875\%$ .
- Deany, Paul & Crofts, Nick (1996). Harm Reduction in Asia. Report on a Workshop on Prevention of HIV among IDUs in Asia. 7th Int'l Conference on the Reduction of Drug Related Harm, Hobart, Aust. 3-7 March 1996. Australia: Macfarlane Burnet Ctr. for Med.
- 11. Charlton Lien Amo, State Minister of Health of Manipur, India, whose speech at the a/m Workshop on Prev. of HIV among IDUs in Asia was appended to the Report by Deany & Crofts.
- 12. Wodak, A. & Stewe, A. et. al. (1995). HIV risk exposure of injecting drug users in Sydney. *Drug & Alcohol Review* 14, 213 222.

#### HIV/AIDS Education and Commercial Sex Workers

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#### Abstract

There has been no HIV/AIDS education for commercial sex workers in Hong Kong. Existing education material which targets women in general is not meaningful for women in the commercial sex industry. Through actively listening to women in the sex industry, develop an education/awareness program using materials designed to meet their specific needs and concerns. An HIV/AIDS education program has been designed and is under production. Involvement of women from the commercial sex industry in the preparation and testing of the materials is leading to a decrease of fear and avoidance of discussion of HIV/AIDS related issues, especially in relation to their own lives. HIV/AIDS education is proving to be more effective through using a two prong approach e.g. active and passive, fun and serious, subliminal and conscious, peers and professional.

# AIDS Education and Commercial Sex Workers<sup>1</sup>

# Society's Perception of Women in the Commercial Sex Industry (CSI)

According to society's traditional perception, commercial sex workers have been considered to belong to a high risk group for contracting HIV and are, as a result, often blamed for the spread of the disease. But as was stated by Dazon Dixon at the International Conference on Population and Development in Cairo " there are only two kinds of people in the world: those who are at risk for HIV/AIDS and those who are already infected with it. There are no in between." In actual fact it is unsafe behavior and not "risk group" membership that places individuals at risk for HIV infection.

The targeting of female sex workers as the main group of women affected by the epidemic encourages blame, stigma and discrimination not only against commercial sex workers but against all women. It also allows others, both the men who infect the sex workers and the wives of these men, to deny they are at risk.<sup>3</sup> In "One Strong Voice"<sup>4</sup>, AIDS has been described as a democratic disease, affecting as it does women of all ages, social classes and professions. HIV/AIDS education and awareness programs, however, need to be designed and modified to meet the needs and concerns of different groups of women.

#### AIDS Education Tailored to the Needs of C.S.W.'s

I would like to explore briefly the type of safer sex education presently available and why it fails to meet the needs of commercial sex workers. To date, there has been no HIV/AIDS education program available specifically for commercial sex workers in Hong Kong. Any woman in the commercial sex industry seeking information about HIV/AIDS has recourse to the education material for women prepared by the Government AIDS Unit where she will learn that in order to protect herself she "should take an active role in the prevention of AIDS:

- have a mutually faithful sexual relationship with a non-infected person.
- learn about the background and behavior of her spouse or sexual partner.
- inform her spouse or sexual partner about AIDS and its prevention.
- choose the option of no sex or insist on the use of a condom if there is any doubt.
- do not engage in drug use or do not share needles or syringes when shooting drugs."

Obviously, commercial sex workers have multiple sexual partners. In a 10 - 15 minute

transaction is it realistic to expect a sex worker to inquire about the background or behavior of her sexual partner or to inform him about AIDS and its prevention, especially as she could be serving up to 250 clients in a month? Then, if she is to earn a living, the choice of the option of no sex is not open to her, neither is insistence on the use of a condom.

Clearly, these are inadequate means by which women in the commercial sex industry can protect themselves from HIV. In cooperation with AIDS Concern, Action for REACH OUT has produced an HIV/AIDS education booklet, "What Every Working Women Should Know About HIV/AIDS" which is available in Chinese, English, Thai, Tagalog and Korean. Here safer sex is presented in the form of a menu, in which a range of sexual activities is outlined in order of safest to riskiest. In this booklet, the message obviously targets those who are most likely to have more than one sexual partner and to be drug users.

#### Development of Interactive AIDS Education Strategies and Games

Generally speaking, commercial sex workers are considered to be the outcasts of society and are usually treated as objects for the pleasure of others. As a result of this and also a history of family problems, they have little self esteem and feel totally powerless, with no control over their lives. In Action for REACH OUT, we have been listening to women in the sex industry express, in a variety of ways, their specific needs and concerns with regard to HIV/AIDS. This is no easy task, given that the placing of widespread blame for the spreading of the disease on them has resulted in women in the industry being very defensive when the subject is raised. Moreover since they are convinced they have no other way of supporting themselves and their families, their genuine fears and concerns can be masked by denial, apathy and a sense of fatalism. A common response we receive is "Well, I' m going to die anyway."

In other countries it has been shown that "programs that address only epidemiological and behavioral factors, without giving serious attention to the societal, cultural and structural factors that make women particularly vulnerable to HIV infection have limited success"<sup>6</sup>. In Action for REACH OUT we have discovered that HIV/AIDS education is proving to be more effective through using the two prong approach of active and passive, fun and serious, subliminal and conscious, peers and professional. With this in mind we set out to design materials and strategies to meet the women's needs.

# **Comic Strip**

From observing the women on the street as they waited for clients to approach them, we could see that they enjoyed reading comic strips, especially of the Japanese style which is generally very popular in Hong Kong so one of our first undertakings, in cooperation with AIDS Concern, was to produce a comic strip entitled "Neon Light Tragedy". With the message of promoting condom usage being portrayed visually and with minimum script, the reader becomes actively involved in the story and is more passively absorbing an HIV/AIDS prevention message. A direct message is, however, included on pages which give instructions on correct use of both female and male condoms.

# Newsletter

A quarterly newsletter covering various topics directly related to the women's lives, including safer sex and which is proving to be very popular, again with the emphasis on a visual message is also prepared in Chinese and Thai and distributed during outreach.

#### **Games**

While waiting in the villas where they work, the sex workers often play cards so, with this in mind, a set of **playing cards** has been designed. This set may be used to play any of the traditional card games but has the additional feature that the traditional suits of Spades, Clubs, Hearts and Diamonds are illustrated with male condom, lubricant, female condom, regular medical check up. Irrespective of the game being played, the message of HIV prevention is constantly being relayed to the player subliminally and usually leads to a spontaneous discussion of HIV/AIDS and safer sex as they relate to the lives of commercial sex workers.

### Mah Jong

Probably the favorite game of all Hong Kong people and not just commercial sex workers is mah jong so we are also in the process of producing a mah jong style game which will concentrate on illustrating high risk, low risk, and no risk activities.

#### **Board Game**

A board game illustrating safer sex and risky behavior includes the additional element that anyone who takes a chance is required to give a true or false answer to a question which tests basic HIV/AIDS knowledge.

#### **Role Play**

The use of role play in another game also presents the serious HIV prevention message in a more light hearted manner. Entering into the role of another helps sex workers lower inhibitions and overcome their own fears and avoidance of the fact that they themselves can be exposed to risky behavior.

However, no matter how much AIDS education women receive, the goal of preventing the spread of HIV will never be accomplished until they have the power to do something with it. Commercial sex workers' low self esteem and sense of powerlessness over even the most simple aspects of their lives leaves them at risk of infection as they succumb to fatalism and avoidance of the issue. In order to evoke in the women even some small sense of control, in Action for REACH OUT we have involved the sex workers who come to our drop in center (or whom we meet during outreach) in the preparation and testing of materials. Whereas before, the fear of discussing HIV/AIDS related issues led to avoidance of the topic, now we find that involving the women in the preparation and testing of materials is providing a simple, natural opening to discussion.

# Need for Negotiation Skills

From surveys and face to face interaction, we have discovered that commercial sex workers' basic knowledge about the spread of HIV is fairly adequate. Results of a small scale survey show that all know that HIV can be spreaded sexually or through the sharing of needles in drug use but not through eating together. However, inconsistencies and gaps appear when it comes to knowledge about the risks of infection via mosquito bites, blood transfusion, toilet seats, swimming pools etc.

In the course of our outreach work, we also conducted a small scale study of condom usage among street walkers in Hong Kong. From this we discovered that 72% of the women always use condoms with paying clients, 28% making exceptions for regular clients who pay particularly well or when the client refuse to use the condom and the sex worker is in desperate need of the money. None never not use condoms.

Condom usage with a regular partner or husband, however, is significantly different with more than half (60%) of the street walkers never using condoms here. This is, in our opinion, the most serious gap in their awareness of the spread of HIV - thinking that unprotected sex with a regular partner is safe. It would appear at times easier for a woman in a business setting to insist on condom use. Not using a condom with a regular partner or husband also helps to distinguish between "work" and "intimate" sex. Many women also fear that insisting on condom usage with regular partners would lead to the end of the relationship, especially in situations where the partner is unaware that she is involved in the sex industry.

It is thus equally important to keep in mind the private lives of the women as well as their working situation. Concentrating on the latter is not sufficient since their private lives often are not associated with high rates of partner change but usually involve unprotected sex. In other countries it has been established that sex workers are contracting HIV through sexual contact not with their customers but through their regular partners who themselves are intravenous drug users and have been infected through sharing needles. Therefore there is a great need to focus on negotiation skills around condom usage for their private as well as working lives.

#### Conclusion

Because of heavy debts and family responsibilities, the main concern of commercial sex workers seems to center around earning money and they are unable to accept or cope with being tied to specific dates and times. As a result, this sector of society requires a specific HIV/AIDS education program, one which cannot be conducted in any formal way nor be dependent solely on talks or the distribution of leaflets to be studied. More indirect, creative and interactive methods are essential features of such a program. In the near future we in Action for REACH OUT also plan to extend our outreach service to nightclubs and karaoke bars where commercial sex workers of other nationalities work. To this end the games and other materials we have prepared will be made available to the owners and managers of these clubs and villas where commercial sex workers serve their clients. We believe that this will prove to be an effective strategy for HIV/AIDS education for the women in the commercial sex industry.

#### **Footnotes**

- 1. In this paper commercial sex is understood to be "the exchange of sexual services for money or goods"
- 2. Dixon, Dazon Sister Love: Women's AIDS Projects. *Defining the Women and AIDS Agenda, Cairo and Beijing*. AIDSCAP Project, pp 25.
- 3. Hamblin, Julie (1991). Women, the HIV Epidemic and Human Rights: A Tragic Imperative. UNDP, pp7.

- 4. Clemente, Ana Tereza, Passion (1996). Can Be Dangerous. *One Strong Voice: Writings on Women and AIDS*, AIDSCAP with UNAIDS, XI International Conference on AIDS, 1996, pp21.
- 5. AIDS Unit, Department of Health (1994). *AIDS A Woman's Concern*. Hong Kong: AIDS Unit, Department of Health.
- 6. Lamptey, Peter. Defining the Women and AIDS Agenda, Cairo and Beijing, AIDSCAP Project, pp 3.

# AIDS Awareness and Sexual Behaviours of Truck Drivers in Hong Kong

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# **Abstract**

The objectives of this study have three folds: to understand the general profile of truck drivers industry; to assess their AIDS awareness and their risk perception of HIV infection; and to study their sexual practices and behaviours when they engaged in commercial sex across the border. Data is collected through a structured interview with truck drivers in Lok Ma Chau and Container Terminals in Kwai Chung by interviewers with a structured questionnaire. The interview lasted for around 5 to 7 minutes. The general personal data, AIDS awareness and sexual practices of the truck drivers are examined. A total of 1,276 truck drivers was interviewed. All the respondents are male and majority of them are middle aged, married with children and earn above the average family income. As shown from this study, there are several factors that make truck drivers more vulnerable to HIV infection: (1) sexually active middle aged; (2) relatively high income; (3) strong masculine culture that man have extra-marital sex is nothing wrong; (4) the commercial sex industry across border is prosperous; (5) they found the truck driving job is quite boring. However, they were quite knowledgeable on the nature of AIDS disease and its modes of transmission. Their information and knowledge on HIV/AIDS were mainly from TV, Radio, Newspaper, pamphlets etc. Only a quarter of the respondents admitted that they had engaged in commercial sex across the border before. Among them over 90% used condom. Only 11.8% alleged of having STDs before. Among their fellow workers, they commonly believed that they must use condom with prostitute or unstable sexual partner but they would not use condom with their wives or "stable" sexual partners. Their risk perception of HIV infection is low as they alleged of having safer sex practices. Besides, this group of adult is quite health conscious. Due to the threat of HIV infection, they are rational to reduce their high risk behaviours. It is because they are the breadwinner of their families and earn a relative high income. They are afraid of losing all he had if getting the infection. By and large, this sector in the community is found not to be a risky group nor the vector of HIV Infection to Hong Kong. Truck drivers of Hong Kong had several potential risk factors of increasing their vulnerability to HIV infection. However, due to their rational and health conscious orientation, they are willing to have safer sex practices, such as condom use when they engaged commercial sex. Regular publicity on HIV/AIDS should be rendered to this target group so as to remind them of the significance of safer sex practices in responding to the epidemics is recommended.

#### Introduction

AIDS CONCERN and Division of Social Studies, City University of Hong Kong had jointly conducted a survey on the AIDS Awareness and Sexual Behaviours of Truck Drivers in Hong Kong in June this year. The underlying rationale of selecting truck drivers to be the subject of this survey is that due to the prosperity of Hong Kong-China economic activities, most of the truck drivers are cross-border drivers. They become a part of the mobile population. According to a study conducted by World Health Organisation (WHO) on AIDS and Mobility in 1991, it revealed that mobile population such as travellers, imported labour, long-distance and cross-border truck drivers etc. were indirectly related to Human Immunodeficiency Virus (HIV) and Sexually Transmitted Diseases (STD) infection. It is not uncommon to find HIV infected people who are long-distance truck drivers in sub-Saharan Africa. The linkage between AIDS and Mobility is that people away from home are more likely to engage in high risk behaviours, such as engaging in commercial sex activities, promiscuity etc. due to such factors like boredom, loneliness and sense of liberty.

# Research Objectives

The objectives of this survey are (1) to understand the general profile of truck drivers industry; (2) to assess their AIDS awareness and their risk perception of HIV infection; (3) to study their sexual practices and behaviours when they engaged in commercial sex at the border.

# Methodology

This is a descriptive study. Data is collected through a questionnaire survey on truck drivers who are waiting in the holding areas of Lok Ma Chau Check-point and Container Terminals in Kwai Chung by the interviewers recruited from social work students of Division of Social Studies, City University of Hong Kong and volunteers of AIDS Concern. In parallel to the survey, an AIDS campaign targeted on truck drivers were held. A safer sex kit and AIDS pamphlet were distributed to the truck drivers. Most of them (88.3%) welcomed such kind of AIDS education activities. The response was very satisfactory. A total of 1,276 completed questionnaires was collected. Among them, 83.1% (1,060) were cross-border drivers. All the respondents were male and majority of them were middle aged (aged 31-40) and married with children. Their average monthly income was \$18,114 which was higher than the average household income in Hong Kong. 76.4% of the respondents described their job of truck driving to be very to quite boring.

# Summary of Findings

#### I. AIDS Awareness of Truck Drivers

- 1.1 98.9% of the respondents had heard of AIDS before.
- 1.2 The three most common sources of HIV/AIDS information and knowledge were Television (93.8%); Radio Broadcast (54.1%) and Newspapers & Magazines (51.8%) respectively.
- 1.3 The majority of the respondents gave a correct answer to the three commonest route of transmission of the disease: they were "unprotective sexual intercourse" (93.9%); "sharing needles for injecting drugs or other substances" (88.6%) and "peri-natal transmission, i.e. from infected mother to infant" (81.1%). However, the truck drivers were not very sure whether HIV could be transmitted through "mosquito bite" (37.1% correct) and "contact with saliva or sweat" (53.3% correct). 75.7% of them knew the asymptomatic nature of HIV infection that they could not identify a person with HIV/AIDS from appearance. As compared with the general population, the truck drivers had an adequate understanding on the common route of transmission and nature of the disease. (Table 1)

Table 1: AIDS Awareness & Knowledge of Truck Drivers					
	<u>Y</u>	<u>es</u>	<u>No</u>	<u>Not</u> <u>Sure</u>	
I. Have you heard of AIDS	99	9.2%	0.8%		
II. Route of Transmission					
Unprotective Sexual Intercourse	e 93.9%	1.2%		4.7%	
2. Sharing Needles	88.6%	1.6%		9.3%	
3. Peri-natal Transmission	81	1.1%	4.1%	14.1%	
4. Mosquito Bite	37	7.7%	37.1%	24.5%	
5. Saliva or Sweat	25	5.1%	53.3%	20.4%	
III. Can you identify a person have HIV/AIDS from appearance	(	6.7%	75.7%	13.0%	
IV. 74% of the Respondents answered correctly 5 or more out of 7 items (i.e. I to III).					

#### II. Commercial Sex Activities and Truck Drivers

- 2.1 65.8% of cross-border truck drivers expressed that they would stop at some places during the route before arriving the destination. The four most common places for stop were restaurant (75.5%); Karaoke bars (39.1%); tea shops (33.2%) and hair saloon (30.2%) respectively. As alleged, there were some forms of commercial sex activities carrying out in the last three places.
- 2.2 84.5% of the respondents thought that the commercial sex activities or the sex trade at border was very prosperous. Only 25.5% of the respondents frankly alleged that they had engaged in commercial sex activities such as prostitution, petting etc.. at border within the past 3 months. Most of their sex activities were not well planned. However, 74.3% of those who had engaged in commercial sex activities alleged that they constantly used condom when they had sex with prostitute or unstable sexual partners. Most of them brought their own condom from Hong Kong.
- 2.3 11.8% of the respondent expressed that they had STD before. As compared with the infection rate in the normal population (around 1%), the STD infection rate of the truck drivers was relatively high.

#### III. Perceived Risk of Infection and Behavioural Change

3.1 88.9% of the respondents perceived that they had no or relatively low risk of getting the HIV infection as they alleged of having no high risk behaviours such as using commercial sex workers (CSWs), promiscuity etc. So it was obvious that this group had underestimated their chance of infection even though they were actually at a relatively high risk situation.

3.2 43.2% of the respondents, on the other hand, would change their sexual behaviour due to the threat of HIV infection, such as "using condom when having sex with CSWs or unstable sexual partners" (50.1%), "reducing promiscuity" (48.8%), "cutting down their engagement in commercial sex activities at border" (37.5%) respectively.

#### Conclusion and Recommendation

The present survey revealed that truck drivers of Hong Kong as one type of mobile population actually had several high risk factors such as relatively high income (that meant they were able to afford commercial sex activities), boring job due to long distance driving, sexually active group and reducing self-control when staying away from home etc. which might induce them to engage in commercial sex activities at border. So this would increase their risk of getting the HIV or STD infection. However, the truck drivers had quite good understanding on AIDS. They commonly alleged that they would use condom when having sex with CSWs or unstable sexual partners. In addition to, they were quite health conscious. They were unwilling to take risk as they had stable income and were the breadwinner of their families. They were afraid of losing all they had if their health condition was endangered due to HIV/STD infection. Under such circumstances, they were more willing to adopt safer sex practices. Actually, 43.2% of the respondents revealed that they would change their sexual life due to the threat of HIV infection such as using condom or reducing promiscuity. Thus, it was believed that this group had a high awareness towards HIV/AIDS and was willing to have prominent behavioural change subject to the threat of this disease.

Unfortunately, most of them perceived their risk of infection was no or very low. That might weaken their alertness to have safer sex practice in response to the challenge of HIV/STD. Besides, their engagement in the commercial sex activities at border was believed to be vigorous and their STD infection rate as reflected from this study was comparatively higher than the normal population. Under such situation, it was confidently believed that the truck drivers of Hong Kong were still subject to threat of HIV/STD infection. Therefore, measures had to be taken to render regular AIDS education to them such as distributing safer sex kit and AIDS pamphlets at checkpoints so as to remind them of the risk of HIV/STD infection. It was hoped that this would lower the chance of spreading the HIV/STD in this community.

Another point had to mention. Although there was a common belief among the truck drivers community that they should use condom when having sex with CSWs or unstable sex partner, they seldom used condom or adopted other forms of safer sex practice with their "second wife (Pao Arrangement)" or "stable girl friend" in China. Actually, they did not have adequate understanding on the past sexual background of their "second wife (Pao Arrangement)" or "stable girl friend" in China. As reflected from other studies, more and more cross-border truck drivers were believed to have "second wife (Pao Arrangement)" or "stable girl friend" in China. Undoubtedly, this would increase their risk of HIV/STD infection. The awareness of the truck drivers on this aspect of potential threat should be enhanced.

Last but not the least, most of the truck drivers (78.3%) in this survey were married with children. The risk of HIV/STD infection not only directly threaten the truck drivers alone but also indirectly affected their wives. Therefore, measures had to be taken such as targeted AIDS preventive education for this group of women in order to enhance their awareness on HIV/STD infection were urgently needed.

# Acknowledgement:

We are indebt to Mr. Lui Chi Wai, former Lecturer of Division of Social Studies for his contribution of ideas in designing this research.

# References

AIDS Scenario & Surveillance Research (ASSR) (1995). Cross-Border Lorry Drivers and Commercial Sex Activities in Hong Kong: Report of a Preliminary Study. Hong Kong: ASSR.

Hendriks, A. *AIDS and Mobility - the impact of international mobility on the spread of HIV and the need and possibility for AIDS/HIV prevention programmes*. WHO Regional Office for Europe Document EUR/GPA 023.

McKeganey, N. (1994). Why do men buy sex and what are their assessments of the HIV-related risks when they do. *AIDS Care* 6:3, 289-52.

Rubuloye, IO, Caldwell, P. & Caldwell, C. (1993). The role of high-risk occupations in the spread of AIDS: truck drivers and itinerant market women in Nigeria. *International Family Planning Perspectives* 19:2, 43-48.

United Nations Economic and Social Commission for Asia and the Pacific. (1993). Focus on the AIDS pandemic in Asia and the Pacific. *Social Development Newsletter* 29.

Weinstein, N.D. (1989). Perceptions of personal susceptibility to harms. In Mays, V.M. et al. (eds.) (1989). *Primary Prevention of AIDS: Psychological Approaches*. London: Sage, 142-67.

