HIV & AIDS for Primary Care Doctors

- an Information Booklet

3rd Edition

AIDS Unit Department of Health Hong Kong

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1. PREFACE

A booklet on AIDS information was first published in 1992 for busy primary care doctors who wish to have a quick view of the basics of the problem. The publication was revised in 1995. There have been substantial advances in the last two years regarding medical management of HIV-infected patients. It is our intention, therefore, to introduce the updated information to our readers in this third edition.

The booklet is again divided into sections for the ease of reference of practising doctors. Information included is meant to be concise and essential, without going into the details of different aspects of HIV disease. Interested readers are advised to refer to relevant texts for in-depth description of individual area. We hope that medical practitioners will find this booklet useful in their care and control of HIV/AIDS. In case of queries, the AIDS Unit of the Department of Health can be contacted for clarification and additional information.

Medical Team AIDS Unit Department of Health September 1997

2. Basic facts of HIV/AIDS

AIDS is the acronym for acquired immune deficiency syndrome which represents the late stage of a disease caused by a retrovirus - human immunodeficiency virus (HIV). Two types of HIV exists: HIV-1 and HIV-2.

There are three major modes of HIV transmission, which involves an exchange of HIV-contaminated body fluid: (1) sexual - both homosexual and heterosexual contact; (2) blood-borne; and (3) perinatal i.e. mother-to-infant. The risk of sexual transmission increases if there is concurrent sexually transmitted disease (STD). Blood-borne transmission needles/syringes. occurs via sharing of Transfusion HIV-contaminated blood/blood products exposure via needle-stick/mucosal contact remains a low though genuine risk in health care setting. An HIV-infected mother can transmit the virus to her child during pregnancy, at delivery or through breast-feeding. The risk of perinatal infection is about 15% to 30%. Day-to-day social contact does not result in transmission

HIV affects and destroys many types of human cells, in particular the CD4+ T lymphocytes (T helper, T4) and cells in the central nervous system. With a decline in the number and function of the CD4 cells, there is progressive depletion of immune function leading to increased risk of developing HIV-related symptoms/ diseases - often opportunistic infections or malignancies. Nevertheless HIV infection generally has a long incubation period during which a person remains well clinically. On average, about 50% of HIV-infected patients progress to AIDS with evidence of immunodeficiency in 10 years' time. There exists, however, a minority of patients (non-progressors, slow progressors) who remain clinically and immunologically well for 15 years or more after infection.

- HIV has a long asymptomatic phase
- AIDS = **HIV** infection + opportunistic infections or neoplasms indicative of marked immunosuppression

3. Diagnosis of HIV Infection

HIV infection is often diagnosed by performing an HIV antibody test which is conducted in two phases - screening and confirmatory (supplemental). A positive result by screening (ELISA, enzyme linked immunosorbent assay) must be confirmed positive or otherwise with a supplemental test, e.g. Western Blot. "window period" denotes the initial period after infection during which the test could be falsely negative. It represents the time taken by the body to generate enough antibody to be detectable by the laboratory test. "window period" is usually shorter than three months, and one is paradoxically more infectious than that in the chronic phase of infection. A person should be (re)tested for HIV antibody after the window period if there is suspicion.

HIV antibody test is usually indicated when there is evidence of HIV-related signs/symptoms, history of risk behaviours or presence of STDs. There should be informed consent before an HIV antibody test, given the potential medical and psychosocial consequences of a positive result. Issues including nature of the test, meaning of positive/ negative results, confidentiality, potential consequences, and available clinical and support services, should be discussed.

HIV antibody test is readily available in Hong Kong. Since April 1989, the Department of Health has been offering free confirmatory tests for initially positive samples referred from private medical practitioners (Enquiry: Virus Unit Tel:28554121). Alternatively clients can be referred to the AIDS Unit of the Department of Health for counselling and HIV testing. The Department's Social Hygiene Clinics also offer HIV tests to patients suspected of having STDs. Both services are provided free of charge and information kept confidential.

- Test for HIV when there is presence of **STD**, behavioural risk or clinical suspicion
- **HIV** antibody test: Screening + Confirmation
- Beware of "false" negative **HIV** antibody result during "window period"
- Government provides free confirmatory test for preliminary positive specimens

4. Epidemiology - Global & Local

The first AIDS cases were described in USA in 1981 among some previously healthy homosexual men. Since then HIV has been shown to spread to virtually every place in the world, albeit with varying extent. Most of the known AIDS cases so far have been reported from the Americas and Africa. However, Asia is experiencing the fastest growth of HIV epidemic in the world, despite its later onset. To date over one million AIDS cases worldwide have been reported to the United Nations Joint Programme on HIV/AIDS (UNAIDS) and World Health Organisation (WHO). However, the estimated cumulative HIV infection is about 30 million; with 90% from the developing countries. Sexual contact, mainly heterosexual transmission, has accounted for a majority of the infections. HIV/AIDS has caused an estimate of 6 million deaths worldwide. The epidemic continues to expand, especially in Asia.

In Hong Kong, as of the end of September 1997, a cumulated 907 HIV cases have been reported to the Department of Health, of whom 290 have progressed to AIDS. About 70% of the infected patients were Chinese and more than 80% acquired HIV through sexual transmission. The growing importance of heterosexual transmission continues. About 