# The Hong Kong Community Charter on AIDS

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#### **Abstract**

AIDS, the disease caused by HIV, proved to be more than an ordinary epidemic. It became a fullscale pandemic. One may attempt to calculate the monetary damages of the epidemic, but, in fact, the full extent of human suffering can never be quantified by any measure. What is obvious, though, is that this tragedy of modern mankind has been unnecessarily magnified by the climate of discrimination rampant in many parts of the world, including Hong Kong. This discrimination happens both in the workplace and everyday social interaction, threatening to divide our society as the disease continues to spread. Many a country already had the foresight of curbing discrimination by either legislation or education. Charter movements similar to ours have been quite successful in places like the United Kingdom and Thailand. The idea is to encourage active and voluntary participation of employers in a pledge of non-discrimination in the workplace. Such an official commitment of the company is surprisingly effective in forestalling misunderstandings among the work crew. It in fact helps create a trustful relationship between workers and employers. In late 1993, the Lions Clubs International. District 303 - Hong Kong and Macau, and the AIDS Unit of the Department of Health began to explore the possibility of setting up the Hong Kong Community Charter on AIDS. It took only one year before the joint effort bore fruit. There were 7 founder signatories of the Charter in the first signing ceremony on 8 Dec 94, representing some of the biggest employers in Hong Kong. The Government, for instance, had a total of 180,000 employees on its payroll. The number of signatories steadily increased in the last two years. Today we boast 75 signatories in total, covering 270,000 employees. As signatory of the Charter, an employer is requested to: actively and openly support the Charter, provide AIDS education in the workplace, and institute a non-discriminatory policy on HIV/AIDS. Upon fulfilment of these criteria, a plaque is presented in recognition of the achievement. Success of the Charter will eventually be gauged by its ability to change the way AIDS is perceived in the general public. To this end, nothing is more important than an active education programme. We are hopeful that as society gradually comes to grasp the principle of non-discrimination as embodied in the Charter, more and more businesses will join. The time will come when AIDS victims are accepted and integrated in society to such an extent that the Charter can no longer justify its own existence.

#### **Background**

In 1985, the first AIDS patient was diagnosed in Hong Kong, five years after AIDS had been identified as a distinct disease entity in the United States. The potential of this virus of HIV (human immunodeficiency virus ) to spread to the scale of a pandemic had already been well recognised in developed countries. In fact, what began as a cluster of only a few PCP (Pneumocystis carinii pneumonia) in 1980 had developed into over one million cases of AIDS at the end of 1994, while the estimated number of infections stood at 19.5 million worldwide. In Southeast Asia, it was estimated to be 3 million. WHO predicted that by the year 2000, there would be as many as 30 to 40 million HIV-infected persons in the world, out of which 12.8 to 18 million would have progressed to AIDS.

Not only does this epidemic of HIV/AIDS levy excessive toll on human lives, it generates vast socio-economic repercussions in many parts of the world. HIV primarily affects young, sexually active and economically productive individuals in society. In its early stage of development, the epidemic especially targeted homosexuals and injecting drug users. These characteristics, coupled with the ultimately incurable nature of the infection, helped incite fear which, more often than not, was out of proportion of the real threat<sup>2</sup>.

One consequence of fear is discrimination, a fact that unfortunately has held true since time immemorial, and an absolutely unnecessary tragedy should it occur. Since a most plausible scenario of discrimination is the workplace<sup>3</sup>, and since the most effective way of countering

discrimination is education, many countries in the world have adopted a two-prong approach to forestall discrimination in the workplace.

- 1. Legislation In 1990, the United States, being the hardest hit country among developed nations, included HIV/AIDS in the American with Disabilities Act (ADA), which required employers to make "reasonable accommodations" for disabled employees<sup>4</sup>. Legislation was also in place to prohibit forced disclosure of the HIV status of employees<sup>5</sup>. This received widespread support in the country. Enacted almost ten years after the occurrence of the disease, the ADA was probably too late to completely prevent the discrimination that was happening in many workplace settings. However, the idea of legislation was not so much as to punish but draw the line of acceptable attitudes toward victims of the disease.
- 2. *Education* The ultimately incurable nature of the disease and rapid spread of the epidemic of HIV/AIDS aroused fear in the public, very much out of proportion to the real threat. Efforts to educate people on ways of transmission of the disease and its prevention were made in an attempt to change this irrational fear into sensible precautions. In this respect, the Business Responds to AIDS Program (BRTA) orchestrated by the Centres for Disease Control was particularly noteworthy for its target toward the business sector and the workplace <sup>6</sup>.

The Hong Kong Community Charter on AIDS has its roots and counterparts in Thailand, the United States and the United Kingdom. "Companies Act!, the Business Charter on HIV/AIDS" was launched in July1992 in the UK and was the primary model from which the concept of a Hong Kong Charter was derived. Cultural characteristics and business practice, however, dictated that some modifications be made.

In Hong Kong, the spread of HIV/AIDS has been relatively modest in comparison with many other parts of the world. Epidemiological data indicate that a sharp but limited burst of HIV infections occurred among homo/bisexual men in Hong Kong during the early 1980s. Significant annual numbers - of several hundred per year - in this population did not start until after the mid-1980s. As of 1994, it was estimated that the cumulative number of HIV infections that had occurred in Hong Kong was about 3,000 and the cumulative number of AIDS cases  $250^7$ .

This relatively low level of HIV infections in the population contrasted with the blatant ridicule and discrimination against HIV victims that were rampant in Hong Kong. The association of the epidemic in its early stage with injecting drug use and homosexuality led many to equate them together, disregarding the fact that hemophiliacs and blood transfusion recipients were also at risk. This attitude not only would undermine their own alertness in maintaining appropriate safety precautions against the disease, but sow the seeds of discrimination.

The epidemic having spread to our neighbouring countries<sup>8</sup>, it now poses a threat more real than ever. To forestall discrimination against AIDS patients, to allow patients to continue to contribute to society, and to maintain communication with not only the patients but people at risk of infection, we needed to adopt an open mind and an objective attitude to the occurrence of HIV/AIDS in society and in the workplace in particular.

This need was felt by both the AIDS Unit (Special Preventive Programme) of the Department of Health and the Lions Clubs International of Hong Kong and Macau. The Lions Clubs, with its excellent track record of community services in Hong Kong, had been involved in

AIDS education for quite some time and especially enjoyed a good working relationship with the AIDS Unit. This idea of the Charter was formally raised and discussed in one of their regular meetings in Dec 93.

# **Progress**

It did not take long for the AIDS Unit and the Lions Clubs to agree on a Hong Kong Community Charter on AIDS. What was not expected was the more than satisfactory pace of preparation. In less than 6 months' time, publicity efforts were already under way and invitation letters sent to various business companies. In retrospect, the early launching of the Charter proved to be timely, as in late 1994, reports began to surface in the news on stories of discrimination and unjustified termination of employment.

The Hong Kong Community Charter on AIDS was essentially modeled after the its English predecessors<sup>9</sup>.

#### Its objectives were:

- 1. to provide access to education on HIV/AIDS in the workplace
- 2. to raise the issue of HIV/AIDS in the business community
- 3. to prevent any form of discrimination against people living with HIV/AIDS

#### Content:

Any employer in Hong Kong is eligible to sign the Charter and support the fight against HIV/AIDS.

# **Commitments:**

On signing the Charter, an employer promises to make three pledges in the fight against HIV/AIDS in the workplace and also receives advice on how to implement them.

### Actively and openly support the Hong Kong Community Charter on AIDS

- 1. The company or organisation is encouraged to put up a charter plaque or other publicity materials in an eye-catching area to show its commitment to the Charter
- 2. The signatories would communicate to all employees the Charter principles and the HIV/AIDS workplace policy, and
- 3. The company or organisation is encouraged to support the Charter through the media and raise awareness of the HIV/AIDS in the business community

# Facilitate the provision of HIV education in the workplace

- 1. Providing HIV education in the workplace is essential in maintaining a harmonious working atmosphere and ensuring minimal work disruption should an infected co-worker appear in the workplace.
- 2. Employers should provide employees with accurate and updated information on HIIV transmission and risk reduction, and foster a supportive attitude towards staff with HIV/AIDS.
- 3. Education programmes could be provided in different ways or formats e.g. exhibition, seminar and seminar, in order to meet the needs of individual companies or organisations.

- 4. Education sessions are best conducted during regular working hours.
- 5. HIV education may be incorporated into the regular health and safety training programme, if the company or organisation already has one.
- 6. Resource materials can be obtained from the AIDS Unit of the Department of Health or the other non-governmental organisations. They may also be approached for assistance in the development of educational programmes.

# Formulate a non-discriminatory policy on HIV/AIDS in the company or organisation

- 1. It is important to note that the workplace in general does not constitute any risk of HIV infection. Employees with or without HIV/AIDS should be treated alike in the workplace.
- 2. The AIDS policy in the workplace should address the following issues:
  - the right of infected employees to continue working as long as their condition permits,
  - the right of infected employees to confidentiality,
  - The need to make reasonable accommodation, as required, to the work duties of infected employees,
  - the right of all employees to a safe and healthy working environment,
  - the access of all employees to education on the subject of HIV infection, and
  - the unsuitability of routine HIV antibody testing on employees or on potential employees as a general pre-employment screening.
- 3. The policies should be developed by companies and organisations involving both employers or employees, and preferably implemented before HIV-related problems arise in the workplace.
- 4. A liaison person can be appointed to take care of the whole process of formulating the policies.
- 5. AIDS and the workplace policy can either be independently drawn up or be incorporated into existing personnel policy.

As the average size of business companies in Hong Kong is smaller than that of their counterparts in the United Kingdom, a draft workplace policy as excerpted from the International Labour Office Document of World Health Organisation was also provided for the reference of the signatories.

On completion of all requirements, a special commemorative plaque would be presented to the signatory in a public ceremony.

The Hong Kong Community Charter on AIDS was officially launched on December 8, 1994, concurrent with an organised effort of publicity with the media. There were 7 founder signatories of the Charter in the first signing ceremony, representing some of the biggest employers in Hong Kong. The Government, for instance, had a total of 180,000 employees on its payroll. The ceremony was held at the Sheraton Hotel where the Charter movement was officially introduced to members of the press.

# Chronology

Time/Period	Events
Dec 93	Lions Clubs International, District 303 discussed with AIDS Unit of Department of Health on furthering AIDS education programmes in Hong Kong. The concept of a Charter was proposed.
Apr 94	An Organising Committee of the Hong Kong Community Charter on AIDS was set up.  Prof. Jonathan Mann, former director of GPA (Global Programme on AIDS), WHO, took on the role as honorary adviser.  Mr Mike Sinclair, an AIDS patient himself, was the technical adviser.
May 94	The Right Honourable Christopher Patten, Governor of Hong Kong, became patron of the Charter.
Jun 94	Contacts were made with companies interested in becoming founder signatories.
Oct 94	The Charter was included in the annual Policy Address by the Governor.
Dec 94	The Charter launching ceremony was officiated by heads of Department of Health, Civil Service Branch, and Health & Welfare Branch. There were 7 founder signatories.
1995	Publicity campaign intensified. 3000 companies approached. Interested parties guided through process of fulfilling requirements of charter.
Aug 95	The second signing ceremony cum first plaque presentation was officiated by Dr Leung Ding-bong. 25 new signatories.
Aug 95 - now	Favourable response from all District Boards. 26 more signatories. More businesses continue to join. 58 signatories in total as of end of Sept.
Nov 96 Dec 96 Jan 97	Second Anniversary of Charter Third Signing Ceremony Cum Second Plaque Presentation Ceremony 75 Signatories in Total

#### Results

The number of signatories steadily increased in the last two years. Today the list of signatories numbers as many as 75 in total, covering more than 270,000 employees. On the surface, this is encouraging. However, if the Hong Kong Government was not entered into calculation, the number of employees covered would have been a mere 90,000. It also has to be borne in mind that the invitation to join the Charter had been sent to almost all employers in Hong Kong that employed more than 100 people. These invitations numbered more than 3000. This yielded a success rate of less than 2.5% per invitation! Responses of companies that declined invitation included, among others, the following:

- 1. the notion that AIDS somehow cannot possibly manifest in 'their' companies,
- 2. that fear that supporting the Charter will give rise to perception on the part of the public that AIDS is already a problem within their organisation,
- 3. the confusion of supporting AIDS victims with championship of gay rights or counter-Chinese attitudes, and
- 4. the cold calculation that effort and resources needed to implement the requirements of the Charter were unjustified by potential gains.

These are beliefs that are obviously unfounded. Nevertheless, they served very well in illustrating the need of more intensive education for the public. They also demonstrate how ill prepared our community is against the social aftermath of this disease of AIDS.

#### Conclusion

Success of the Charter will eventually be gauged by its ability to change the way AIDS is perceived in the general public. To this end, nothing is more important than an active education endeavour on the part of the government and the NGOs. The fact that HIV/AIDS, formidable as it might be, is not contagious through regular social contact cannot be overemphasised.

We are hopeful that as society gradually comes to grasp the principle of non-discrimination as embodied in the Charter, more and more businesses will join. When the time comes that people living with AIDS are accepted and integrated in society just as anybody else with a chronic infection, the existence of a Charter will no longer be justified. Ironically, this is exactly what we, as members of the Organising Committee, are looking forward to.

#### **Footnotes**

- 1. Martens, TE et al. (1995). Global estimates of HIV infections and AIDS: further heterogeneity in spread and impact. *AIDS* 9:(supp 1), S251-S272.
- 2. Barr, Judith K., Waring, Joan M. & Warshaw, Leon J. Knowledge and attitudes about AIDS among corporate and public service employees. *American Journal of Public Health* 82:2, 225.
- 3. Baggaley, R. et al. (1994). Impact of HIV infection on Zambian businesses. *British Medical Journal* 309, 1549-1550.
- 4. Gunsch, Dawn. (1992). The ADA's effect on existing employees. *Personnel Journal* 71:4, 16.
- 5. Panel opposes forced AIDS disclosure. Washington Post (31/7/92), 15.
- 6. CDC Business and Labour Resource Service. Tel No.1-800-458-5231
- 7. AIDS Unit & Lions Clubs International. (1994). *Introductory booklet on the Hong Kong Community Charter on AIDS*. Hong Kong: AIDS Unit.

- 8. Advisory Council on AIDS. *Report*. 7/1995.
- 9. Handley, Paul (1992). AIDS at work. Far Eastern Economic Review 155:10, 48.

# A Preventive Education Programme for Men Who have Sex with Other Men

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#### **Abstract**

The development, delivery and responses to the "Gay Outreach Program" offered by AIDS Concern over the last 16 months is presented. This project is a response to the fact that 32% of the total recorded HIV transmissions in Hong Kong are attributed to men who have sex with other men even though this group is thought to make up less than 10% of the total population. Official statistics show that male to male transmission is still a significant factor in the epidemiology of HIV infection in Hong Kong despite the increasing predominance of heterosexual transmission. The project aimed to give gay men an opportunity to participate in the development and delivery of AIDS prevention materials, messages and events targeted at men who have sex with other men. The project has produced a range of safer sex promotion materials targeted at men who have sex with other men; these include leaflets, stickers, and a safer sex kit. Volunteers have been mobilized to distribute condoms and leaflets regularly at gay bars, saunas and nightclubs. Permanent displays of safer sex leaflets have been placed in a number of establishments with the co-operation of the owners/managers. Events and workshops have been held which have attracted large numbers of gay men. Gay groups have been approached and offered assistance in the development and delivery of AIDS prevention work. Stickers with safer sex messages and gay hot-line contact numbers have been placed in venues where men go to have sex with other men. There has been an increase in the number of gay men calling our Help-line since the program began. Local gay establishments have been on the whole very receptive to our efforts. The Gay Outreach Team has attracted a diverse range of volunteers with both sexes and possibly several different sexual orientations represented. Gay men's involvement and response to the AIDS problem has followed a very different path from that taken by the gay community in the West. There is a complex of social, cultural and political issues which help determine the nature of the "gay response" to the epidemic. The success of the Outreach Program depends to a large extent on its ability to adapt and respond to the ways in which the local gay community sees fit to address HIV/AIDS as a community issue.

#### Introduction

Since its inception in 1990 AIDS Concern has held AIDS awareness events targeted at the gay community. Several such events were produced in co-operation with local gay groups. However, prior to 1994 these efforts were piecemeal and not part of an overall education strategy. In July 1994 AIDS Concern decided that its new education strategy would be to provide outreach education programs to marginalised groups. As a starting point we decided that over the next five years we would develop programs targeted at three such groups: Asian migrant workers, female sex workers and men who have sex with men (MSWM)<sup>1</sup>. It was another year before enough staff were in place to enable us to begin work on these programs. The Gay Outreach Program was the first of these three programs to get off the ground. This paper is intended as an informal account of our progress to date.

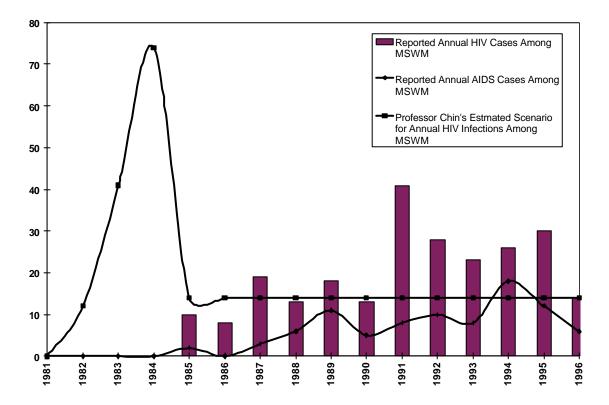
# HIV/AIDS & MSWM in Hong Kong - What do we know?

We know very little about the trend of HIV transmission among MSWM in Hong Kong. We do know that up until 30th September 1996 MSWM have accounted for 32% of all recorded HIV transmissions in Hong Kong and 38% of all recorded AIDS cases. But these figures are cumulative and give us no idea about the rate of infection. Neither the number of new HIV cases among MSWM each year or the number of new AIDS cases reveal any clear or obvious trend. The real trends are obscured by the fact that the year in which an HIV or AIDS case is reported is not necessarily the year of infection or progression to AIDS.

The more reliable indicator of the rate of HIV infection is the number of newly reported AIDS cases each year. These figures formed the basis of the only existing estimate of HIV

infection trends among MSWM<sup>2</sup>. Professor Chin's scenario has the number of new infections among MSWM peaking at 75 in the mid 80s and falling to a steady 14 new cases per year by 1986<sup>3</sup> (Figure 1.) But without any correlating information about the size of the population of MSWM, their sexual behavior patterns, and how these behavior patterns are changing over time, the available statistics cannot be relied upon to give us a complete and accurate picture of the situation.

Figure 1 Estimated and Reported Incidence of HIV and AIDS Among MSWM in Hong Kong



(Reported HIV and AIDS figures for 1996 only up until September 30<sup>th</sup>)

#### Gay Hong Kong

Since the "decriminalization" of homosexuality in Hong Kong in 1991 there has been an increase in the number or organizations catering to the needs of the gay population. To date there are six organizations for gay men, five of which were set up after decriminalization. There are also a growing number of bars where gay men meet for drinking, socializing and karaoke.

Several of the gay groups produce a regular newsletter and one of them produces a magazine which covers gay news and monitors the general media's coverage of gay issues. There is also a commercial locally-produced gay magazine which is available through subscription and through some gay bars. As well as providing social activities and support services for the gay community the gay groups are also working together in responding to the issue of equal opportunity legislation concerning sexual orientation.

In addition to the social clubs, groups and bars for gay men there are a number of places where MSWM go for sexual encounters. There are at least 12 gay saunas in the territory as well as numerous public toilets which are frequented by men in search of sex with other men.

The above account of gay groups and venues, although not very detailed, maps out the terrain which has to be covered by an intervention targeted at MSWM in Hong Kong.

#### The Intervention

This outreach program aimed to actively involve MSWM in the production and distribution of safer sex materials for MSWM. We wanted to produce materials which MSWM could easily identify as having been written for them. We aimed to give clear and explicit information about how HIV is transmitted and how infection can be avoided. We also wanted to organize safer-sex promotion events for the gay community.

#### Achievements

#### 1. Materials Produced4:

So far we have produced a series of 3 leaflets, a set of 2 stickers, a safer sex kit packet and a set of 12 cards all of which carry safer sex information or a safer sex slogan.

The three leaflets cover the topics of 'Safer Sex', 'Oral Sex' and 'Anal Sex' and were written by volunteers in AIDS Concern's Gay Outreach Team. These attractive pocket-sized leaflets are in Chinese and English and all contain the contact numbers of local AIDS Hotlines and the Hotlines of local gay groups. They are regularly handed out by AIDS Concern volunteers outside different gay establishments, usually with a free condom. We have also had some plexiglass stands specially made to contain the leaflets. The stands have now been placed in 7 gay bars, 10 gay saunas and 1 gay shop. So far over 30,000 leaflets have been distributed.

There are two versions of the sticker; one in Chinese and one in English. The stickers contain a picture of a condom and a safer sex slogan as well as telephone numbers for the AIDS Concern Helpline and the Hotlines of two local gay groups. The main point of the sticker is to place a visual reminder of the need to practice safer sex in public toilets where men engage in sex with other men.

The safer sex kit packet was designed to contain a safer sex leaflet, a condom and a small capsule of lubricant. These have been distributed by AIDS Concern volunteers at gay events organized by AIDS Concern and events organized by local gay groups. Some have also been handed out during the regular distributions outside gay establishments.

The safer sex cards are a set of 12 collectable cards, about the size of a credit card, with a photo and slogan on one side and some safer sex information on the other. Six of the cards are in Chinese and six in English (there being six different messages in total.) Topics covered are anal sex, oral sex, masturbation and kissing, STDs, steady boyfriends, sex and drugs. Because the cards are quite small they are easily concealed and we are hoping that the photos will make men want to collect the whole set of 12.

#### 2. Events and Distributions:

Volunteers have handed out condoms<sup>5</sup> and leaflets at the monthly Tea-dances organized by the local gay group Horizons. We have been invited to speak at events held by the new Freemen group, and at a conference for Chinese gay men and women, and we have been

approached by a well-known gay nightclub which organized a fundraising event on our behalf. We have also delivered a safer sex workshop to members of the 10% Club.

We have already held the first two of a series of parties called "Rubber Love" designed to raise awareness in the gay community. By inviting representatives from all the local gay groups we hope to contribute towards the building of a community-wide sense of involvement.

We do regular condom and leaflet distributions outside a number of popular gay establishments.

#### Lessons Learned

In many Western countries the first community responses to AIDS were gay community responses, thus many significant AIDS NGOs in Western countries are run by gay men for the gay community. In Hong Kong this has not been the case. The 10% Club has worked together with the Department of Health to produce a safer sex leaflet and a safer sex video in 1994 and the newest of the groups, Freemen, is currently applying for funding from the AIDS Trust Fund for an AIDS-related project. However, there is no gay AIDS organization in Hong Kong and none of the local gay groups has ever delivered an on-going community AIDS education program or support service.

There are many possible reasons for this and many significant differences between the situation in Hong Kong and that of the West at the beginning of the epidemic. One obvious reason has to do with the nature of the epidemic in the region. AIDS has not had a high visibility impact on the gay community in Hong Kong as it has elsewhere in the world. At this point in time it seems unlikely that the epidemic will take such a large toll on the gay community as it did in San Francisco for example. Another factor is the view held some local gay group leaders that it would be detrimental to their struggle for social acceptance to too closely associate themselves with the AIDS epidemic.

Responses from the gay community to AIDS Concern's efforts have been quite diverse and at times unpredictable. The most obvious illustration of this has been the reactions from local gay groups and gay activists. On the one hand the leaders of several gay organizations have been publicly supportive and appreciative of our efforts. On the other hand individual activists have been publicly critical of AIDS Concern's work in this area, accusing of the organization of insincerity and inefficiency.

To give an example, a few individuals have expressed frustration at there not being in Hong Kong a gay response to AIDS along the lines of Gay Men's Health Crisis or Act Up in the States. There is an obvious tension between this view and the other previously mentioned view that it would be detrimental for the gay community in Hong Kong to become too closely involved with the AIDS issue. AIDS Concern sits awkwardly in the middle; we disappoint the former because we do not have a gay identity, we unnerve the latter by presenting AIDS as a gay issue. It would be difficult to determine whether either of these views is representative of the community as a whole; they are probably better taken as an indication of the level of diversity of opinion within the community.

As part of our outreach work we have contacted all the local gay groups and offered to deliver workshops to their members on AIDS and safer sex. We have also made it clear that if any of the groups require any assistance with AIDS-related projects we would be happy to help

out. The responses to these offers have been very lukewarm with several group leaders voicing their concern that AIDS and safer sex workshops would attract few participants. We did hold one such workshop for the 10% Club and about 15 people turned up. Feedback was mixed; half the participants wanted more detailed technical information and the other half felt that the session was already too serious. The newest gay group, Freemen, hosted its first gathering earlier this year and included some safer sex games which seemed to go down fairly well. This might be the best way of broaching the subject within the community.

We have been surprised by the relative ease with which the sauna and bar owners have accepted our display stands of safer sex leaflets. So far only three saunas have rejected our display stands. Reasons given for not accepting the leaflets have not been very explicit but one owner said that what his clients did on his premises was their business and not his. Some owners have been indifferent but tolerant of our presence and others have been very enthusiastic and encourage and support our efforts. Newer establishments on the whole are more receptive and welcoming.

Gay volunteer recruitment has not been particularly successful. We have distributed volunteer recruitment flyers in gay bars and put advertisements in the house programs of gay plays. The former received no response and the latter resulted in but a few people coming forward. The viability of a volunteer team called the "Gay Outreach Team" depends to a large extent on the willingness of potential participants to self-identify as gay. Although AIDS Concern attracts quite a few gay men as volunteers many of them are not willing to make such a disclosure and choose instead to volunteer in other areas of our work.

#### Conclusion

Over the past sixteen months AIDS Concern has produced a range of gay safer sex materials and has distributed them widely in bars, saunas and public toilets frequented by MSWM. In doing so we hope to have raised the profile of the AIDS issue within the gay community, and to have increased awareness of the need to practice safer sex. Of course, the real measure of the effectiveness of an AIDS intervention is whether or not it has resulted in any behavior change. If you want to know whether fewer men are having unprotected anal intercourse with other men after your intervention, you need first to know how many men were having such intercourse before your intervention. At the time of beginning our Gay Outreach Program we felt that, given our limited resources, it was more important to get on with the business of intervening than to further delay the production and distribution of safer sex materials by first conducting behavioural research.

We have now reached a point where the materials for the intervention have been produced and are in circulation. It is time to address the issue of evaluation so that we can assess the effectiveness of the work that we have done so far, focus our intervention where it is needed most and deliver it in a manner which optimises our chances of reducing the practice of unprotected anal intercourse between MSWM.

Research into the behavior of MSWM in Hong Kong is only just beginning<sup>7</sup> and none of it so far has been specifically conducted with a view to planning and evaluating an AIDS intervention program. We simply do not know with what frequency unprotected anal intercourse is practiced in public toilets or saunas, or by how many men. We do not know whether the members of the emerging gay organizations are representative in their sexual behavior of MSWM as a whole. We do not know which, if any, environments are more commonly associated with

unsafe sexual practices. We do not know how frequently MSWM are reporting other STDs at Social Hygiene Clinics and whether or not this is changing over time<sup>8</sup>. Collecting accurate data on these points is no easy task, but until we have this information the planning and evaluation of any intervention targeted at MSWM will remain more intuitive than objective.

#### **Footnotes**

- 1. Hereafter abbreviated as MSWM.
- 2. Presented in *Estimation and Projection of HIV Infection & AIDS Cases in Hong Kong*, a presentation by Professor James Chin given on 1st December 1994.
- 3. Professor Chin's scenario was based on AIDS cases reported through September 1994. The original chart only takes the figures up to 1990. If we assume the trend remains stable (at fourteen new cases per year) up until the present, this would mean that there have been a total of 295 male-to-male HIV transmissions in Hong Kong. If this figure were true it would mean that the government has already detected 80% of all male-to-male transmissions.
- 4. Funding to cover the cost of the materials produced for this program has been provided by the Red Hot Charitable Trust Fund (UK) and by Concerned Asians and Friends (Hong Kong.)
- 5. The condoms distributed as part of this program have all been donated by Mr. Condom. As a rule we hand out Extra-Strong condoms because these are more suitable for anal sex.
- 6. The production costs of the two *Rubber Love* events held so far have been covered by a generous donation from Mr. Condom.
- 7. Several publications covering local gay issues by Hong Kong University academic Chou Wah Shan, are welcome development. In 1995, Chou Wah Shan conducted a survey of 300 gay men and found that 49% reported that they did not like anal sex and 23% reported that they had never had anal sex. Interviewees were accessed via local gay groups and given a face-to-face interview. (See Satsanga's newsletter June 1996, and Chou Wah Shan (1996). *The stories of Gay Men in Hong Kong* (in Chinese). Hong Kong: Gay Men Research Centre.)
- 8. In the States and in the UK it was found that interventions targeted at MSWM in the 1980s resulted in a significant drop in the numbers of MSWM reporting other STDs at clinics (see Chapter One of *Safety in Numbers*, by Edward King, published by Cassell, 1993.) Comparable data is not routinely collected or reported in Social Hygiene Clinics in Hong Kong.

# Preventive Education Programme for Asian Migrant Workers

Tan Milagros, AIDS Concern, Hong Kong

#### **Abstract**

The development, delivery and evaluation of the "Asian Migrant Worker Outreach Programme" offered by AIDS Concern over the next 6 months is presented. The project is in response to the needs of the estimated 300,000 migrant workers based in Hong Kong. As of July 1996, approximately 36% of official HIV positive cases in Hong Kong were non-Chinese and, while statistics do not indicate the number of migrant workers affected, the economic/societal forces affecting the migrant workers place them in a high risk group for transmission of HIV and other STD's. The project aims to allow migrant workers the opportunity to participate in the development and delivery of AIDS prevention materials, messages and events targeted for the different groups of migrant workers. The project will produce culturally sensitive educational materials for the four largest migrant worker populations in their respective languages: Filipino, Thai, Indonesian, and Chinese. These include posters, pamphlets, and training manuals for volunteer trainers chosen from the individual populations. The trainers and volunteers will conduct HIV prevention seminars and other related events designed to support the migrant workers in choosing a lower risk lifestyle. Posters and leaflets will be visible at migrant worker support centres; leaflets will also be passed out during the large Sunday gatherings in Central, the parks, and union meetings. After the first month of liaison work, reception from the different migrant worker groups has been overall positive and receptive to future joint educational programs. The conditions surrounding migrant workers have a profound effect on the transmission of HIV and STD's within the communities. A majority are women forced to leave home to improve their economic situation and support those left behind. The export governments strongly encourage the outflow of workers, but provide minimal training and support. Hong Kong society has perceived the workers as third class citizens and cases of abuse abound. It is deemed necessary to provide HIV/AIDS information to a sector of Hong Kong's population that has limited access to information and to allow them some control over their lives. The project's success will depend on improving the lines of communication between citizen and immigrant, and breaking the barriers of distrust and prejudice.

#### Introduction

This paper is an informal overview of the first four months of the Asian Migrant Worker Outreach Project, conducted by AIDS Concern; the project was designed to meet the needs of the Asian migrant worker population in Hong Kong with regards to HIV/AIDS.

In 1994, AIDS Concern chose to concentrate its outreach energies on three sectors of the general population: gay men, sex workers, and Asian migrant workers. These three groups had received little or no coverage from other AIDS organisations; AIDS Concern believed that we could offer these groups general support, education, and resources. With the underlying belief that community work is best done by community members, our outreach work aims to develop networks and share information with the target groups to promote self-awareness and understanding based on the unique 'language' of the different cultures.

A large bulk of migrant workers in Hong Kong are Asian domestic workers from the South East Asian region, particularly the Philippines, Indonesia and Thailand (Table 1). Largely driven by economic necessity this social phenomenon of mainly female workers (estimated ratio of 9 women for each man) has not received much notice in terms of HIV/AIDS prevention and education, but due to their linguistic limitations and relative vulnerability (social/economic position), may be in need of information about the disease and its consequent implications to their loved ones. International health and development organisations (UNDP) have discussed the influence of poverty and migration on health issues, such as the spread of HIV/AIDS<sup>1</sup>.

Table 1 Reported and Estimated Numbers of HIV/AIDS Cases (July 1996)

COUNTRY	REPORTED CASES (CUMULATIVE HIV/AIDS; as of July 1996)	ESTIMATED CASES (CUMULATIVE HIV/AIDS)
HONG KONG	738	3,000
CHINA	5157*	100,000
INDONESIA	449	100,000
PHILIPPINES	732	50,000
THAILAND	43,186	600,000

<sup>\*</sup> China Public Health Ministry announcement as of end of October (SOURCE:UNICEF)

The Asian Migrant Worker Outreach Project aims to provide a two part education and awareness campaign to address the health needs of Asian migrants in Hong Kong in terms of HIV/AIDS and STD's. Since its formal beginning in August of 1996, the primary goal has been to increase migrants' understanding of HIV/AIDS so they may be able to make appropriate and educated choices to protect themselves against HIV infection. This is done by attracting their attention with pertinent materials in their own languages, providing peer counsellors they feel comfortable with, and giving them an opportunity to share their fears, concerns, and ideas in a safe and confidential environment.

Networking with the migrant social centres and other service providers (legal aid, unions) gives the project a much needed foot in the door. The centres allow us to meet with a broader spectrum of migrants who may not know of our services. The centres also work as a meeting place and distribution site for information. The Bayanihan Trust Centres in Kennedy Town and Mongkok are a prime example of migrant social centres where the domestic helpers (Filipino and Thai) can meet on their days off (mainly Sundays); spend time with friends; participate in activities like fashion shows, religious gatherings, musical performances; and develop educational needs like computer classes, language skills, cooking, nurse care, etc. On average there are between 500 to 1000 women passing through on a typical Sunday. Another centre that provides a home away from home atmosphere is the Asian Migrant Centre in Jordan where the more political groups have a forum for legal, social and economic discussions, access to information from around Asia, and a free meeting room in the Union Church to prepare for rallies and gatherings. As a reliable and respected legal aid group, Helpers for Domestic Helpers, in Tsim Sha Tsui, is a place that migrants turn to when in legal trouble. The social workers there have a strong commitment to preventing exploitation of migrants.

The following description may help to depict the general social environment within which the outreach programme has to work. Domestic workers are commonly seen in regional cliques, those who come from a particular province or locale tend to flock together. A typical band would consist of 10-15 women who meet regularly at the centre, go to religious service in the morning, have lunch, and, should there be an event worth participating in (singing contests for instance), practice a dance or song in the afternoon. They will usually speak in the dialect of their

region which can be difficult to understand if one is not from that area of the country. Those that gather at focal points like Chater Garden or other parks and outside public areas may come from the same family, or province, or have friends who brought them into Hong Kong to work. They will stay some time at the park after sending their monthly remittance back home to their families. Another draw are the rows of manicurists who ply their services along the alleys near Chater and St. John's Cathedral in Central. This is the one chance the workers have to catch up on news, relax, or read letters from home.

There is also a largely hidden community of migrants who don't have access to the centres or aid. Many are Indonesians or from the Indian subcontinent who may not know any fellow countrymen, or are not allowed by their employers to leave the immediate vicinity of the home. Further disadvantaged by the language barrier, they are a sector of the community difficult to reach.

The HIV/AIDS information workshops given to the migrants aim to inform, allow a forum for discussion, and arouse interest in volunteering. The presenters are migrant worker volunteers trained in basic HIV/AIDS information and who show a commitment to their community; they also form the peer counsellor team. The basic format is as follows: a brief introduction to AIDS Concern and the presenter, a description of the history and present situation of HIV in Hong Kong and in their own countries (numerical representation found in Table 2), a brief explanation of HIV/AIDS, followed by a question and answer forum; to break the pattern, a video produced in the Philippines by the Reach Out Education Foundation, is sometimes used for Filipino audiences. The video uses a musical approach to HIV/AIDS with an array of famous Filipino artists who support the AIDS awareness movement in the Philippines. This has proved popular to the younger crowd of migrants who recognise their favourite performers and seem to enjoy it more than simply listening to a lecture.

Evaluation of the understanding achieved during the workshops has not been successful. While diagnostic quizzes are given to the participants to check their level of understanding of HIV/AIDS at the beginning of the program, trying to reach the same people who participated a month later to test whether the information was absorbed is complicated by the fluidity of the population. Many tell the presenters that they will be returning home in the immediate future. It is rare to have the same people at the same place a month or so later. Some migrants also do not get regular days off and at times, must work on Sundays when requested by their employers. These factors make it hard to evaluate the effectivity of the presentation.

Table 2 Foreign Citizens in Hong Kong

COUNTRY	DEC.	DEC.	DEC.	DEC.	JUNE	FEB.
	<b>'91</b>	<b>· 92</b>	<b>'93</b>	<b>'94</b>	<b>.</b> 95	<b>'96</b>
INDONESIA	-	11,000	14,700	19,700	22,800	25,900
PHILIPPINE	72,000	83,800	99,200	115,500	137,000	139,000
S						
THAILAND	17,000	19,500	21,500	23,800	25,700	25,100

( SOURCE: IMMIGRATION DEPARTMENT)

To augment the presentation, pamphlets in the respective migrant languages have been produced and are passed out after the workshop, at migrant centres, a doctor's office (a Filipino doctor who services mainly Filipino domestic helpers), and on designated Sundays at Chater Garden, Kowloon Park, Victoria Park, etc. The contents cover basic HIV/AIDS information, safer sex/condom use, HIV antibody testing and the services of AIDS Concern (help-line, buddy/ride concern, and resource centre). At present, the pamphlets have been translated into Tagalog (Filipino), and Bahasa Indonesia. Two posters targeted at the Filipino community have been produced and distributed around the community. For the Thai sector, a cassette tape produced by the Thai Red Cross and made available by the Royal Thai Consulate Labour Section is distributed and discussed during English classes at the consulate. The Department of Health has also published HIV/AIDS pamphlets in Filipino and Thai which are also given out to supplement the information AIDS Concern issues.

There is growing world wide concern over the issue of mobility and HIV/AIDS. As world trade opens up under the formation of regional and world wide trade blocs, the need for cheap labour exploits the economic difficulties faced by millions of people in developing nations. Since laws concerning the hiring of inexpensive expatriate labour restricts the immigration of families, the culture of single-sex workers blossoms. In response to the situation in Hong Kong, the Asian Migrant Outreach Project, in collaboration with the Department of Community Medicine, University of Hong Kong, will work on an evaluative research project that would look at the migrant communities mentioned above as well as the migrant workers at Chep Lap Kok Airport to delve deeper into the issue of HIV/AIDS and migration. As the next step into understanding the influence of migratory patterns and population on the disease, the result hopes to provide insight into the regional growth of AIDS and on methods of prevention.

Entering into the fifth month of progress, the results are encouraging. The community has been welcoming and very few difficulties in meeting people have taken place. The project has been careful to develop culturally sensitive materials and to respect the limits of more conservative parties of the community. It is also important to make the information user friendly and promote discussion when it seemed appropriate. The support from certain consulates has also helped broach the subject with more resistant groups, but could backfire if used too often (for instance, certain Indonesian migrants are not on easy terms with their consulate). Flexibility and basic experimentation with new ideas and presentation formats helps keep the information interesting and the volunteers motivated.

From the beginning a major limitation on the effectivity of the program has been the lack of research in understanding migrant behaviour in relation to HIV/AIDS. The difficulty of obtaining factual information from previous studies on migration and HIV/AIDS is a double edged sword: the program can experiment and be more flexible in approaching the topics, but the hit-and-miss style of presenting can be difficult to sustain. Working with different cultural groups requires diplomacy when dealing with controversial issues like safer sex and illegal drugs; by training the peer counsellors to be aware of these sensitive topics, there seems to be less resistance from community leaders to accept the materials offered. However, the collaborative project with the University of Hong Kong is expected to provide the first step in delving deeper into the issue of migrant behaviour and patterns of risk behaviour.

It is hoped that by the next conference, a more in depth understanding of the situation of migrants in Hong Kong and their susceptibility to HIV/AIDS will be learnt in the course of the projects progress. The results of the research project should be of interest not only to the

territory but to the understanding of HIV/AIDS in the larger context of human patterns and behaviour.

# **Footnote**

1. Cohen, D., <u>Economic Impact of the HIV Epidemic</u>, IP#2, HIV and Development Program, UNDP, New York, November 1993

# Distribution of Portable Sharpbox in Methadone Clinics

Wong KH, Lee SS & Mak YW, Department of Health

#### **Abstract**

Abandonment of used syringes and needles on streets by drug users have been causing nuisance to the public in Hong Kong. Portable sharpbox, a product for containing needles, has been distributed to drug users to minimise harm caused to them and the public. We undertook a pilot project of distributing such portable sharpbox to the attendees of Methadone clinics in Hong Kong. Five-syringe plastic portable sharpboxs of size 140mmX32mmX68mm were procured. It is puncture-resistant and thus can be used as portable sharpbox for disposal of up to 5 used 2.5ml syringes by injecting drug users. Syringes put into the box cannot be retrieved and there is a cover to safely lock the box after use. Labels were added to the box to encourage safe disposal as well as to publicise the AIDS Hot-line. Attendees of 5 Methadone day clinics were assessed by physicians and social workers. Those practising drug injection were offered the portable sharpbox. A simple questionnaire were then administered to them 2-3 weeks later to assess their use and their views towards the box. Between February and June 1996, 124 questionnaires were retrieved: sixty-six (53%) clients had used the portable sharpbox. Amongst them, 90% disposed the used boxes in public or private rubbish bins. 43% of the clients found the box useful and 37% indicated that they would continue to use if there is supply in the future. Overall, 72% felt that this portable sharpbox had raised their awareness of AIDS prevention. Negative comments were made by some clients: box too small (6) and fear of detection of use by the family or police (4). Distribution of portable sharpboxes for attendees of Methadone clinics is feasible. It can serve the purposes of disposing used syringes safely as well as providing health education. Fear of arrest by police is a concern of the users. The impact of use of portable sharpbox on abandoned syringes in the streets has to be addressed in other studies.

# Background

The sharing of injection equipment, e.g. needles or syringes, during illicit drug injection is a well-known risk factor for HIV transmission. This has in fact contributed substantially to the global HIV cases. Nevertheless, Hong Kong has a low HIV prevalence (<0.1%) among drug users, as evidenced by the surveillance statistics<sup>1</sup>. Easy access to cheap disposable syringe in Hong Kong might have contributed a lot to the low infection rate, by reducing the frequency of needle-sharing. Also, the extensive network of Methadone clinics and other drug treatment/rehabilitation centres have decreased the amount of drug intake and thus risk for HIV<sup>2</sup>.

Apart from the potential risk of more HIV infections from drug use, there are other issues relating to drug abuse that are affecting the society of Hong Kong. Of these, the abandonment of used syringes and needles on streets by drug users have been causing nuisance to the public. Fitpack, a product for containing needles, has been distributed to drug users in overseas countries to serve as portable sharpbox and minimise harm caused to them and the public. We undertook a pilot project of distributing such fitpack to the attendees of Methadone clinics in Hong Kong.

#### Method

Five-syringe plastic fitpacks of size 140mmX32mmX68mm were procured. It is puncture-resistant and thus can be used as portable sharpbox for disposal of up to 5 used 2.5ml syringes by injecting drug users. Syringes put into the box cannot be retrieved and there is a cover to safely lock the box after use. Labels were added to the box to encourage safe disposal as well as to publicise the AIDS Hotline. Attendees of 5 Methadone day clinics were assessed by physicians and social workers. Those practising drug injection were offered the fitpack. A simple questionnaire were then administered to them 2-3 weeks later to assess their use and their views towards the box.

#### Results

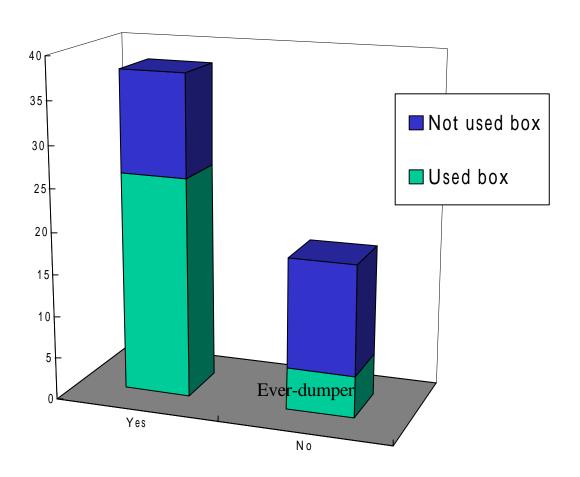
Between February and June 1996, 124 questionnaires were retrieved: sixty-six (53%) clients had used the portable sharpbox. Amongst them, 90% disposed the used boxes in public or private rubbish bins (Table 1). Forty-five (68%) of the drug users found the box useful. Another 8 of the not yet used population also considered it useful. Fifty-six percent of the already users indicated that they would continue to use if there is supply in the future. Overall, 37% of all the clients claimed that they would continue to use in the future. The box had raised the awareness of AIDS prevention in 80% of the drug users who had used the box. The overall figure of improved AIDS awareness was 72%.

Table 1 Disposal of and response towards the portable box for drug users who had used the sharpbox (n=66)

	No.(%)
Disposed the used portable sharpbox at	
street	1(1.5%)
public rubbish bin	28(42%)
private rubbish bin	32(48%)
The portable sharpbox is	
useful	45(68%)
not useful	17(26%)
Will continue to use such portable sharpbox	
Yes	37(56%)
No	29(44%)
The portable sharpbox has increased my awareness of HIV/AIDS	
Yes	44(67%)
To some extent	9(14%)
No	13(20%)

Demographic characteristics were recorded for 79 clients - 74 were male. Their mean age was 42 (range, 23-74). They have injected drug for a median of 12 years (range, 0-28). Thirty eight of them answered that they have ever dumped syringes on the street while 18 answered never did so. As shown in Figure 1, it was found that significantly more of the ever-dumpers used the portable sharpbox than non-dumpers (65% vs. 33%, odds ratio:3.85, p=0.046). Drug users with less than 10 years' history of drug injection tended to use the box more often than those who had injected for more than 10 years though the difference was not statistically significant. History of dumping syringes on the street and duration of drug-injection practice did not correlate with the results of (i) find the box useful or not, (ii) continue to use the box in the future, and (ii) raised awareness towards AIDS prevention.

Figure 1 Frequency of usage of the portable sharpbox among the ever-dumpers and non-dumpers of syringes (n=56)



Negative comments were made by some clients concerning the portable box. They were: box too small (6) and fear of detection of use by the family or police (4).

#### Discussion

The abandonment of used syringes and needles on streets by drug users, especially in areas where they aggregate, e.g. around Methadone clinics, has worsened inacceptance of the drug-taking community by the public in Hong Kong. It is not uncommon to hear appeal from the public to close down the Methadone clinic in their living district. This attitude of "not in my backyard" and the unsupportive environment thus generated will definitely hamper the prevention effort for HIV/AIDS and drug abuse. Under the auspices of the Working Group on Drug Abuse & AIDS of the Committee on Education & Publicity on AIDS (CEPAIDS), the Pui Hong Self-Help Association have implemented the *Cleaning the Abandoned Syringe* project since 1994. Their workers, who were ex-drug users, have visited districts including Shek Kip Mei, Tuen Mun, Yuen Long, Tai Wo Hau and Chaiwan, and recovered a total of 363 syringes in these five rounds of exercise. Other measures should however also be explored for tackling this problem of abandoned syringes.

Needle exchange programmes were implemented in some overseas countries to facilitate safer injection practice of drug users<sup>3,4</sup>. In this connection, needles, syringes, alcohol pads, condom, and disposal containers were all distributed to the drug users. Hence, apart from minimising the harm and risk of drug injection for the drug users, the fitpack (disposal container) also minimise the potential danger to the public through care-free disposal of used syringes/needles on the street. The return and/or proper disposal of the portable sharpbox should of course be clearly instructed.

Against these backgrounds, we undertook a pilot project of distributing such fitpack for the drug users in Hong Kong. The objectives of this project is two-fold: (i) to provide a way of disposing used needles and syringes safely so as to minimise harm to the drug users as well as the public, (ii) to impart AIDS awareness and education messages to the recipients. Our work is in line with the current international belief of risk and harm reduction for the drug users who cannot quit their practice. The portable boxes have been distributed to the street drug users during outreach activities, and also those attending the Methadone clinics. The re-visit nature of Methadone clinics' attendees enables us to have a simple evaluation of the project.

It was found that distribution of portable sharpboxes for attendees of Methadone clinics is feasible. Despite the thinking that such boxes will not be welcome by the drug users, more than half of the respondents used the box and majority of the users were those who had dumped used syringes on the street. Of course, there may be the bias of higher response rate by the clients who favour the use of the box. It is encouraging to note that nearly 70% of the users found the box useful and 56% would continue to use. The more important aspect of improving AIDS awareness among the drug users was also achieved to a great extent as about 80% of the clients agreed so. Fear of detection of use of the box by others is a concern of the drug users. Amongst this, fear of arrest by police is a main drawback that may adversely influence the potential usefulness of such portable sharpbox.

Although limited by the relatively small sample size of the study population, it can be concluded that the portable sharpbox is of use to some injecting drug users. The cost-effectiveness of wider distribution of the boxes for drug users, and its potential impact on abandoned syringes in the streets have however to be addressed in other bigger studies.

# **Footnotes**

- 1. Wong, KH & Lee, SS. (1996). Maintaining low HIV seroprevalence among injecting drug users [letter]. *JAMA* 275:8, 596.
- 2. Hong Kong Department of Health. (1995). *STD/AIDS Update 4th Quarter 1995 Vol.1 No.4*. Hong Kong: Department of Health.
- 3. Ljungberg, B., Christensson, B. & Tunving, K. et al. (1991). HIV prevention among injecting drug users: three years of experience from a syringe exchange program in Sweden. *J AIDS* 4, 890-895.
- 4. Hagan, H., Des Jarlais, DC & Purchase, D. et al. (1993). An interview study of participants in the Tacoma, Washington syringe exchange. *Addition* 88, 1691-1697.

# Training Received by Health Care Workers, Social Workers, and Secondary School Teachers about HIV/AIDS

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#### **Abstract**

The presentation delineates training about HIV/AIDS received, desired, and evaluated by health care workers, social workers, and secondary school teachers. Data came from mail surveys of (1) 4,624 health care workers in 1995, (2) 1,103 social workers in 1994, and (3) 864 secondary school teachers in 1993. Surveyed health care workers were respondents from populations of doctors, nurses, medical laboratory technicians, occupational therapists, radiographers, physiotherapists, optometrists, and medical students. Surveyed social workers were respondents from populations of outreaching social workers, drug rehabilitation workers, family service worker, family life education workers, and home helpers registered in the Council of Social Services. Surveyed teachers were respondents from 46 randomly selected secondary schools. At-work and off-work training were the major source of knowledge about HIV/AIDS among 30.2% of health care workers. Whereas 28.8% of health care workers attended training for 3 hours or more, only 8.2% of social workers did so. Among health care workers, occupational therapists were most likely (90.6%) to attend less than 3 hours of training. Infection control was the most likely (30.4%) content of training received by health care workers. There were still 83.3% of health care workers who found training to be inadequate whereas 37.8% of social workers found training to have little use. Particularly, only 3.2% to 5.3% of social workers regarded training to be adequate for helping other workers, infected clients, and families of infected clients. Over 91% of health care demanded more training in various areas whereas 56.7% to 77.9% of social workers demanded specific training in different areas. Less than a quarter of secondary school teachers reported having received guidelines about HIV/AIDS. Among those reporting having received guidelines, only around 30% found them to be adequate. Although 72.2% of secondary school teachers were aware of receiving any of teaching materials about HIV/AIDS, only 16.6% of them used any of the materials. The current participation rate for training among all health care workers, social workers, and teachers was low. However, there was appreciable demand for training from health care workers and social workers although social workers' evaluation of training was not very positive.

#### Introduction

Need for training to deal with HIV/AIDS is pronounced in health care workers, social workers, and secondary school teachers, and other front-line professionals. The literature shows that:

- Health care workers and social workers primarily worry about contracting HIV at work (Gillman 1991; O' Donnell et al. 1990), and teachers lack confidence in teaching AIDS-related issues in school (Boscarino and DiClemente 1996).
- Health care workers' worry about HIV infection stems from their likelihood to encounter blood and other body fluid (Cockcroft et al. 1994).
- Health care workers and social workers also have difficulty to care for and counsel persons with HIV/AIDS and their families (Herlitz et al. 1990).
- Similarly, teachers worry about dealing with HIV-infected students in view of the escalating risk of HIV infection among school students (Holtzman et al. 1995).
- The worry and concern of health care workers, social workers, and teachers are certainly notable in Hong Kong (Ho 1995).

To address the training need, this presentation summarizes findings from three recent surveys in Hong Kong. It aims at:

- 1. depicting the amount and forms of training and instruction concerning AIDS-related issues received by various professional groups,
- 2. their evaluation of these training, and

3. their need for training programs on AIDS.

#### Methods

Data came from three mail surveys, respectively of:

- health care workers in 1995, who were respondents from populations of doctors, nurses, medical laboratory technicians, occupational therapists, radiographers, physiotherapists, optometrists, and medical students,
- 2. social workers in 1994, including outreaching social workers, drug rehabilitation workers, family service worker, family life education workers, and home helpers, and
- 3. secondary school teachers in 1993, from 46 of 50 randomly selected secondary schools responded to the school survey.

#### Results

#### Health care workers

- Health care workers learned about HIV/AIDS primarily from self study (34.6%, see Table 1), followed by undergraduate or student training (26.9%) and at-work training (23.9%), and least from off-work training (6.3%).
- Doctors especially relied on self study (56.1%) whereas nurses learned about HIV/AIDS less likely from self study than at-work and undergraduate or student training (22.3% vs. 31.6% & 30.3%).
- Medical students aside, at-work training and undergraduate training were least significant as a source of knowledge for private doctors (8.6%).
- At work training appeared to be most (36.8%, see Table 2) helpful to develop skills in health care workers among different modes of training.
- Laboratory technicians especially found it to be helpful (48.3%) whereas medical students were the least likely to find so among various professional groups.
- Medical students were most likely (40.2%) to regard prework training as helpful among various modes of training and professional groups.
- They were also most likely to treasure practical experience among various professional groups (32.9%). Professional obligation appeared to be most helpful to private doctors (37.3%).
- Majority (71.2%, see Table 3) of health care workers attended less than three hours of training on AIDS.
- Medical students were most (52.5%) likely to receive three hours or more training on AIDS and occupational therapists were least (9.4%) likely.
- Infection control was the most (30.4%, see Table 4) common content of training received by health care workers, especially nurses (43.2%).
- Topics on sex-transmitted disease were most (22.5%) common in training received by private doctors.
- They were least likely to reach physiotherapists (1.9%).
- Topics on AIDS education and counseling, HIV management, and infection control were most likely in training received by nurses (20.6%-43.2%).
- Lecture was the most common format of training received by health care workers (44.7%, see Table 5).
- Local training courses were the most likely form of training received by laboratory technicians (33.7%).

- Workshops were the most likely form appealing to medical students (21.1%).
- Overseas conferences were the most likely channel for private doctors among various professional groups.
- Most (51.0%, see Table 6) health care workers found training on AIDS inadequate and another substantial proportion (32.3%) regarded it as very inadequate.
- Occupational therapists were most likely to find the training to be inadequate whereas medical students were least likely to do so.
- Overwhelming majority of health care workers expressed demand for training in medical knowledge, management of patients, self-protection from infection, and counseling of patients (91.3%-96.3%, see Table 7).
- Medical knowledge was the most demanded area among occupational therapists (97.2%).
   Management of patients and self-protection from infection was the most concerned area among optometrists (100.0%).
- Counseling of patients was the most demanded area among private doctors (96.0%). On the other hand, it was least likely the demanded area of laboratory technicians (77.0%).

### **Social workers**

- About one-sixth (16.1%, see Table 8) of social workers in fields of home helping, outreaching, drug rehabilitation, family service, and family life education received training on HIV/AIDS.
- Drug-rehabilitation workers were most likely to have received training (25.0%) and outreaching workers were least likely (6.8%).
- Only 8.2% of all social workers attended 3 hours or longer of training. Seminars were the most likely channel of training (8.2%).
- Near two-third (65.7%, see Table 9) of social workers desired further training.
- Knowledge about means to prevent infection from the job was the most popular topic desired for further training (77.9%).
- Home helpers were especially likely (83.8%) to desire further training on this topic.
- Yet, at least more than half (56.7%) desired further training on family counseling skills and other aspects suggested in the questionnaire.
- Family service workers were especially likely (93.8%) to desire further training on family counseling skills whereas home helpers were the least likely (51.2%).
- Regarding further training on personal counseling skills, outreaching, family service, and drug rehabilitation workers were more likely (83.3%-87.5%) to express the desire than home helpers and family life education workers (54.8% & 62.5%).
- Only 59.3% of social workers found training to be useful (see Table 10).
- Family service workers were most likely to regard it as useful (86.7%) and home helpers were least likely to do so (53.0%).
- At most, only 17.6% of social workers found that training was adequate to protect them from clients.
- Home helpers were least likely to find it adequate (7.7%) whereas family service workers were most likely (35.3%).
- At the worst, less than 6% of social workers regarded training as adequate to help infected clients, their families, and other workers.
- Only slightly above 10% found training to be adequate to acquire knowledge and help clients prevent AIDS. Across these evaluations, home helpers were least likely to be favorable.

- Less than a quarter (24.2%, see Table 11) of secondary school teachers received instruction from the Department of Education on incorporating AIDS-related materials into the teaching curriculum.
- Teachers who taught biology were most likely to receive the instruction among teachers. Among those having received the instruction, 31.3% evaluated it as adequate.
- Teachers who taught religious studies were most likely to find it adequate.
- Of all teachers, 42.1% received the circular from the Department of Education on basic facts about AIDS and precautions in schools and 23.6% received other guidelines.
- Among those having received the guidelines, 29.2% found them to be adequate.
- Besides, 72.2% of all teachers received some education material on AIDS and 16.6% used it in teaching.
- The booklet of Facts about AIDS was most commonly received and used by teachers (53.8% & 9.4%).
- Regarding all items, there was a sizable gap between reception and use of educational materials.

#### Discussion

The fact that most health care workers found training to be inadequate indicates their demand for it. The demand was pronounced in every aspects of HIV/AIDS knowledge. In particular, at-work training appears to be indispensable to health care workers who regarded it as most helpful. Doctors more reliance on self-study to learn about HIV/AIDS may reflect either of two facts, that they were taking more initiative to learn or they receive an insufficient amount of training. The latter should call for providing more training to doctors.

Demand for further training on AIDS was weaker among social workers than health care workers. This reflects social workers lower possibility of contacting AIDS patients who need to receive medical care. However, social workers, especially home helpers were not likely to find training to be useful and adequate. Strengthened training for social workers, especially for home helpers, is undeniably necessary.

As a whole, health care workers, social workers, and secondary school students all perceived training on AIDS to be inadequate to meet their needs.

- Only 36.8% of health care workers found at-work training to be most helpful to develop skills in treating HIV-infected patients;
- Only 13.1% of health care workers found the amount of training to be adequate;
- Only 3.4% of social workers found training to be adequate to help them work with HIVinfected clients;
- Only 29.2% of teachers found guidelines on management of HIV-infected students to be adequate.

Training that enhances professionals skill and confidence in working with HIV-infected persons is certainly essential.

#### References

Boscarino, Joseph A., & DiClemente, Ralph J. (1996). AIDS Knowledge, Teaching Comfort, and Support for AIDS Education among School Teachers: A Statewide Survey. *AIDS Education and Prevention* 8:3, 267-277.

Cockcroft, A., K., Oakley, C. Gooch & Mastin, S. (1994). Anxiety and Perception of Risk of HIV and Hepatitis B Infection among Health-care Workers Reporting Accidental Exposures to Blood and Other Body Fluids. *AIDS Care* 6:2, 205-220.

Gillman, Ruth (1991). From Resistances to Rewards: Social Workers' Experiences and Attitudes toward AIDS. *Families in Societies* 72, 593-601.

Herlitz, Claes & Bengt, Brorsson (1990). Facing AIDS: Reaction among Police Officers, Nurses, and the General Public in Sweden. *Social Science & Medicine* 30:8, 913-918.

Ho, CO (1995). Report of Attending the International Conference on HIV/AIDS and Social Work, Denmark, Copenhagen. Hong Kong: AIDS Trust Fund.

Holtzman, Deborah, Mathis, Mary P., Kann, Laura, Collins, Janet L. & Kolbe, Lloyd J. (1995). Trends in Risk Behaviors for HIV Infection among U.S. High School Students, 1989-1991. *AIDS Education and Prevention* 7:3, 265-277.

O'Donnell, Lydia, O'Donnell, Carl R., Pleck, Joseph H., Snarey, John & Rose, Richard M. (1990). Psychosocial Responses of Hospital Workers to Acquired Immunodeficiency Syndrome (AIDS). In Temoshok, L. & Hillsdale, A.B. (1990). *Psychosocial Perspectives on AIDS: Etiology, Prevention, and Treatment*. NJ: Lawrence Erlbaum, 287-301.

Table 1 Sources of knowledge for health care workers (%)

Most of knowledge about AIDS/HIV coming from:	Public doctors	Private doctors	Medical students	Nurses	Lab. techni- cians	Occupa- tional therap-	Radio- graphers	Physio- therap- ists	Opto- metrist	Total
						ists				
	693	373	92	1949	691	191	247	216	57	4624
Undergraduate/ student training	31.8*	6.9	74.7	30.3	25.3	19.9	31.0	15.2	28.3	26.9
At-work training	16.6*	8.6	0.0	31.6	28.5	13.8	17.1	22.2	0.0	23.9
Off-work training	1.4*	4.6	0.0	9.1	5.4	7.5	3.8	5.6	2.2	6.3
Self study	47.5*	72.2	21.7	22.3	34.8	32.7	34.8	34.3	41.3	34.6

<sup>\*:</sup> significantly different among professional types at the 2-tailed .05 level by *Kruskal-Wallis's* test

Table 2 Helpfulness of sources of knowledge perceived by health care workers (%)

Most helpful to develop skill in treating HIV-infected patients:	Public doctors	Private doctors	Medical students	Nurses	Lab. techni- cians	Occupational therapists	Radio- graphers	Physio- therapists	Opto- metrist	Total
Prework training	12.9*	14.7	40.2	35.7	24.0	33.3	23.9	28.4	26.9	27.6
At-work training	41.9*	30.0	22.0	31.4	48.3	41.1	41.9	46.9	30.6	36.8
Practical experience	22.0*	18.0	32.9	14.6	13.6	11.7	20.5	12.4	17.3	16.4
Professional obligation	23.1*	37.3	4.9	18.3	14.2	13.9	13.7	12.4	25.0	19.2

<sup>\*:</sup> significantly different among professional types at the 2-tailed .05 level by Kruskal-Wallis's test

Table 3 Total hours of training received by health care workers (%)

Public	Private	Medical	Nurses	Lab.	Occupa-tional	Radio-	Physio-	Opto-	Total
doctors	doctors	students		technic-	therapists	graphers	therapists	metrist	
				ians					
68.2	64.1	47.5	70.7	69.1	90.6	80.8	83.2	87.2	71.2
20.7	24.8	46.3	22.3	22.8	7.1	14.1	14.7	12.8	21.3
5.0	6.1	6.3	3.9	5.3	1.8	4.2	0.5	0.0	4.2
1.7	0.3	0.0	1.2	1.3	0.6	0.5	1.1	0.0	1.1
4.5	4.6	0.0	1.9	1.5	0.0	0.5	0.5	0.0	2.1
(	68.2 20.7 5.0 1.7	68.2 64.1 20.7 24.8 5.0 6.1 1.7 0.3	doctors         doctors         students           68.2         64.1         47.5           20.7         24.8         46.3           5.0         6.1         6.3           1.7         0.3         0.0	doctors         doctors         students           68.2         64.1         47.5         70.7           20.7         24.8         46.3         22.3           5.0         6.1         6.3         3.9           1.7         0.3         0.0         1.2	doctors         doctors         students         technicians           68.2         64.1         47.5         70.7         69.1           20.7         24.8         46.3         22.3         22.8           5.0         6.1         6.3         3.9         5.3           1.7         0.3         0.0         1.2         1.3	doctors         doctors         students         technications         therapists           68.2         64.1         47.5         70.7         69.1         90.6           20.7         24.8         46.3         22.3         22.8         7.1           5.0         6.1         6.3         3.9         5.3         1.8           1.7         0.3         0.0         1.2         1.3         0.6	doctors         doctors         students         technicians         therapists         graphers           68.2         64.1         47.5         70.7         69.1         90.6         80.8           20.7         24.8         46.3         22.3         22.8         7.1         14.1           5.0         6.1         6.3         3.9         5.3         1.8         4.2           1.7         0.3         0.0         1.2         1.3         0.6         0.5	doctors         doctors         students         technicians         therapists         graphers         therapists           68.2         64.1         47.5         70.7         69.1         90.6         80.8         83.2           20.7         24.8         46.3         22.3         22.8         7.1         14.1         14.7           5.0         6.1         6.3         3.9         5.3         1.8         4.2         0.5           1.7         0.3         0.0         1.2         1.3         0.6         0.5         1.1	doctors         doctors         students         technicians         therapists         graphers         therapists         metrist           68.2         64.1         47.5         70.7         69.1         90.6         80.8         83.2         87.2           20.7         24.8         46.3         22.3         22.8         7.1         14.1         14.7         12.8           5.0         6.1         6.3         3.9         5.3         1.8         4.2         0.5         0.0           1.7         0.3         0.0         1.2         1.3         0.6         0.5         1.1         0.0

<sup>\*:</sup> significantly different among professional groups at the .05 level, by Kruskal-Wallis's test

Table 4 Content of training received by health care workers (%)

Table 4 Collien	t of trail	inng rec	erveu by	nearm	care v	voi kei s	( /0)			
Content of training	Public doctors	Private doctors	Medical students	Nurses	Lab. techni- cians	Occupa- tional therap-	Radio- graphers	Physio- therap- ists	Opto- metrist	Total
						ists				
Sex-transmitted	9.9*	22.5	13.0	15.1	18.1	2.6	2.4	1.9	3.5	13.4
disease										
AIDS education and	11.5*	16.2	13.0	20.6	15.8	6.3	4.9	12.5	5.3	15.9
counseling										
HIV management	11.2*	12.2	10.9	21.2	6.5	4.7	4.5	7.4	3.5	14.3
Infection control	19.6*	15.9	13.0	43.2	31.4	11.5	15.0	23.1	10.5	30.4
Others	4.9*	11.1	2.2	12.2	4.1	4.2	6.5	2.3	5.3	8.3

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Table 5 Form of training received by health care workers (%)

Form of training	Public doctors	Private doctors	Medical students	Nurses	Lab. techni- cians	Occupational therapists	Radio- graphers	Physio- therap- ists	Opto- metrist	Total
Lecture	52.5	49.1	54.4	41.4	43.7	42.0	40.9	58.9	51.9	44.7
Local training course	16.8	13.1	9.2	26.6	33.7	20.4	26.1	20.2	31.9	24.1
Workshop	12.6	17.0	21.1	19.5	12.6	18.3	17.6	14.5	4.1	17.6
Overseas	15.0	16.6	12.2	8.5	8.0	4.3	10.6	4.9	8.0	9.7
conferences, training										
and/or attachments										
Others	3.1	4.2	3.1	4.0	2.0	15.0	4.9	1.6	4.1	3.9
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 6 Assessment of the existing training on AIDS by health care workers (%)

Adequacy of training	Public doctors	Private doctors	Medical students	Nurses	Lab. technicians	Occupational therapists	Radio- graphers	Physio- therapists	Opto- metrist	Total
Too much	0.2	0.5	0.0	0.4	0.6	0.0	0.0	0.5	0.0	0.4
Adequate	17.0	21.9	24.7	11.1	9.0	5.9	14.5	10.1	14.0	13.1
Inadequate	59.0	52.2	55.3	51.4	51.6	42.5	56.2	56.7	49.1	51.0
Very	23.8	25.4	20.0	37.0	38.8	51.6	29.4	32.7	36.8	32.3
inadequate										

Table 7 Areas of training that health care workers needed strengthening (%)

Areas to be Strengthened	Public doctors	Private doctors	Medical students	Nurses	Lab. techni- cians	Occupational therapists	Radio- graphers	Physio- therap- ists	Opto- metrist	Total
Medical knowledge	85.8*	93.9	81.0	94.0	93.7	97.2	92.2	95.0	84.9	92.3
Management of patients	96.8*	96.7	98.8	96.9	90.7	97.8	98.7	98.6	100.0	96.3
Self-protection from	89.8*	92.4	91.3	95.2	96.8	97.8	98.7	97.1	100.0	94.8
infection										
Counseling of patients	94.1*	96.0	97.4	95.2	77.0	95.0	74.4	95.0	92.2	91.3
Average	91.8*	95.0	92.2	95.3	90.0	97.0	91.5	96.5	94.3	93.8

<sup>\*:</sup> significantly different among professional types at the 2-tailed .05 level by Kruskal-Wallis's test

<sup>\*:</sup> significantly different among professional groups at the .05 level, by Kruskal-Wallis's test

Table 8 Amount and form of training received by social workers (%)

	Home	Outreach-	Drug	Family	Family life	Total
	helping	ing	rehabili-	service	education	
			tation			
Number	598	211	64	103	82	1103
Received training	19.9*	6.8	25.0	15.7	7.4	16.1
Received part-time training	7.3*	1.4	12.5	4.0	0.0	5.5
Received full-time training	0.4	1.0	0.0	2.0	2.5	0.8
Attended seminars	9.3*	3.9	14.1	10.9	3.8	8.2
Received other forms of training	5.4*	1.0	4.7	3.0	0.0	3.8
Attended training for 3 hr or more	8.1	6.3	12.5	11.9	6.2	8.2

<sup>\*:</sup> significantly different among different jobs by the  $\chi^2$  test at .05 level

Table 9 Desire for further training received by social workers (%)

	Home helping	Outreach- ing	Drug rehabili- tation	Family service	Family life education	Total
Desire further training	62.9	75.0	68.8	75.0	75.0	65.7
Aspects desired: $(n = 224)$						
Prevention skills	74.7	47.1	83.3	75.0	75.0	73.3
Means to prevent infection from the	83.8*	52.9	72.2	62.5	50.0	77.9
job						
Medical knowledge	70.7	62.5	72.2	87.5	75.0	71.6
Personal counseling skills	54.8*	87.5	83.3	87.5	62.5	62.1
Family counseling skills	51.2*	68.8	61.1	93.8	62.5	56.7

<sup>\*:</sup> significantly different among different jobs by the  $\chi^2$  test at .05 level

Table 10 Evaluation of training received by social workers (%)

	Home helping	Outreach- ing	Drug rehabili-	Family service	Family life education	Total
			tation			
Usefulness of the training	53.0	69.2	68.8	86.7	50.0	59.3
Adequate training to:						
Help clients prevent AIDS	5.3*	18.8	12.7	17.6	15.2	10.6
Protect oneself from clients	7.7*	28.4	30.2	35.3	24.7	17.6
Help infected clients	2.9	3.4	7.9	2.9	3.9	3.4
Help families of infected clients	4.0	4.8	9.5	7.8	7.8	5.3
Help other workers	2.9	1.4	6.5	6.9	2.6	3.2
Acquire knowledge	7.5*	16.9	15.6	15.7	9.1	10.9

<sup>\*:</sup> significantly different among different jobs by the  $\chi^2$  test at .05 level

Table 11: Having received and used teaching materials among secondary school teachers who taught different subjects (%)

	Human biology	Biology	Social studies	Religious studies	Ethics	Others	Total
Number	21	56	139	52	40	454	864
Received instruction on incorporating	47.6*	57.1	22.5	42.2	32.5	19.6	24.2
AIDS-related materials into the							
teaching curriculum							
Instructions were adequate	33.3*	58.8	40.0	64.3	33.3	31.6	31.3
Received the circular from the	47.4	54.5	38.8	49.0	48.7	43.8	42.1
Education Department, titled "Basic							
Facts about AIDS and Precautions in							
Schools" in December 1992							
Received other guidelines from the	50.0*	40.0	25.9	24.0	42.5	24.7	23.6
Education Department relating to							
management of HIV/AIDS school							
children							
These guidelines were adequate	45.5	45.5	32.1	43.8	26.1	29.2	29.2
Received any of the following	71.4	75.0	79.1	80.8	77.5	70.7	72.2
Used any of the following	47.6*	58.9	21.6	11.5	27.5	14.8	16.6
Received the video tape of the ETV	42.9*	37.5	11.5	9.6	15.0	8.4	9.6
program: AIDS							
Used the video tape of the ETV	28.6*	30.4	7.2	3.8	12.5	4.0	4.6
program: AIDS							
Received the video tape of the Query	28.6*	12.5	7.9	3.8	15.0	5.1	5.9
on AIDS							
Used the video tape of the Query on	9.5*	5.4	2.2	0.0	10.0	1.1	1.6
AIDS							
Received the video tape of HIV	14.3	12.5	9.4	9.6	7.5	5.5	6.3
Carriers							
Used the video tape of HIV Carriers	4.8*	7.1	1.4	0.0	2.5	1.3	1.2
Received the booklet of	57.1*	48.2	23.7	26.9	30.0	21.1	23.5
"Understanding AIDS"							
Used the booklet of "understanding	19.0*	26.8	7.2	3.8	7.5	3.1	4.7
AIDS"							
Received the booklet of "How Much	52.4*	44.6	28.1	23.3	37.5	18.9	22.3
Do You Know about AIDS"							
Used the booklet of "How Much Do	23.8*	25.0	6.5	5.8	12.5	4.4	5.3
You Know about AIDS"							
Received the booklet of "Facts about	66.7	55.4	62.6	59.6	57.5	51.1	53.8
AIDS"							
Used the booklet of "Facts about	19.0*	26.8	11.5	7.7	7.5	8.4	9.4
AIDS"							
Received the leaflet for secondary	38.1	41.1	30.9	28.8	42.5	30.8	30.8
school pupils							
Used the leaflet for secondary school	14.3*	21.4	6.5	1.9	7.5	5.1	6.4
pupils							
Received the teaching kit on AIDS	28.6*	33.9	9.4	5.8	10.0	4.4	6.4
Used the teaching kit on AIDS	19.0*	23.2	4.3	3.8	7.5	2.0	2.9
Received the learning pack on AIDS	9.5*	21.4	11.5	7.7	7.5	4.0	5.6
for secondary school students							
Used the learning pack on AIDS for	0.0*	10.7	2.9	3.8	7.5	1.8	2.1
secondary school students							

<sup>\*:</sup> significantly different among the six subjects at .05 level by the F-test in regression analysis

# Symposium E:

# Psychosocial Aspects of HIV Care

# Multidisciplinary Team Approach for Care of AIDS Patients

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#### **Abstract**

AIDS patients face complex medical and psycho-social problems but often have inadequate support system for coping. There is need for a comprehensive service which helps to improve their quality of survival, shorten hospital stay and allow them to maintain self control until the final stages of their illness. The AIDS Clinical Service of Queen Elizabeth Hospital (QEH) has adopted a multidisciplinary team model to ensure an efficient and high quality service for patients with AIDS. The service is predominantly out-patient based but patients may be hospitalised when their health condition deteriorates or when their family members find it difficult to cope with their care at home. A multi-specialty medical team advises on the investigations and management of various infectious complications. To ensure smooth transition from the hospital to the patient's home, ample time is given for pre-discharge assessment by the multidisciplinary team. Liaison is also established with the community nurses, home help services of the Social Welfare Department, and staff of non-governmental organisations to ensure adequate support for home care. The multidisciplinary team approach to provide care for AIDS patients has ensured a patient-centred service and the clinic-based service helped to shorten their duration of hospital stay. By attending to their physical, nutritional, and psychosocial needs, they are allowed to retain self control and their quality of life is improved. With adequate predischarge planning and liaison with community-based organisations, smooth transition form the hospital to the home setting is ensured.

#### Introduction

This presentation is based on the contribution from the AIDS clinical service of the Department of Medicine, in collaboration with the Departments of Medical Social Work Service, Dietetics and Catering, Physiotherapy, Occupational Therapy and the Community Nursing Service in Queen Elizabeth Hospital (QEH).

A brief overview of the nature of our service, the philosophy behind our provision of care to AIDS patients, and the way we are moving towards patient-centred and seamless care with the collaboration of different clinical and allied health departments in our hospital are discussed in this paper.

QEH has a long tradition of providing clinical services to individuals with HIV infection and AIDS which can be dated back to the days of the Medical and Health Department. Our hospital has developed the reputation and indeed is a major referral centre for the management of HIV-infected and AIDS patients. Of all the reported AIDS patients in Hong Kong, around 60% had been hospitalised in QEH and another 15% had been assessed and managed in our clinic.

The first AIDS patient in Hong Kong was reported in February 1985 and we are now well into the second decade of the AIDS epidemic. Up to June 1996, a total of 702 HIV-infected individuals was reported, of whom 214 had already progressed to AIDS. Estimation from the Department of Health, however, described a figure of 2000 to 3000 of HIV-infected individuals in Hong Kong at present. It is anticipated that the number of HIV-infected and AIDS individuals who require the clinical services of public hospitals will escalate in the next few years.

In QEH, there has been a noticeable increase in the prevalence of in-patients with HIV infection or AIDS from 1 to 2 at any time a few years ago to 5 to 10 in the past two years. Thus it is vital and necessary for us to run our AIDS clinical service efficiently and effectively so as to

minimise the demand for in-patient care while at the same time maintaining the high quality of service and in line with the rising expectation of the patients as well as the other non-governmental organisations.

# Bio-psycho-social Needs of AIDS Patients

AIDS patients often face complex medical, psychological, social, vocational and economical problems which tend to intensify as their health deteriorate. They often develop multiple opportunistic infections and occasional malignancies which affect different body systems as their immunodeficiency progress. They also have to face considerable stress as a result of physical disability, disfigurement, pain, unemployment, economical hardships, death as well as stigmatisation and rejection from the society.

With these considerations, the AIDS clinical service in QEH aims to improve the quality of life of HIV-infected and AIDS patients, decreases their need for hospitalisation and allows them to maintain self control until the very end of their illness.

# Mission of Multidisciplinary Team

Our mission is to provide a comprehensive service which is patient-centred and outpatient based as much as possible. We aim to cater for patients' psycho-social as well as medical needs through multidisciplinary team works. Co-ordination of all services offered by different agencies are carried out to eliminate any service gap. Confidentiality and continuity of care are maintained throughout all in- and out-patient treatment periods.

#### Multidisciplinary Team Approach for Care of AIDS Patients

The Special Medical Clinic at QEH serves as a centre providing ambulatory clinical services for HIV-infected and AIDS patients. Clinical and psycho-social assessment, investigations, minor procedures and treatment can be conducted on an out-patient basis in the clinic. When necessary, referrals for various other clinical and psycho-social services will be coordinated by its medical and nursing staff.

In QEH, in-patients are under the care of the Department of Medicine. A multi-specialty clinical team consisting of dedicated specialists in respiratory medicine, gastroenterology, haematology, and neurology in the Department of Medicine provides expertise care to the complicated medical conditions in HIV-infected and AIDS patients. The medical and nursing staff of the AIDS clinical service will monitor the progress, advise on management as well as prepare pre-discharge plans to patients in order to maintain the continuity of care.

Special arrangement with the Dental Unit of QEH, Dermatology Service of the Department of Health, and the Ophthalmology Service of the Hong Kong Eye Hospital allows prompt and specialist management of oral, cutaneous or ocular complications in individual patients.

Pathologists and microbiologists in QEH provide an extensive range of laboratory investigations which facilitate early diagnosis of infections or other conditions. Palliative care and pain control are given by specialists from the Department of Radiotherapy and Oncology, QEH. Hospice and home care service for patients with advanced stages of AIDS can be arranged with

the Haven of Hope Hospital, Bradbury Hospice, the Society for AIDS Care and the community nursing service. The assistance of other clinicians is enlisted when the need arises.

We also provide backup in-patient service for clients attending the AIDS Unit of the Department of Health. A weekly joint clinical round by the multidisciplinary team of our hospital, the staff from Department of Health and Haven of Hope Hospital serves to improve communication among the staff and enhance continuity of the care of the patients.

The psycho-social needs and pre-discharged planning of all in-patients are co-ordinated by the nursing staff of the AIDS clinical service at QEH. Each patient is individually assessed to identify his special problems and service needs. Individual counselling is given to relieve their psychological stress. Health education is conducted to improve their ability to cope with their symptoms and treatment with a view of enhancing self-control. Patients requiring long-term intravenous medications are taught the technique of home injection so that they can lead an independent and even active life. Counselling and health education are also provided to their family members and significant others to improve their home support when they are discharged.

After initial assessment by the nurse co-ordinator, the patients will be referred to the appropriate allied health services according to their needs. The patients are regularly monitored to obtain feedback on adequacy of the service being provided. The nurse co-ordinator also liaise with the home care services by the Social Welfare Department and voluntary agencies as part of the pre-discharged planning.

The professionals from different allied health services form a multidisciplinary team to cater for the service needs of the HIV-infected and AIDS patients. The dietician provides nutrition assessment and advice to patients with wasting and eating problems. The medical social worker provides psychological support and assists those patients in need to apply for financial support and re-housing. The clinical psychologist offers counselling for patients with significant difficulties in coping with psychological distresses as well as mental assessment for patients with cognitive impairment. The physiotherapist and occupational therapist offer rehabilitation to patients with neurological complications and functional disability as well as advice for appliances and home modifications.

To ensure a smooth transition from the hospital back to the patient's home, ample time is given for pre-discharge assessment by the multidisciplinary team. Liaison is also established with the community nurses, home help services of the Social Welfare Department, the staff of voluntary agencies such as Hong Kong AIDS Foundation, AIDS Concern and the Society of AIDS Care to ensure adequate support for the home care of the patients. Where possible, family members and close friends are encouraged to participate in the provision of care. The friends and their family members are reassured of the accessibility to the health care advice through paging the nurse co-ordinator as well as arranging earlier clinic visit for review should problems arise after discharge from the hospital.

The multidisciplinary team is co-ordinated by the medical and nursing staff of the AIDS clinical service at QEH. Issues related to management of individual patients are solved through personal communication and discussion during the weekly multidisciplinary rounds. Case conferences are also conducted to decide on the management of difficult problems in specific patients.

# Conclusion

In conclusion, the multidisciplinary model of service at Queen Elizabeth Hospital has facilitated our aim to provide comprehensive and seamless care for AIDS patients. The process of assessment, investigation, treatment and symptom control for the infectious complications is made more efficient and has helped to shortened hospital stay. By attending the patients' physical, psychological, nutrition, and social needs, they are allowed to retain self control and their quality of life is improved. With adequate pre-discharged planning and liaison with community and voluntary organisations, a smooth transition from the hospital to the home setting is ensured. It is anticipated that the multidisciplinary seamless service will further mature with the expansion of the membership and increased liaison with other service agencies.

# A Publication by and for People with HIV/AIDS - Evaluation of a Pilot Project

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#### **Abstract**

The project is to initiate people with HIV/AIDS directly and actively participating in publishing a bulletin for the AIDS community and the community at large. As the social climate of Hong Kong is still of rejection and discrimination towards the illness and the patients, mobilising PWAs towards a publication is not an easy task to be accomplished. With funding from the AIDS Trust Fund, 8 members were recruited to form an editorial board in Dec., 94 which had full responsibility in a variety of work, like writing up features, conducting artwork, etc., for the bulletin, named "Red Ribbon". Professional staff are supposed to be facilitators only. Three issues of "Red Ribbon" have been published since June 95. 4000 copies have been printed for each issue and delivered to PWAs, various organisations and the general public. Positive comments have been received from the public. Good and trusting working relationship is a pre-requisite of successful mobilisation of PWAs to participate in any kind of activities. And persisting support and intervention form professional staff is still considered inevitable in enhancing group development.

# Rationale and objectives

In coping with the illness of HIV/AIDS, patients and their family members are in need of a whole variety of information relating to the illness, its treatment, availability of services and resources. This kind of information, however, is ever-changing and scattered. To facilitate the patients to obtain up-to-date useful information, it is realised that some sort of publication, which are informative, practical and comprehensible, is of sound importance.

Hence, with funding support from the AIDS Trust Fund, the AIDS Unit of the Department of Health initiated a project, which comprised primarily of the production of a publication in Chinese. The publication is considered to be more meaningful when people with HIV/AIDS (referred to as PWAs) are involved in the preparation process because they are the end-users who know better about their own needs, and they may learn, help and support among themselves. Besides, as the AIDS community of Hong Kong is still largely underground while the community at large does not provide favourable atmosphere for them to come out and face the public, such a publication written by and for PWAs provides a channel for them to exchange ideas, share experiences, air feelings and provide support to one another, and to communicate with the community at large.

# Establishment of an Editorial Board

Recruitment of members is usually a common difficult task of organising a group. To organise a group of PWAs tends to be more difficult. As aforesaid, when social rejection and discrimination towards the illness and the patients is still enclosing the community at large, most of our patients refused to participate in any kind of activity so as to minimise the risk of revealing their HIV status. Besides, to be the group member, he/she requires to handle information related to the illness and to work with and for PWAs. This means that one have to face the risk of being infected and changes in the health status, normally deteriorating, of the others. Hence, patients tended to decline our invitation as they thought that it was painful to face those realities. In addition, publication work itself, by nature, involves abundant written work and requires considerable time input of which patients considered to be beyond their capabilities and time availability.

But afterall, eight patients were recruited in Dec 94 and an editorial board, named as "Red Ribbon Working Group", were formed in a way of assuming the full responsibility for the publication of the bulletin ( called "Red Ribbon"), including deciding on the style and content, writing up features, contributing articles, doing interview, designing and doing some liaison work. Professional staff are supposed to be facilitators only.

# Progress of Publication of the Bulletin

Three issues of "Red Ribbon" have been published since June 1995. The coming issues will be available in every 3-4 months. Each issue contains 12 pages at A4 size. The content includes a feature on recent social issue in relation to AIDS, news from overseas, medical information, health care advice, articles from PWA and letters to the editors.

As a start to attract more readers and to test out the response, 4000 copies have been printed for each issue and been delivered to PWAs, AIDS-related NGOs, NGOs, schools, community centres, youth centres, patients' organisations, medical institutions, public libraries, interested parties and so on.

# **Development of Group Members**

After a year's work, overcoming the thrust of death and drop-out of some members, 5 members (one of them was recruited later) are still actively involving in the project. They showed their commitment to ensure better product by making constructive comments as well as critical opinion towards the bulletin production and other related aspects and formulating plans for better promotion of the bulletin inside and outside Hong Kong.

As time goes by, group members start to show concern towards each other whom they do not know in the beginning. More encouraging, they have shown readiness to extend their concern and support to other PWAs who are in need.

In order to let them feel the pulse of societal responses of AIDS in Hong Kong and contribute towards a better system of AIDS prevention and care, some members have been involved in participating in some activities of local AIDS campaign and in helping in various educational or publicity activities, e.g. involving in production of AIDS education materials, accepting interviews on radio to share their views and life experiences, etc.

To conclude with a piece of impressive feedback from one of our members:

"I joined the group but I did not bring along any concrete expectation when starting the work. But now, I realise that our work is not meaningless. Being a patient of HIV/AIDS, I treasure some kind of psychological support more than physiological care, and I believe that one can obtain comfort and support from the messages of our publication. It confirms my belief that we should do something, no matter how small it is, for the Society."

# Feedback from the Public

Positive comments have been received from the public, comprising teachers, nurses, students, reporters, social workers, insurance agents etc. Some are as follows:

"The articles written by people with HIV/AIDS is very touching. I definitely understand more about them from this bulletin. Keep it up!"

"Highly commended. Can more health care workers and hospitalised patients be given the chance to read this bulletin?"

"A good move and initiative. We strongly support the bulletin!"

# Evaluation and Projection into the Future

Throughout the years' trial, we learn that, to mobilise PWA towards any kind of work, like publication, the pre-requisite is the quality of worker-client relationship. A good and trusting relationship can nurture clients' confidence in facing and coping with their personal or psychological barriers in social participation. Besides, to select clients whose interests and expectation are compatible with the nature and the goals of a project is also crucial in the recruitment process.

At present, although the intervention and involvement of professional staff in enhancing the group members' communication and mutual understanding as well as mobilising them to involve in more related activities is still inevitable, there is a positive trend of forming self-help group among PWAs in order to serve the AIDS community.

In the coming future, in order to attract more readers and obtain more feedback, we have a series of actions for promoting our Bulletin. Firstly, we will send the bulletin to some AIDS-related organisations outside Hong Kong to build up the international network. The initial targets are those of Chinese communities as People of Republic of China and Taiwan. Secondly, we will translate some of the articles into different languages, for an example, English, to be published into the Bulletin. To have a wider access from all parts of the World, the bulletin will be put on Internet in the near future.

# A Holistic Model Proposed for Counselling Persons with AIDS in Hong Kong

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#### **Abstract**

Based on the literature and on the findings of a three year qualitative study on the biographical disruptions of persons with AIDS (PWAs) in Hong Kong, a holistic model of counselling built along the entire course of AIDS is proposed for the reference of the helping professionals. The holistic model is a complement to the already and commonly recognised mode of physio-psycho-social counselling. It is aimed at meeting the spiritual needs of PWAs in their long and anxious anticipation for the uncertain future when their death will come. By holistic, it refers to a belief that human beings can only be at peace and enjoying the fullness of life in their physio-psycho-social-spiritual entity. Recognising the needs of PWAs in different phases of their illness, some "concrete" techniques and skills are suggested to help them.

#### Introduction

Holistic counselling is different from eclectic counselling. Holism is a belief in a human being composed of the physio-psycho-social-spiritual part of its total entity (Gordon, 1980). Eclecticism is a pragmatic use of whatever applicable to the situation. As different models of counselling have their own strengths and emphases, the eclectic use of them is acceptable as long as it is appropriate and helpful to those who seek help. What the writer proposes here is to look at the holistic need of persons with AIDS (PWAs) who may need some extraordinary help from a transcendent source of power when their physical, psychological, and social needs are more easy to be recognised.

## A Brief Literature Review

Two major themes are found in current literature on AIDS counselling: (1) to employ eclectic means of techniques and services; and (2) to meet the needs of PWAs according to the development of the illness.

First, in terms of the use of techniques and skills, an emphasis on psycho-social approach is dominant in the literature. Buckingham (1987) emphasised on checking the ego strengths of PWAs and their levels of suicidal risk. Social support was deemed necessary to help them. Burnard (1992) suggested six elements of AIDS counselling and put them in two domains: the authoritative style being prescriptive, informative, and confronting; while the facilitative style being supportive, catalytic, and cathartic. They were both needed to help PWAs. Kain (1989) stressed on enhancing the quality of life of PWAs in their long struggle with the slow progress of the illness. He further expanded the commonly observed psycho-social issues of PWAs into four areas - the physio-psycho-social-spiritual needs - for intervention. Leukefeld and Fimbres (1987) collected papers of different helping professionals on their ways of helping PWAs. They asked helping professionals to reflect on their own values of serving people different from their own.

The second characteristic of the literature relates to providing different services according to the different needs of PWAs in their course of illness. Winiarski (1991) put it well that AIDS counsellors have to be flexible as they have many roles due to the unpredictability of the course of AIDS. Albers (1990, p. 23) also said, "it is in the acute reaction phase, or in a prolonged unresolved reaction phase that counselling can bring the greatest comfort." In addition, Miller

and Bor (1988) concerned about looking into the different phases of HIV/AIDS for accurate assessment of needs; they took the individual's and the family's stages of development into consideration for generating their systemic view of counselling.

To sum up, most counsellors (Bor, et.al., 1992; Burnard, 1992; Shelby, 1992; Winiarski, 1991) developed their counselling models to PWAs according to the development of the illness. One common approach is to divide the course of AIDS into four phases - the onset phase; the long-haul adjustmental phase when the T4 cells are depleting; the full blown phase with signs of opportunistic infections; and the dying phase - for intervention.

# A Need for Developing a Holistic Model for Counselling Persons with AIDS in Hong Kong

Like other developing countries, there is a prevailing need for technological advancement in the maximisation of efficiency in the Hong Kong society. In order to maintain a better level of living standard, Hong Kong people tend to place their attention on strength, productivity, and vitality. No one wants to be weak, dependent, and sick. However, physical deterioration, sickness and death are human realities which cannot be avoided.

With the emphasis on economic affluence and immediate gains, most Hong Kong people may be more aware of their physio-psycho-social needs until they come face to face with a crisis beyond their "external" control such as facing AIDS or other terminal illnesses. Usually, it is medical professionals who take care of the physical well-being while psychologists/ counsellors look after the mental and emotional needs of a person. The social and economic need of a person involves the willingness of another party or the resource distribution of an entire system. The spiritual health of a person is normally left to the organised religious groups with which not everyone would like to associate. However, PWAs as well as those who need to cope with life-threatening events are more prone to have reflections. Facing uncertainties in their destiny at the end of their mortal life, many people may search for meaning of life and feel the need for help from some sort of Cosmic Power (Cornett, 1992). This is the time when the spiritual needs of a person comes to the forefront.

## A Proposed Holistic Model for AIDS Counselling

Based on the literature and together with the writer's working experiences with PWAs in Hong Kong, a holistic model for counselling according to the needs of different phases of AIDS is developed. The eclectic use of techniques and skills is for pragmatic purpose with an aim to help PWAs who may encounter similar needs when their illness becomes full blown.

#### The Onset Phase

The onset phase is an <u>untimely disruption</u> for most persons who do not want to be infected with an incurable disease. It is usually characterised by a period of <u>shock</u> and <u>restlessness</u> disregard of any physical discomfort that leads a person for blood test. No matter how prepared one is, the confirmation of HIV positivity is a harsh reality for any person to face. The infected person will never "go back" to his/her pre-confirmed state as s/he will never be "benign" again. The shock is great enough to require for a **crisis intervention**. An effective AIDS counsellor needs to listen and empathise with his/her clients in a crisis situation. Normally the use of humanistic type or better called the **Rogerian** person-centred therapy deems

appropriate to build up a supportive rapport with persons first found out to have been infected with HIV.

# A Personal Reflection

Counsellors need to reflect on their own values and roles before they can be effective helpers for PWAs (Leukefeld, Fimbres, & et. al., 1987). What are their own attitudes towards AIDS and its subsequent issues on death and dying? Do they know the cause of HIV infection and the course of AIDS? Are they afraid of being infected when communicating with PWAs?

## An Active Listening

After reflecting on their own values and attitudes about AIDS, counsellors need to listen to their clients' thoughts about themselves. Here, an active listening is deemed necessary as PWAs need to be heard and accepted rather than being told what to do and what to feel. They need some one whose total presence and listening can support their initial walk on their course of illness.

1) Listening to what PWAs talk and feel about their infection

The general counselling skills such as the attending skills including the non-verbal and minimal verbal interactions, the paraphrasing, the use of open questions, the emphasis on feelings, and the summarisation and integration techniques (Egan, 1990; Ivey & Authier, 1978) are important for the care of persons with AIDS. However, there are some important points to be emphasised.

- -- The use of silence is important if it is a necessary and expectant one. The quiet and caring presence of a counsellor gives a PWA an opportunity to collect and organise his/her thoughts. S/he has a choice to decide what to say and what to solve. The hidden message is powerful and therapeutic that whether s/he talks or not, s/he is accepted.
- Giving indication of reception, such as "I'm with you" or "I follow what you're saying," gives an accepting atmosphere to encourage a PWA to speak. Sometimes, a brief reflection and focusing on what has been just said are good illustrations of showing acceptance and attendance.

## 2) Listening to any possible threats of suicide

It is easy for persons infected with an incurable disease to think of death. For PWAs, suicide may also be a way out to solve the problem of stigmatisation that comes along with the illness.

-- Checking the support system of PWAs and see their relationships with immediate family members. It is more dangerous for persons who stay alone by themselves without any tie to a particular group of people. Sometimes, it may be helpful to ask directly PWAs their views towards life and death so that they can have a chance to articulate their suicidal plan if they have such thought.

- -- **Providing useful information** about physical development of AIDS and other available medical and social resources so that PWAs may develop hope and new perspective about their illness.
- 3) Listening to making contracts for further interventions

After the initial shock and crisis has been settled, PWAs need some time off to re-organise themselves. The most common question is with whom should they share the news? Or will they be better off to keep the secret by themselves? A sensitive counsellor can help his/her clients list out their immediate concerns and make an early appointment to see them in no more than a week's time.

## The Low T4 Phase

Life after infection will be different even though most HIV-infected persons carry on their daily routines as usual. They need to attend follow-up treatments to monitor their T4 counts. Usually this phase is characterised by a time of reflection and reconstruction of life priorities. It is quite a paradox that driven by pain and suffering most PWAs change to living a "better" life style. Three major tasks for counselling deem necessary during this phase of illness. PWAs may need a time to grieve, to reflect, and to make changes for their life priorities (Cornett, 1992). Some form of **psychoanalytic** techniques may be appropriate if PWAs have certain unresolved conflicts in their early life that they would like to tackle at this time of "post-crisis."

## A Time to Grieve

PWAs may grieve about the losses of their good health and thus a possible prosperous future. Some of them may miss the chances of setting up a proper family. Whatever the losses are, PWAs need to take time to say "good-bye" to the "past good old things/ thoughts" and accept the present reality with a positive attitude.

Some form of **mind travel, gestalt,** and **symbolic techniques** (Shainberg, 1993) may be needed to help PWAs grieve the irreversible losses. If there are some unresolved pains and conflicts in the past that cannot be settled in the present, a counsellor can help PWAs use imaginations to relive the old experience in a new way where suggestions can be made to correct the past misbehaviour. Sometimes, the creation or destruction of certain symbols, arts or crafts may be needed to highlight the finish of the unfinished business.

# A Time to Reflect

A counsellor can help PWAs reflect their past in a meaningful way. As it is not healthy for them to dwell on grieving or self blaming endlessly, a counsellor can use **reframing techniques** (Bor, et. al., 1992) to help shift their attention from something negative to something positive. The goal is to strengthen their will to live in the present while the past is recalled to establish new meanings for today.

A counsellor may use **consistent and positive feedbacks** to ensure PWAs that they have tried their best to live within their own limitations. The way how a counsellor conveys the message is more important than what s/he says for attitudes and actions speak louder than words.

# A Time to Change

Sensing the shortage of time for a mortal being, most PWAs after a period of reflection will re-construct their life. A counsellor can help them set their priorities according to their wish and desire. A healthy life style consists of a well balance in physical, psychological, social and economic, and spiritual fulfilment of a person.

## 1) Physical Fulfilment

- -- Good diet and nutrition.
- -- Maintain some physical exercises.
- -- Good sleep.
- -- Medication if needed.
- -- Alternative therapeutic work such as massage, herbal drink, foot on sand, etc.

# 2) Psychological Fulfilment

- -- Positive thinking.
- Peaceful mind: to forgive and be forgiven; to reduce stress by relaxation techniques; to foster a single-mindedness with faith and hope for the uncertain future.
- -- Focus on the present in the ever-lasting here and now.

## 3) Social and Economic Fulfilment

- -- Be connected to somebody and feel important.
- -- Be able to share with someone and get support from.
- -- Self sufficient for basic needs; save for future use.

# 4) Spiritual Fulfilment

- -- Find meaning in life and death.
- -- Pray and meditate.
- Dream and unconscious work.
- -- Stick to a belief and practise some rituals.
- -- Foster an attitude of "let it be & let it go".

It may be easy for PWAs to make decisions for leading a healthy life style. But it is difficult to keep the practice in the long run as "resignation over time" has been found quite a common phenomenon for PWAs to cope with their long-haul illness. On-going supportive counselling or group work are encouraged to help them maintain their good practice.

# The Full Blown Phase

Even with a low T4 in their blood count, PWAs may stay healthy for years. They keep their jobs and social life as usual. Life under a shadow of a timed bomb is not easy for PWAs but there is still hope that their infection will not become full blown or there will be curative medicine discovered in the near future. When signs of opportunistic infections occur, PWAs may

encounter another shock and adjustment. The hope for maintaining a good health has gone. It is also more difficult for them to keep the secret as they need to be in and out of the hospital for treatment quite often. During this phase of illness, PWAs need to struggle between keeping a keen desire to live or giving up hope to commit suicide. The urgency of time becomes more prominent. PWAs need to finish their unfinished tasks before they will feel at ease. A counsellor may give some measure of hope for the uncertain future and yet not to give false assurance about how long a PWA can live at this phase of illness (Bor, Miller, & Goldman, 1992). After all, the quality of life is more important than the quantity of it. Fostering an attitude with an emphasis on the "Being" in the present moment than on the "Doing" is difficult in Hong Kong as the City itself tends to put high values on productivity and materialistic gains. But it is necessary for counsellors to convey such a message to PWAs who can hopefully be sustained to keep on living a day at a time.

However, some practical issues of care problems, to whom to release the "secret", and other financial arrangements may be needed for some PWAs at this phase of illness. The use of **cognitive-behavioural** techniques may be appropriate to engage them for concrete and positive actions. For others, the use of transpersonal techniques is good for fostering faith and hope from a "Cosmic Power" to face the uncertain future of life.

# Talking about Practical Needs

When PWAs become too ill, who will bring them to see the doctor? Who can help manage the regimen and what about their financial need? If so agreed by PWAs, the appropriate resources from both the governmental and non-governmental agencies should be referred.

A counsellor, if deemed appropriate by PWAs, can arrange meetings with their significant others to solicit support and help. No more than allowed will a counsellor inform the concerned party. The major purpose is to let PWAs release their secret and feel accepted.

# Reassuring Significance

People need to find meaning in their suffering. PWAs especially want to tell themselves that they have not wasted their life. They need confirmations and support from others. A counsellor can help reassure PWAs that they have made decisions to live their best for themselves and for their significant others. Even though there may be pains and fears in illness, they are not alone.

## Locating the Source of Strength and the Belief System

Most people will have their own belief system from where they draw energy and get strength. Some will externalise their belief system by an expression of faith and relate themselves to some form of Cosmic Power. It is important for a counsellor to understand and accept the belief system of PWAs and build strength on it. There may be some ethical codes and practices that PWAs need to follow. Or a counsellor can introduce some faith elements or lead PWAs to draw faith from their own belief system. It takes time, support and positive confirmations from the counsellor before PWAs can have faith and hope to let go of their fear of the uncertain future.

# The Dying Phase

In whatever ways PWAs may choose to respond to their failing health, they need to face their own <u>approaching death</u> subtly. Again, counsellors need to reflect on their own attitudes towards death (Burnard, 1992) before they can be effective helpers for PWAs who are at the very late phase of their illness.

Most PWAs, sensing the urgency of the limited time that are available, will utter their needs or the unfinished tasks before they will feel at ease. Usually, it is the interpersonal relationships that disturb people most. The PWAs need to connect, reveal and feel meaningful in their life. They also need to go through a process of torn between fear and acceptance before they will let go the control of their physical body and be ready to die. A counsellor can help ease their restlessness by supporting their caregivers to do the following (Miller & Martin, 1988; Narayanasamy, 1991; Harrison & Burnard, 1993):

# The Need to Connect, Reveal, and Feel Meaningful

PWAs in the dying phase need to be connected to some significant others; they need to reveal themselves and feel a sense of meaning in their life. Under such a strong need for communications with others, PWAs can be assured of their past achievements and positive events by the use of **life review techniques.** There are numerous ways to help them recollect their golden old days and be contented with life. Looking at pictures taken at remarkable times, reviewing some positive life events and other memorabilia are just some examples. Even though there may be pains and tears in reviewing past life events, they are healthy for PWAs can have a chance to be grateful for what they have gone through.

Sometimes, a PWA may request to talk to a priest or other people with symbolic significance. By all means, these requests should be honoured as a high priority.

# The Discussion of the Will and the Funeral

PWAs have the right to disperse their property. A counsellor can help them write their wills and check the legal proceedings. PWAs will also feel a sense of completion if they are encouraged to talk about or write down what they want to be seen in their own funeral.

## The Process of Being Torn Between Fear & Acceptance

Living with uncertainty is painful in itself. Usually PWAs are ready to let go the control of their physical bodies after a long time of illness. Yet, they will feel more at ease if they know where to go after they die. A counsellor can help them release their tension by owning the fear and letting go. It is important for PWAs to know that they have finished doing their best in their life and it is timely and all right for them to go and be at peace with the Cosmic Power.

# Reference

Albers, G. (1990). Counselling and AIDS. Dallas, TX: Word.

Bor, R., Miller, R., & Goldman, E. (1992). *Theory and practice of HIV counselling - A systemic approach*. London, Cassell.

Buckingham, S. L. (1987). The HIV antibody test: Psychosocial issues. *Social Casework: The Journal of Contemporary Social Work*, September, 387-393.

Burnard, P. (1992). *Perceptions of AIDS counselling: A view from health professionals & AIDS counsellors.* Aldershot, England: Avebury.

Cornett, C. (1992). Toward a more comprehensive personology: Integrating a spiritual perspective into social work practice. *Social Work*, 37:2, 101-102.

Egan, G. (1990). *The skilled helper: A systematic approach to effective helping* (4th ed.). Monterey, CA: Brooks & Cole.

Gordon, J. S. (1980). The paradigm of holistic medicine. In A. c. Hastings, J. Fadiman, & J. S. Gordon (eds.). *Health for the whole person: The complete guide to holistic medicine*. New York: Bantam Books.

Harris, J., & Burnard, P. (1993). Spirituality and nursing practice. England: Avebury.

Ivey, A. E. & Authier, J. (1978). *Micro-counselling* (2nd ed.). Springfield, IL: Charles C. Thomas.

Kain, C. (Ed.). (1989). *No longer immune: A counsellor's guide to AIDS*. Alexandria, VA: American Association for Counselling & Development.

Leukefeld, C. G., & Fimbres, M. (Eds.). (1987). Responding to AIDS: Psychosocial initiative. Silver Spring, MD: NASW.

Miller, R., & Bor, R. (1988). AIDS - A guide to clinical counselling. London, UK: Science Press Limited.

Miller, W. R. & Martin, J. E. (1988). *Behaviour therapy and religion : Integrating spiritual & behavioural approaches to change.* London: SAGE.

Narayanasamy, A. (1991). *Spiritual care: A practical guide for nurses*. Nottingham, Britain: BKT Information Services & Quay Publishing.

Shainberg, D. (1993). *Healing in psychotherapy: The path and process of inner change*. (2nd ed.). Switzerland: Gordon & Breach Science.

Shelby, R. D. (1992). *If a partner has AIDS: Guide to clinical intervention for relationships in crisis.* New York: The Haworth Press.

Winiarski, M. G. (1991). AIDS related psychotherapy. New York: Pergamon Press.

# Program Evaluation for AIDS Concern's Buddy Service

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#### **Abstract**

AIDS Concern's Buddy Service has been providing emotional support and practical assistance to people living with HIV/AIDS, their families and friends, since 1991. This evaluation was undertaken to provide a factual basis from which to improve service utilisation and direct service development. The Buddy Service consists of trained volunteers who provide confidential companionship to HIV-infected individuals. Each Buddy Volunteer belongs to a Care Team and clients are matched with one or more volunteers belonging to the same team. The exact nature and type of service provided depends on the needs of the client; it is the clients needs which dictate the number of volunteers allocated and the frequency and type of contact. The Care Team operates as a support network for the volunteers. This evaluation is based on feedback from the clients and the Buddies which will be collected through unstructured interviews by researchers using an unstructured questionnaires. The questionnaire will aim to identify needs and expectations on the service from those who participate in it, those who use it and those who are eligible to use it but do not. Views and suggestions for future improvement will also be solicited. It is expected that the survey will highlight the extent to which the Buddy Service, which is very much a product of the NGO response to HIV/AIDS in Western Society, meets the needs and expectations HIV positive individuals in Hong Kong. We also hope to identify ways in which the service can be developed and expanded on the basis of the expectations and needs of the potential client pool. It is anticipated that cultural factors may lead to more pragmatic demands for tangible services such as transportation and palliative care. We also hope to learn more about the ways in which this service is accessed and the level of familiarity with what the service offers among members of the target group. The Buddy Service Has an important role to play as a communitybased service for HIV-infected people in Hong Kong. The future development of this service should first take into account the cultural factors which determine the types of demand being placed on the service in the local context.

## Introduction

This paper aims to evaluate the Buddy Service provided by AIDS Concern since 1991. The evaluation is based on a small scale survey with unstructured questionnaires and unstructured interviews. The interviewees included people with HIV/AIDS (Buddy Clients) and volunteers of AIDS Concern (Buddy Volunteers).

# **Background**

The AIDS Concern Buddy Service has been providing emotional support and tangible assistance to people living with HIV/AIDS, their families, lovers and friends, since 1991. We believe that through the helping relationship, we can enable and empower people living with HIV/AIDS to live as independently as possible, to take responsibility for the way they live and thereby improve their quality of life.

Buddy means "Friend". A Buddy Volunteer is a person who has commitment to befriend and support person living with HIV/AIDS. The AIDS Concern Buddy Service is delivered by volunteers from all walks of life. We recruit and give training to volunteers and let them "Buddy" clients. We believe in the concept of community care and intend that community participation in the delivery of the Buddy Service should help foster social acceptance of people with HIV/AIDS.

The Buddy Service provides all sorts of psychological support, including home visits, hospital visits, telephone contact, assistance with accessing local services and resources,

accompanying clients to lunch, dinner, movie, shopping, etc., providing basic household assistance as needed, medical follow up escort, free transportation services to and from hospitals/clinics for follow up treatment, "Soup on Wheels Delivery" and the "Concern Birthday Fund".

In order to provide support to Buddy Volunteers, the concept of a "Care Team" has been adopted in order to let Buddy Volunteers share their experiences and difficulties. The Teams are designed to function so as to maximise the quantity and quality of support that we can offer to individual clients. Most of the time, Care Team members have to work with other healthcare professionals and organisations to provide the most tailor-made service to meet the Buddy Clients' needs.

From the onset of HIV infection to full blown AIDS, a patient is carrying a "Big secret" and often no family members or friends will know that they are HIV+. A Buddy may be needed at the time he/she is diagnosed as HIV+ to share their feelings and provide emotional and psychological support to cope with any difficulties encountered.

# Methodology

Unstructured interviews were conducted by using unstructured questionnaires in October, 1996. A total of 10 people are interviewed in which 6 of them were Buddy Volunteers and 4 Buddy Clients. This evaluation was undertaken to provide a factual basis from which to improve service utilisation and direct service development. Obviously the numbers surveyed were extremely small. Our aim was to collect qualitative data to help us determine the value of our service to our clients.

#### Result

As reflected from the interviews with Buddy Clients in the present study, the Buddy Clients benefited in the following aspects:

## **Emotional Support**

When Buddy Clients are matched with Volunteers, they reported that they had "someone to talk to", i.e. someone they could talk to and share their feelings and emotions. They feel comfortable because Buddy Volunteers are asked to keep their "secrets" confidential and be non-judgmental.

## Companionship

Since the service provides companionship such as Buddy Volunteers doing shopping or having dinner or lunch together with their clients, the clients feel less isolated and better supported in their daily activities.

# **Psychological Support**

Buddy Clients stressed that they have someone to discuss their problems and difficulties with. They appreciate that Buddy Volunteers may not be able to solve their problems, but at least they have someone that they can rely on to discuss their situation with a caring attitude and genuine support.

Buddy Volunteers affirmed that the Buddy Service helps Buddy Clients in the following aspects:

## Companionship

Volunteers reported feeling that they are providing a different level of friendship and partnership to their clients. Some clients may need intensive companionship in terms of time commitment while others just require weekly contact. The role of the Buddy Volunteer is "to be there" with their clients when needed.

#### **Social Acceptance**

Since this service is delivered by trained volunteers from all walks of life, a sense of affirmation, acceptance and approval coming from a concerned community is created. This is very important to clients because it shows that, despite obvious discriminatory elements, there is still hope of acceptance within the community.

## Rapport with clients

Some Volunteers have experienced the dying process with their clients. This is a critical moment for both the clients and volunteers and one in which the client can benefit most from the encouragement and support that the volunteer has to offer. Clients will have a friend to depend on, at their critical moment to share their fear and emotions. Volunteers, on the other hand, can experience the challenge to personal growth in confronting issues around death and dying.

#### Mutual growth

The Buddy Service offered a type of symbiotic relationship between Buddy Volunteers and Buddy Clients. Buddy Volunteers not only help and empower their Clients towards personal growth, but Buddy Volunteers also grow personally from what they learn from Clients.

The result of the interviews showed that Buddy Clients are on the whole satisfied with the Buddy Service and what the Buddy Volunteers are doing to meet their needs. However, difficulties still exist when delivering the Buddy Service.

# Difficulties Encountered When Delivering the Buddy Service

#### Clients are referred in their dying phase

Most of the clients who are referred to this service are at their "dying phase", in which it is very difficult to build up a rapport between client and volunteer. Clients, therefore, are unable to gain maximum benefit from this service. It is often happened that clients die within one month of receiving the Buddy Service.

# **Chinese Culture**

Some Chinese AIDS patients prefer tangible support rather than intangible support such as psychological and emotional support. Chinese people tend to seek pragmatic and tangible assistance and regard counselling, friendship and the sharing of feelings to be abstract and non-instrumental. This has important implications for the philosophy of the Buddy Service and its applicability in this cultural context.

#### Perception of healthcare workers

A client ability to access this service often depends on the willingness of their primary healthcare workers to refer them. It is quite common for these healthcare workers to make decisions on the clients behalf about whether or not the service is of any value to the client. Thus we have encountered many clients who have been kept ignorant of the broader range of social services available to them outside the government services. Some of these clients have expressed regret that they were not informed earlier of the Buddy Service. It is important, therefore, to change the attitudes of healthcare workers so that they are both more responsive to the needs of their clients and more aware of the benefits that their clients may derive from services such as the Buddy Service.

#### Recommendation

# **Early Referral**

As this service focuses on emotional and psychological support, it will be of use to the client as soon as they are diagnosed HIV+. The earlier the referral, the better the support network that can be built up. We need to solicit the assistance of those healthcare workers who do the post test counselling in introducing the Buddy Service to the people with HIV/AIDS at this most appropriate time.

## **Publicity and Promotion**

As a small non-governmental organisation, it is very expensive for AIDS Concern to promote services through mass media. A more effective way to proceed would be for HIV antibody testing services to ensure that clients testing HIV+ are fully briefed about the whole range of support services available. This could be achieved by arranging post-testing interviews with representatives from some of the organisations providing such services or by ensuring that personnel providing post-test counselling in testing clinics are more thoroughly briefed about the services available.

## **Service Delivery System**

More support and training should be given to Buddy Volunteers, covering topics such as bereavement and dying. Furthermore, the psychological burden on the Buddy Volunteers should be alleviated through more sharing and mutual support. The matching process between Buddy Volunteer and Buddy Client was crucial and significant to the success of the Buddy Service. Existing links between the Buddy Service and other HIV/AIDS care services should be strengthened.

#### Conclusion

The result of the survey showed that people who are diagnosed HIV+ are carrying a "Big secret" and are in need of people to share their emotions and inner feelings . The Buddy Service provided by AIDS Concern offers a volunteer who is non-judgmental and can keep their client's status confidential to render psycho-social support to people with HIV/AIDS during period of emotional turmoil. The usefulness and effectiveness of Buddy Service are confirmed as this service meet the needs of the clients at the right time. The Buddy Service should be continued and strengthened in future though there are some aspects which need improvement.

Wider publicity and promotion are needed. The Buddy Service should be rendered to people with HIV/AIDS starting from the onset of the disease. However, the cultural barriers of demanding tangible assistance and the misperceptions of healthcare workers concerning the value of the Buddy Service are the major obstacles for the future development of this service.

# **Reference**

AIDS Concern (1996). *Buddy Service: Policy, Procedures, Rules and Guidelines*. Hong Kong: AIDS Concern.

Bynum, B. Christian, Velentgas, Priscilla & Zierler, Sally. (1990). The Buddy Volunteer Committment in AIDS Care. *American Journal of Public Health*, 80:11.

Coyle, S.L., Bonich, R.F., & Turner, C.F. (1991). *Evaluating AIDS Prevention Programs*. Washington, DC: National Academy Press.

Green, L.W. & Lewis, F.M. (1986). *Measurement and Evaluation in Health Education and Health Promotion*. Palo Alto, CA: Mayfield.

Tam, S.C. Jane. (1996). A look at the Illness Trajectory of AIDS Patients in Hong Kong. *The Hong Kong Journal of Social Work*. 30:1.

Symposium F:

Role of NGOs in HIV Prevention & Care

# Support Services on AIDS for Social Welfare Personnel -Training for Persons Engaged in Home Help Service

Chan SY, Pang SF, Lam SK, The Hong Kong Council of Social Service

#### **Abstract**

Lack of knowledge and correct information about HIV/AIDS caused the social service providers not willing to or not ready to provide service to PWA/HIV in the early stage. The primary objective of this project is to equip the social welfare personnel with knowledge and skills for providing services to PWA/HIV. This project included: (1) a baseline survey on knowledge/attitude among social welfare personnel was conducted; (2) based on the findings of the aforesaid survey, a series of training programmes (including seminars, workshops & visits) were planned and implemented for the social welfare personnel, in particular the personnel working in home-help service; and (3) built-in evaluation mechanism had also been applied in some workshops to evaluate the effectiveness of the training at this stage. Over 80% of the personnel working in home help service had attended the seminar or workshops on AIDS during the past two years. Based on the collected questionnaires of the built-in evaluation, 82% of the participants opined that their knowledge on AIDS had increased after joining the training session. Besides, 82% of the participants felt they were more willing to provide services to PWA/HIV after joining the training sessions. Small group discussion on values, morality etc. towards AIDS was considered to be the most effective way for inducing attitudinal change. Overall evaluation (A formal follow-up survey on knowledge/attitude on AIDS among social welfare personnel) on the training project will be carried out at the end of this year.

#### Introduction

The establishment of the AIDS Project of the Hong Kong Council of Social Service (Council) marks the steadfast commitment of the Council to fight against the challenges posed by HIV/AIDS. Since as early as 1994, the Council have started to provide training to staff of its member agencies, with the purpose to encourage them to extend service provision to cover PWA/HIV (People with HIV/AIDS). The optimal goal of service extension is to provide care and service to clients in need and such an extension is in accordance with the service objectives of our social welfare system, that is, to keep PWA/HIV remain in the community that they are familiar with and lead a normal life as long as they could.

Staff engaged in the home help service are one of the main target groups of the training programmes of the AIDS Project. In the period of the past two years, more that 1100 staff of the home help service had participated in the training programmes provided by the AIDS Project of the Hong Kong Council of Social Service. Attitudinal and behavioural changes could be observed and we were happy to find that most of the home helpers became more willing to provide home help service to PWA/HIV after joining the training programmes.

# Historical Background

## The Establishment of the AIDS Project of the Council

The establishment of the AIDS Project was the Council's response to the ever-growing problem of HIV/AIDS spread in the community. At that time, the Council had a membership of 210 NGOs operating more than 2,000 service units and providing service to Hong Kong citizens from all walks of life, and in that sense, the Council is in a unique position to support the extension of social service to cover PWA/HIV through various NGOs which maintain close contact with clients from all sectors and levels of community.

The AIDS Project of the Council of Social Service was formally started its operation in April 1994. The Council acknowledged that as the number of PWA/HIV keep increasing, some day in the near future, many of its member agencies will encounter clients with HIV/AIDS and the increasing service needs of PWA/HIV will urge the social service agencies to face square on the problem. To prepare the staff of Council's member agencies be ready to accept the new challenge posed by AIDS, training should be provided to them well before the challenges actually come. In this regard, to organise various training sessions for staff of different services is one of the major tasks of the AIDS Project.

## The Survey on Knowledge/Attitude among Social Welfare Personnel

With the purpose to have better understanding on the awareness level, knowledge level and acceptance of the social welfare personnel on AIDS and PWA/HIV (People with HIV/AIDS), a survey entitled: "Survey on Knowledge/Attitude among Social Welfare Personnel" was conducted in September 1994 through the Chinese University of Hong Kong, and findings were released in early 1995. This survey, focused mainly on the five target groups, namely, home help service, family service, family life education service, youth service and drug treatment and rehabilitation service. Findings revealed that home help service had the highest level of misconception about HIV/AIDS and reluctance to provide service to individuals contracted with the virus. Such a low level of knowledge and acceptance will seriously jeopardise the quality of service to be rendered.

Besides, as many as 25% of the home helpers felt that they were likely or very likely susceptible to contract AIDS through daily course of work. All these data revealed that home help service, when compared with other services, needs more training and education programmes to raise the knowledge level and acceptance. In fact, at that time, AIDS service organisations had experienced difficulty in getting home help service for their patients, this phenomena further reflected how exigent the situation was.

Simultaneously, a small scale survey done by the Committee on Home Help Service of the Council also supported the above findings. Among the 18 member agencies operating 88 home help service teams, thirteen of them indicated that they would intake PWA/HIV for service. However, with reasons such as lack of proper training, lack of clear service guidelines on AIDS service, home helpers were not prepared to do so. The other five agencies refused to consider extending their service to cover PWA/HIV. Such a conservative attitude have received widely critiques from the media and the general public.

# Council's Response

In the light of the research findings and having considered the specific service nature of home help service, the AIDS Project deemed it be crucial to provide training and educational programmes to this group of service providers as soon as possible and training on HIV/AIDS for home helpers was thus put on top priority.

With the purpose to induce positive behavioural change among persons engaging in the home help service, we have to first raise their knowledge level which is the crucial step leading to attitude change. As a matter of fact, vast majority of the staff working in home help service had no idea on what HIV/AIDS is, they only got a blurred idea from the APIs on television. Therefore,

we envisaged that to achieve the sequential change, i.e. from increased knowledge level to positive attitude change which in turn leads to positive behavioural change, we have to overcome a great deal of difficulties. A series of training and educational programmes were thus planned and objectives of the training package were stipulated as follows:

- 1. To provide basic information and knowledge about HIV/AIDS
- 2. To clarify misconceptions about HIV/AIDS
- 3. To promote an accepting attitude among home helpers towards PWA/HIV
- 4. To enable the home helpers be willing to provide service to PWA/HIV

As home help service is a kind of team work, which is composed of front line staff like home helpers and supporting staff such as service supervisors, manual workers, cook and drivers, all of them should be treated as an entity rather than separate units. In that sense, not only front line staff, i.e. home helpers should be involved in the training, but also those staff providing supervision and logistic support should also be included in our training programmes, so as to gain unanimous support from all levels of staff working in the service teams. In this regard, seminars, workshops and agency visits targeting different level of staff, were thus proposed.

# Training Design

To begin with, we have to be certain about what we want to achieve. In this case, the optimal goal is to enabling home help teams to extend their service provision to cover PWA/HIV. However, we did recognise that prior to the achievement of this optimal goal, we have to raise the knowledge level of the staff, forge an accepted attitude and more importantly, mobilise service agencies to support such a service extension. Only with the support from our member agencies, the effect of training can be long lasting.

Well before the implementation of our training programmes, we have to take some factors into consideration.

# Background of the targeted participants

As you might be aware that most of the home helpers were relatively less educated, their concerns were wide in range. They might query about the facts of AIDS, like route of transmission, proper precaution procedure, physical implication of being infected, etc. But on the other hand, as AIDS is perceived as life-threatening and highly infectious, most of the home helpers would not like to provide service to PWA/HIV if they were given the choice. They might worry about the response of their family members who might discourage them from providing service to PWA/HIV. All these queries and worries should be well recognised and be addressed in the training programmes.

But for social workers who were relatively well educated, their concerns were less personal. They often show more concern on the staff management aspect. They might want to know more about how to mobilise the front line staff, how to handle grievance and how to facilitate communication between the front line staff and the management level. In this regard, staff management should be one of the main contents of the training provided to social workers.

#### **Choice of Trainers**

The choice of trainers is a vital factor to the success of training. To make their presentation more convincing, trainers should better possess experience in serving PWA/HIV. This kind of real contact can help trainers share with participants in a more personal manner which would be more touching and vivid. Further, trainers should speak home helpers' language, and should show empathy to the worries of the participants and have better understanding on the job nature of home help service. Besides, trainers with medical service background is another strength, which can make their presentation more authoritative.

# **Involvement of Service Agencies**

It is important to get service agencies involved in the training process. Involvement can be in various forms like releasing staff to participate in training sessions; organising staff sharing; and allocating additional resources for purchasing of equipment such as 'one-off' plastic gloves, etc. Periodic review on the progress of training and on feedback of the participants should be arranged between home help service supervisors and Council staff.

In fact, in our training programmes as mentioned above, different training programmes such as seminars, agency visits and practical workshops were organised.

For seminars, which mainly serve to impart basic knowledge about AIDS were organised in early 1995. Owing to the urgency of the situation, seminars was the best way to raise the knowledge level of a large target group of home help personnel within a short period of time. We invited medical professionals, buddy volunteers from various AIDS specific agencies and experienced home helpers to share their personal experience in a warm and humane manner.

For agency visit to AIDS Unit and various AIDS specific agencies, it could provide opportunities for participants to see and to feel the atmosphere of the places where PWA/HIV gather and receive treatment. Besides, participants could also have direct contact with caretakers such as front-line nurses, volunteers and even amahs working there. As AIDS remain a mysterious disease to most of the home help personnel, such kind of visit can unmask part of the mystery of the disease.

For workshops, besides practical techniques on universal precaution, value reflection which serves to raise participants' self awareness on their own attitude on AIDS and PWA/HIV was another focus of the workshops. We believed that only they become more aware of their own attitude, positive attitude change among participate was possible. In the training workshops, role play on proper precaution procedures, small group discussion on personal feeling and mutual confrontation on value were adopted as means to induce attitude change.

#### Results/Recommendations

During the period of the previous two years, numerous training programmes had been organised and more than 80% of the home help staff had attended training provided by the Council. We could say that we have successfully change the attitude of the home helpers from "not willing" and "reluctant" to provide service to PWA/HIV to 'Filling to' provide service to this group of people. In fact, there were already three service teams having such experience in serving PWA/HIV during the said period. At present, we could say that 100% of the agencies rendering home help service have expressed their willingness to provide service to the PWA/HIV in need.

Based on the findings of the built-in evaluation of our training sessions, 82% of the participants opined that their knowledge on AIDS/HIV had increased after joining the training. Besides, 82% of the participants did reveal that they felt more willing to provide services to PWA/HIV.

Though quite a number of the people engaging in the home help service have received AIDS training and all agencies show willingness to provide service to PWA/HIV, however, there is no room for complacence for us. In fact, the home help service is developing very rapidly. In 1994, there were only 18 agencies operating 88 services teams, however, in 1996, there are now 22 agencies operating more than 120 service teams.

We believe that to tackle the issue of HIV/AIDS, training is only one of the approaches. Also we think that in order to make services provided to PWA/HIV become a routine and nothing special social service, each agencies should establish their own agency policy rather than depending on ad hoc resolution. In this aspect, staff of the Council would continue their effort to achieve the mission.

# St. John's Cathedral HIV Information & Drop-In Centre Service

Fung Elijah, Manager of St. John's Cathedral HIV Information & Drop-In Centre

#### **Abstract**

The HIV Information & Drop-In Centre is a non-profit making and community-based organisation. Our Centre is under the umbrella of St. John's Cathedral and was opened on 13 September 1995. Our aims and objectives are to raise public awareness towards HIV/AIDS, to befriend people who are affected by HIV/AIDS and to contribute to the effort to limit the spread of the AIDS pandemic. The Drop-In Centre provides a comfortable space where you can relax, make a cup of tea/coffee, browse through books and leaflets. You may also watch videos on AIDS related issues or listen to music. This paper summarises the statistical profile of the service provisions since its establishment and evaluates the experience of setting up of the HIV Information & Drop-In Centre.

# **Objectives**

To offer a "drop-in" service for people who are directly and indirectly affected by HIV/AIDS in Hong Kong.

# **Project**

The duration of the project was from June 1995 to mid August 1996. The project was divided into three stages. The first stage was the renovation of the Centre premises which took almost two months to complete. The second stage was the recruitment and training of volunteers. The response was good with volunteers coming from different walks of life and nationalities. A 6-session training programme on HIV/AIDS and counselling was offered to the potential volunteers. 14 out of the 19 potential volunteers completed the training course. The third stage of the project was the official opening of the Centre, which took place on 13 September 1995. The opening ceremony was attended by over 100 guests and was well covered in the local newspapers and media. In fact, many reporters from the media had interviewed us prior to the establishment and official opening of the Centre.

The following methods were used to promote the Centre: -

- 1. Open Day in July. 1995 and Official Opening
- 2. Advertisements in different newspapers and magazines
- 3. Education talks
- 4. Outreach programmes such as information booths in schools, and local community centres, information pack distributions etc.
- 5. Distribution of newsletter and other publications
- 6. Toilet stickers campaign
- 7. Networking with other local AIDS-specific NGOs, hospitals and private sectors

Services provided to "drop-inners" included: face-to-face counselling; information on HIV/AIDS and other health issues; free legal advice on HIV/AIDS-related matters in strict confidential; referrals; facilitating arrangements for memorial services to be held at the Cathedral and provision of spiritual support to people who have lost someone to AIDS. Callers do not need a referral letter or an appointment. They can just drop-in whenever they need assistance.

All the services are free of charge and delivered by a team of trained volunteers. The services are open to anyone regardless of their background, religion, sexual orientation or nationality.

In addition, the Centre also organised 24 education and training programmes on HIV/AIDS and other AIDS-related issues for both its own volunteers and outside organisations. We organised 18 outreach activities including the setting up of information booths at school fairs and community centres, distribution of information packs on the street and in pubs, bars and restaurants, and World AIDS Day activities. Over 50,000 pieces of AIDS materials were distributed during the project period.

## Results

From June, 1995 to mid-August, 1996, the statistical profile of our service provisions is listed as below:

1.	Total "drop-in" visitors	785
	Total "phone-in" callers	199

# 2. Nationality:

Westerner:	312
Asian:	175
Chinese	459
Unknown:	38

#### 4. Gender:

Male:	501
Female:	474
Children (under 12 years old):	9

# 4. Age groups:

1. Under 18:	34
2. 18-30:	429
3. 30-40:	311
4. 40-50:	138
5. 50-60+:	14
6. Unknown:	58

# 5. Reasons for visiting the Centre:

a.	Information/leaflets/testing/ information for gays:	984
b.	Counselling/emotional support/legal advice	79
c.	Find out about voluntary work	87
d.	Just visiting the Centre to find out about its services	144
e.	Overseas visitors	79
	(network with the Centre and learn about local AIDS services)	

f. Others 17

(For example: Visits by Chinese herbalists offering treatments to PWAs; callers wishing to donate furniture to the Centre)

# 6. How they learned about the Centre:

a.	Advertisement	306
b.	Newspaper/media	93
c.	Friends	85
d.	Referrals from other agencies	95
e.	Outreach activities	219
f.	Walk-in	143
g.	Others: Internet, telephone company, etc.	43

# 7. How many "drop-inners" and "phone-in" callers are:

a.	HIV positive or have AIDS	17
b.	Affected by HIV/AIDS	28

#### Lessons learned

During the project period, we observed that the potential for further development of the Centre's activities was constrained by lack of resources and funding. Although volunteer recruitment was overwhelmingly successful initially, the turnover was high after a few months. Some reasons could be: lack of understanding of HIV situation and the role of the volunteer; the volunteer's expectations were not met; the volunteer's personal situation had changed. In a society like Hong Kong, where much emphasis is on academic achievements rather than a balance between both participating in community work and achievements in the academic field, it is difficult to attract local Chinese as volunteers.

We also observed that most of the callers had little knowledge about HIV/AIDS. Most of them still viewed AIDS as a gay disease and some did not even know that there were different kinds of AIDS services and organisations in the community. This observation indicates that there is still a strong need for AIDS education for the public.

Although the known drop-in figures for directly and indirectly affected callers seem to be low, these figures may not reflect the true picture of our Centre's users. In a society where there is a strong stigma attached to AIDS, offering such a "drop-in" service is more difficult than offering other types of front-line services. It takes enormous courage for PWAs or people who are directly or indirectly affected to walk into a place such as the "drop-In Centre" to seek assistance and disclose their HIV status. It is difficult to tell how successful we have been in attracting people who are directly or indirectly affected by HIV/AIDS as it is totally up to the individual caller to disclose any such information to us.

On the whole, the results and operation of the Drop-In Centre have been satisfactory, bearing in mind that this is the first service of this kind for Hong Kong, and the Centre has been set up and run for only a year. In Hong Kong, at present, the "drop-In Centre" seems to be more suitable as an education and information Centre for the public rather than as a place exclusively for PWH/As, their family members and friends.

# Community Based Services - Palliative Home Care Nursing Services for HIV/AIDS

Wong Kit Yee, Xanthe, the Society for AIDS Care

#### **Abstract**

As more people is living with HIV/AIDS nowadays, they prefer to continue to live at home rather than institutional care. Thus, there is a need to integrate the home care palliative nursing services into the existing community and hospital based services for people with HIV/AIDS. To response the growing needs, a home care palliative nursing team was set up by the Society for AIDS Care and started to serve the society in October, 1995. The services included: psychological support to clients and carers; counselling and bereavement services; pain and symptoms control with the help of our doctor; basic nursing care if required; referrals to other supportive services etc. It was found that the Home Care Palliative Nursing Team was a timely service meeting the imminent needs of PWAs and could maintain their living in the community. Better collaboration and communication between different workers could enhance the service delivery.

#### Introduction

Since the first case of AIDS in Hong Kong had been reported in February 1985, the government and the community responded to the epidemic from different directions. The recent statistics from the Department of Health show that we have cumulative numbers of 738 and 228 for HIV and AIDS respectively. Although the services for people with AIDS (PWAs) have been expanded in the past ten years, there are still gaps that can be worked on in order to provide continuity of care and improve the quality of life of PWAs.

According to the July 1996's statistics, majority of the people with HIV are within the age group between 20 - 39. They are young and have been actively involved in the society. Not to mention the physical problems they have to face the psycho-social issues will be quite significant for consideration. At the age of beginning their independence, they are forced to reverse their life cycle, back to dependence again. Instead of looking after their parents, they are looked after by them again as in his/her childhood. For those who have their own family, they have to handle their own heightened marital issues, alongside concerns around their children. As the number of infected women has increased, we are also facing more families with both parents infected with the virus. This further leads to the issues of increasing number of orphans in the community. It is much worse when HIV/AIDS is still a stigma in the society and it is always linked with homosexuality, drug use and promiscuity. As a result, people are too frightened to expose their HIV status and even to seek help. In addition to every problem they have to face, they are required to keep the secret untill the end of their life. However, due to the fact that they are young, they do have a strong power to live. They would like to be as independent as possible and stay at home as long as possible too. Sometimes, I do admire the strength they have.

If we look at the progress of the illness, it is not difficult to highlight the special characteristics. It just looks like a roller coaster (appendix I) that you cannot predict what will happen next. With different opportunistic infections and their treatments, people have to experience several ups and downs and no one can tell when it will be the end. It also means that the stress will be much increased accordingly. Uncertainty and out of control definitely contribute a great deal to this. In fact, the family is also experiencing the same process with the person with AIDS. They are having the same secrets, facing the same society with social stigma and undergoing the same ups and downs.

As the improvement in the prophylaxis, the treatments of different opportunistic infections and the discovery of new drugs, HIV/AIDS is becoming more like a chronic disease. People with AIDS are admitted to hospital only when they have critical opportunistic infections which require in-patient treatment or when the family cannot handle the situation at home. This implies the important role of the community-based services in the care of the people with AIDS. Basically the community-based services can help in two ways. Firstly, we can strengthen the natural support of client, they are their family members, friends, relatives and other loved ones which are their primary care system. Secondly, we can give direct services to them, such as counselling and nursing. By doing the above, PWAs can maintain their living at home and staying in the local community as long as he/she wishes.

# Home Care Palliative Nursing Team

Before October 1995 - the existence of the Palliative Home Care Nursing Team, we have had the following AIDS specific services available in the community already. They are under the following categories:

- Help-line and blood test services
- Buddy and transport services
- Counselling service and financial assistance
- Support groups
- Educational programmes
- Library resource centre

As the illness progresses, people do require different community-based services. Help-line and blood test services, educational programmes, resource centre and even support groups cannot give direct services to those who are at the late stage of AIDS. The main concern of palliative care will be how to take care of himself/herself at home or how to help the family to take care of him/her at home. Nurses or even doctors will be helpful for them in the community just like at home. On the other hand, the existing services depend a lot on volunteers, especially in the home-based services. Volunteers are indispensable but we need to respect their boundaries and limitations. It is not fair to expect volunteers to perform some of the duties, such as nursing duties. There is definitely limited number of full-time front-line workers who are working directly with PWAs.

However, there are other general community-based services that are available to the general public. Ideally, people with AIDS can have access to these services too. Unfortunately, experience tells us that there are certain barriers to the access of these services. They are:

- The services are not tailor-made to accommodate the particular needs of people with AIDS.
   It may be due to the limited resources, social ostracism or social apathy to the growing needs of PWAs.
- There is no or inadequate staff training and preparation in respect to the care of PWAs.
- Stigmatisation also affects the referrals in two ways. The staff has hesitation to accept referrals of people with AIDS, or people with AIDS are too frightened to apply for any services, particularly the general services.

Subsequently, there is a service gap in the care of people with AIDS that a Palliative Home Care Nursing Team is needed. Our team has been operating since October 1995. We

have one nurse manager and three home care nurses, with back-up doctor of palliative medicine. All of us either have palliative care background or AIDS care training. Actually, continuous inservice training and up-dating of information are emphasised within the team. We choose to work for people with AIDS and our service will be developing towards the changing needs of the community. We have certain aims to achieve as the Home Care Nursing Team:

- to maintain the quality of life of PWAs;
- to provide support for other carers, especially their family members;
- to build up a bridge between hospitals and community; and
- to promote and practise care team concept.

We believe in interdisciplinary approach to the care of people with AIDS. With the consent of client, a care team (3) can be formulated. Members can be anyone that is actively involved in the care of client. They can be client himself/herself, family members, home care nurse, family doctor, social worker, volunteer etc. The client should have the right to choose his care team members. Respect and trust are important elements in proper functioning of the team. Each member has his/her particular role to perform. As a home care nurse, we can provide assistance in the following areas:

- Drug monitoring, pain and symptom control with the help of doctor
- Training and supervision on drug infusion and injection
- Wound care
- Bereavement care, psychological support
- Collaboration with care team members and different organisations
- Act as advocates under the requests of clients

Up till now, our team has been visiting up to thirty clients and significant portion of our time has been spent with their family members. Bereavement care is also given by our nurses both on individual base or in the form of support group. Although we have received a lot of positive feedback and advice from clients and family members, we still aim at expanding the service to more people who are affected by AIDS. Due to strong social stigmatisation, we do find PWAs are too frightened to accept any service at the earlier stage of the disease. As a palliative care worker, early referrals are always emphasised because it can allow more time to establish the relationship.

# Conclusion

In conclusion, better care for people with AIDS can only be achieved with the efforts from the whole Society. AIDS awareness is crucial in minimising social stigmatisation. We just cannot imagine how much extra stress and pressure are resulted to clients and their family members because of the stigma involved. Also interdisciplinary team approach is required in the actual care of people with AIDS. However, the team can only function effectively with good collaboration and communication between workers. Actually, AIDS does give all health care professionals a big challenge. It further teaches us how to care for a ¶erson" holistically, instead of just confining to our own profession. Finally, due to the unpredictable progress of AIDS, palliative care should be carried out hand in hand with curative medicine.

# An Assessment of NGOs Efforts and Roles in Hong Kong's AIDS Programmes

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# **Abstract**

This paper commences with a conceptual analysis on the roles of NGOs in AIDS programmes. The comparative advantages of NGOs are also discussed (e.g. flexibility, innovation, access to target community, representing interest and values of specific social groups, etc.). In Hong Kong, the government has run ahead of the NGOs in developing AIDS programmes, and this is quite uncommon elsewhere in the world. Such a phenomenon will be discussed through a historical assessment of local NGO movement. The existing work focuses of local NGOs will also be examined against this background. Overall, findings indicate that as different from most other countries, a salient characteristic of local NGOs is the marginal participation of AIDS-affected social groups. Local NGOs activities seem to cluster in several areas, for example, providing services to people with HIV/AIDS, organising prevention and training programmes. Relatively, few efforts are directed to other equally significant domains - notably policy advocacy and programme evaluation. As revealed by several incidents, NGOs are not particularly active in conflicts between the government and the community regarding the strong social discrimination against people with HIV/AIDS. The paper will discuss the reasons behind the phenomenon, and suggest directions for further development.

#### Introduction

As a sweeping public health issue, the AIDS epidemic demands reactions from all sectors in the society. Experiences show that among the organisations responding to the crisis, non-governmental organisations (NGOs) have emerged as a significant force in the effort to fight against AIDS. Evidently, NGOs have occupied pivotal roles in the AIDS programmes of various developed and developing countries.

This paper has several objectives: a) to examine conceptually the roles of NGOs in the AIDS epidemic; b) to review briefly the historical development of NGOs participation in local AIDS programmes; c) to examine the trend of local AIDS programmes; and d) to discuss NGOs' future roles in Hong Kong's AIDS programmes.

## NGOs in the AIDS Epidemic: A Conceptual Analysis

Conceptually, we can distinguish the emergence of NGOs from several perspectives. From a political standpoint, NGOs provide public goods (for example, medical and health care services) to relatively small groups of people. It reveals government's unwillingness or failure to meet these services needs through direct service provisions. From an economic analysis, NGOs emerge principally as a result of various forms of market failure. An economic analyst will focus on what can be met by these NGOs that is not met by the profit-making sector. Taking a sociological standpoint, the emergence of NGOs represents the existence of pluralistic life-styles and values in the society. Primarily motivated by a vision of a better future, most NGOs have some core values, be it political, religious, or interpersonal, that is so strongly entrenched within their ranks that the pursuit of this value or vision channels all behaviour. The priority of these organisations is organising people around the shared core value; economic incentives are secondary.<sup>1</sup>

Undoubtedly, the contributions of the NGOs in the entire fight AIDS campaign should be fully acknowledged. In 1989, the World Health Assembly stated that: "[NGOs'] commitment and versatility, and their knowledge and experience ..... can make a special impact on individuals and society regarding AIDS and the needs of HIV-infected people and those with AIDS.<sup>12</sup> Perhaps the significance of NGOs in the fight AIDS campaign can be accounted by the novelty and extensiveness of the issue. Reading history, as the AIDS epidemic emerged in the early eighties, most governments were literally paralysed and had largely reacted by an inactivity with a waitand-see attitude.<sup>3</sup> The initial adequate responses almost always come from small circles of concerned lay people, denoting those who themselves have been infected by the disease or people who have lost their close friends and family members because of AIDS. Realising the inadequate reactions from the governments, these first circles of concerned people organised among themselves into NGOs to deliver different kinds of health education programmes and selfhelp activities. Moreover, these NGOs also targeted to work on their governments in urging the development of prompt policies to stop HIV transmission, and also the enactment of laws to protect human rights of the HIV-infected population. In retrospect, their prompt participation in the fight against AIDS is particularly valuable and important as they have successfully urged the much needed societal responses to contain the AIDS epidemic. Moreover, their communitybased backgrounds also enable them to reflect the values and problems of the marginal groups in the society, notably the male homosexuals, intravenous drug users, commercial sex workers, and those who are HIV-infected. As many members in these NGOs are themselves service consumers, their voice can be particularly cogent. After such initial response, pre-existing NGOs and government authorities gradually join in to fight against AIDS.

NGOs have long been regarded as possessing specific strengths that enable them to fight AIDS effectively. We can briefly summarise some of their prominent strengths as follows:

- NGOs possess the flexibility to implement programmes quickly to meet the needs of clients. They can also address to controversial issues with innovative solutions. Because of their non-governmental image, they have less political constraints and thus able to address sensitive topics like sexuality, condom use, and intravenous drug use in a more strict forward manner.
- 2. At the initial stage of the epidemic, AIDS is often closely connected with some marginal groups in the society, such as male homosexuals, intravenous drug users, and commercial sex workers, etc. It is believed that NGOs, with their community connections, are more able to reach these groups more easily.
- 3. Because of their community image, NGOs are more able to gain the trust of the community. They are more likely to obtain the credibility from the community that they serve, and attract community participation. This generates greater possibilities to foster an "inside track" -- an effective strategy to transform the community that they serve.
- 4. NGOs are more capable to attract community resources, including both talent and financial support. This can lower the operating costs.

Evidently, the extent and depth of NGOs participation in the provision of health and welfare issues reflect a society's culture and traditions. Misztal and Moss after an international survey on the participation of voluntary organisations in AIDS programmes conclude that there is a wide variation in the traditions and extent of voluntary organisation in civil society. It can swing

from one extreme where individual recourse to law and collective organisation through mutual support groups of sufferers are part of daily life; but at the other extreme we can also find societies in which citizens' association are extremely rare and they are literally unable to exercise pressure on political elites or to contribute effectively to managing the problems posed by the disease.<sup>4</sup>

# A Brief Historical Note on NGOs Involvement in Hong Kong's AIDS Programmes

Hong Kong possesses a time-honoured tradition of active NGO participation in tackling different kinds of social and welfare problems in the community. At present, if we discount social security, NGOs receive by way of grants some two-thirds of total government expenditure on social welfare services, and employ some 80% of all social welfare personnel. Government policy has clearly stated that "the maintenance of a vigorous and progressive voluntary sector is vital to the future development of social welfare." In other words, NGOs have been deeply entrenched in the social and welfare scene in Hong Kong.

Contrary to the experiences elsewhere in the world, however, Hong Kong government has run ahead of the NGOs in initiating local AIDS programmes. For analytical purpose, we can roughly divide NGOs involvement in local AIDS programmes into 3 different phases, namely, initial, proliferation, and consolidation. The initial phase lasts from 1987 to 1992. In response to the challenges imposed by AIDS, Hong Kong government set up an expert committee under the then Medical and Health Department in 1985 to discuss and review the medical aspects of HIV/AIDS and to work out a plan necessary for monitoring and managing the disease when required. Relevant prompt measures were taken to limit the spread of HIV, including notably the screening of all donor blood for HIV antibody. In 1987, recognising that community involvement was essential to fight against AIDS, the government established the Committee on Education and Publicity on AIDS. Membership of this Committee included influential community leaders and representatives from various social services agencies. In this phase, two AIDS-specific NGOs were established, namely, the AIDS Concern and the Hong Kong AIDS Foundation.

The proliferation phase lasts from 1993 to 1995. In this phase, we witness the successive establishments of different AIDS-specific NGOs, which include AIDS Memorial Quilt Project, Society for AIDS Care, and the HIV Information and Drop-in Centre. Notwithstanding the incessant related NGOs efforts and the growing local awareness on the issue, the setting up of the AIDS Trust Fund in 1993 has certainly provided the much needed financial support to facilitate the proliferation of related NGOs activities during this period.

On the other hand, responses from the pre-existing NGOs in organising AIDS-related programmes are not particularly enthusiastic. Perhaps the only exception is the special AIDS project initiated by the Hong Kong Council of Social Services. This is not to say that pre-existing NGOs are totally uninvolved in fighting against AIDS. They do organise different kinds of related educational programmes. Yet, most of these efforts are ad hoc and piecemeal in nature.

The consolidation phase commences in 1996 when AIDS-specific NGOs are beginning to devote more efforts in better co-ordinating among themselves for future development. Though still at an initial stage, these NGOs have put forward proposal to set up an inter-NGOs alliance to meet the upcoming challenges in the community. Eight groups are reported to be potential members of this alliance; most of which are AIDS-specific NGOs.<sup>6</sup> Such consolidation effort can be regarded as a natural result after years of co-operation and working relationships amongst these NGOs. However, we also note that most pre-existing NGOs are not involved in this proposed new alliance.

Such a developmental history reveals several critical observations. First, as different from the experiences of other countries, NGOs in Hong Kong fall behind the government in responding to the AIDS epidemic. Local AIDS-specific NGOs are also not set up or run by

those who are particularly hard-hit by the disease. To understand such phenomenon, we need to note that in Hong Kong, community groups that bear a high risk to HIV infection are either poorly organised or unwilling to involve themselves actively in the issue. For example, as commercial sex workers and intravenous drug users are marginal groups in Hong Kong, they do not have a good platform for organised action. The homosexual groups tend to dissociate themselves from the HIV/AIDS issue because they think there already exists a widespread misconception in the community that HIV/AIDS is a matter directly related to homosexuality<sup>7</sup> We note that most local AIDS-specific NGOs are staffed by paid workers and volunteers. Seen in this light, we can interpret that these NGOs shoulder a responsibility to represent the values and interests of their clients -- including notably those who are HIV infected.

Second, we note a conspicuous absence of participation from most pre-existing NGOs in Hong Kong. To further substantiate such assertion, we can examine the presentations made in this first local AIDS Conference. There is only a sparse participation from the pre-existing NGOs - a phenomenon in marked contrast to the local tradition of active NGOs responses to other social issues. To explain such lukewarm responses, at least three reasons can be given. First, the relatively low prevalence of HIV/AIDS means the less urgency to develop related programmes. Second, the government's early involvement means that the needs of the persons with HIV/AIDS are not totally unmet. Third, quite a significant amount of local pre-existing NGOs have their own religious or cultural background. As there are always great sensitivity attached to the HIV/AIDS debates (for example, condom use and other sexuality issues) which may clash with local norms and traditions, this may have inhibited active participation from these pre-existing NGOs.

# A New Phase of AIDS Programmes in Hong Kong

Indisputably, the vitality of NGOs lies on their ability to respond to the shifting social needs brought by AIDS. Adopting this as a main principle, we can ask whether NGOs can meet the upcoming challenges in Hong Kong. Here, we first need to give an overall analysis on the existing local AIDS situation.

Arguably, after a decade's development, Hong Kong's AIDS programme has entered a new phase. Bennett and Ferlie in quoting the British experience stated that when HIV/AIDS issue became officially recognised, with formal structure set up and government money available, this already denoted the "legitimation phase" for AIDS policy development in the society. In the case of Hong Kong, the government established the Advisory Council on AIDS in 1990, and a policy document was produced by that Council afterwards. Concomitantly, the AIDS Trust Fund was set up to provide financial resources to stimulate community efforts to organise AIDS-related activities. Although there have been debates on whether such organisational structure is sufficient to handle the epidemic, one cannot possibly deny that Hong Kong has made considerable progress to fight AIDS by initiating relevant organisational structures and programmes since the past decade.

Regarding HIV transmission, one can now surmise with some confidence that the prevailing heterosexual attitude and behaviour among the local population together with some other social factors that the annual prevalence of HIV can be hopefully contained. Needless to say, there are still some factors of uncertainty in this scenario; one of which is the increase of sexual connections between the Hong Kong population and its counterpart in Mainland China over the past decade.

Similarly, service delivery structures are established and programmes are organised to deliver pertinent financial, medical and social care services to people with HIV/AIDS. Now, we may also be able to surmise that those affected by the disease are not totally deprived of the services that they need.<sup>12</sup> Of course, there still exist rooms for further improvement in the service delivery strategy.

In other words, after a decade's effort, Hong Kong is able to achieve a basic infrastructure to contain AIDS. Local AIDS programmes are getting more matured and structured. Now, Hong Kong is heading toward the stage of routinization and normalisation -- AIDS has become an established part and parcel concern of government's public health policies. With this trend AIDS can no longer be viewed as an epidemic, but rather as a chronic disease that society must live with. Heading toward such a new phase, it is high time to examine what are the challenges ahead. This can also bring implications for the future roles of NGOs in the fight AIDS campaign. Here, we note two issues that warrant special attention.

First, HIV transmission has clearly broken out of relatively confined "high-risk" groups, and continues to affect people from all walks of life. Recent approach to AIDS prevention has also shifted the focus from high-risk groups to those who practise high-risk behaviours. It implies that public education of the whole population to fight HIV transmission is now both urgent and crucial. In particular, we note from recent statistics that women are increasingly vulnerable to HIV transmission in Hong Kong. As women are widely dispersed in the community, this inevitably makes related prevention work even more diverse and difficult.

Second, there still exist strong stigmatisation, stereotyping, and discrimination against people with HIV/AIDS in the society. With such a prevailing social attitude, it can pose great danger for further HIV transmission on the one hand; and also hamper the delivery of appropriate services to those who are HIV-infected on the other hand. With stereotyping AIDS as a disease only related to specific groups (for example, male homosexuals, commercial sex users and workers, intravenous drug users, people who are sexually promiscuous), it can easily generate a common feeling that: "nice" people like "us" are not seen as a risk whereas "those" people are. <sup>13</sup> Such responses, at best, only redistribute risk; they do not prevent HIV transmission but can even increase it. Believing stereotypes is particularly risky as it can blind people to exposure from others who do not fit the stereotypes but who are infectious. On the other hand, there are ample evidences to illustrate the current societal discrimination against people who are HIV infected. Certainly, such stigmatisation and discrimination not only inflict intense emotional pain for the HIV infected, it may also lead to their self devaluation. Worst still, it can impede access to the prevention and care services, in particular their access to treatment that can cure or suppress infection.

#### The Way Forward

AIDS is a novel public health issue. One important question for all policy discussion is whether we should set up a new organisational structure to meet the new challenge, or we can utilise the existing ones to handle the problem. Initially, the emergence of AIDS has paralysed most governments' current organisational responses. Therefore, newly established AIDS-specific NGOs rapidly flourish to fill the service gaps. Now, more than a decade has gone, and a new AIDS scenario gradually emerges. In most countries, government authorities, pre-existing NGOs and newly formed AIDS-specific NGOs are all working together to combat the disease. This naturally leads us to reconsider the respective roles of different organisations in the battle against

AIDS. It can avoid duplications of efforts on the one hand, and also attain greater organisational efficiencies and effectiveness on the other hand. Evidently, such issue is also pertinent to Hong Kong.

When the focus of AIDS prevention work has changed from high-risk groups to those who practise high-risk behaviours, it apparently denotes that multi-sectoral participation is essential to contain the spread of HIV. What follows is a need for societal mobilisation to meet the possible challenges. It also logically follows that as the Hong Kong society is well connected with community groups and organisations, the existing networks should be fully utilised to attain such objective. In particular, NGOs in the social welfare and education sectors has a reputable tradition of close connection with the community. There seems to be a need to revitalise their participation in the fight AIDS campaign.

In the past decade, local AIDS programme development seems to be more concentrated on the work of AIDS-specific NGOs. This can be regarded as a natural and healthy development. Evidently, such foundation work is extremely important, as it has provided a good starting point for further development. The work and achievement of the AIDS-specific NGOs should also be fully recognised, sustained and supported. Yet, changing social circumstances breeds new social needs. Heading toward a new phase of AIDS programme development, a more balanced focus maybe needed.

To conclude, two working directions seem particularly relevant: a) further mobilisation of pre-existing NGOs, work organisations and educational institutions in the fight AIDS campaign; and b) de-stereotyping AIDS as a disease related to specific groups. Instead, avoiding high-risk behaviours should be adopted as the main theme in all kinds of AIDS educational campaign. Hopefully, this can help to overcome the "them-us" stigmatisation.

## **Footnotes**

- 1. Hartigan, P. (1992). The response of nongovernmental organisations in Latin Americas to HIV infection and AIDS: A vehicle for grasping the contributions NGOs make to health and development. in Feldman, DA. (ed.) *Global AIDS Strategy*. Westport: Bergin & Garvey, pp.47-60, pp.49-50.
- 2. Mercer, MA, Liskin, L. & Scott, SJ. (1991). The role of non-governmental organisations in the global response to AIDS. *AIDS Care* 3:3, 265-270.
- 3. Pollak, M. (1992). Organising the fight against AIDS. in Pollak, M., Paicheler, G. & Pierret, J. *AIDS: A Problem for Sociological Research*. London: SAGE Publications, pp.36-65.
- 4. Misztal, BA & Moss, D. (1990). (eds.) *Actions on AIDS: National Policies in Comparative Perspective*. New York: Greenwood Press, pp.239-40.
- 5. Hong Kong Government. (1991). *Social Welfare into the 1990s and Beyond*, Hong Kong: Government Printer, p.17.
- 6. The eight organisations are: Society for AIDS Care, Hong Kong AIDS Foundation, AIDS Concern, AIDS Memorial Quilt Project, Teen AIDS, HIV Information and Drop-in Centre, Action for Reach Out, and the Hong Kong Council of Social Services. See Palpal-latoc, L.

- & So, A. (1996). Groups finally merge to combat AIDS. in *Hong Kong Standard*. 14 September 1996.
- 7. United Nations Development Programme The Hong Kong Polytechnic University Collaborative Centre. (1996). *Enhancing Government NGO Collaboration in HIV/AIDS Policy and Services The Case of Hong Kong*. Hong Kong: Hong Kong Polytechnic University, p.17.
- 8. Yeung, VFY. Evolution of AIDS programmes in Hong Kong. in Chan, CW and Lee, SS. (eds.) *The First Decade of AIDS in Hong Kong*. Forthcoming.
- 9. Bennett, C. and Ferlie, E. (1994). *Managing Crisis and Change in Health Care*. Buckingham: Open University Press, pp.21-28.
- 10. Council on AIDS. (1994). *Strategies for AIDS Prevention. Care & Control in Hong Kong*. Hong Kong: Government Printer.
- 11. For example, Dr. Leong Che-hung, Chairman of the Hong Kong AIDS Foundation, has recommended to set up a central AIDS Council to oversee policies and co-ordinate co-operation between the many different AIDS bodies. See Palpal-latoc, L. & So, A. (1996). Groups finally merge to combat AIDS. in *Hong Kong Standard*. 14 September 1996.
- 12. AIDS Services Development Committee of Advisory Council on AIDS. (1994). *A Review of Services Provided to People with HIV/AIDS in Hong Kong*. Hong Kong: Government Printer.
- 13. Gilmore, N. & Somerville, MA. (1994). Stigmatization, scapegoating and discrimination in sexually transmitted diseases: Overcoming `them' and `us'. Social Science and Medicine 39:9, 1339-1358.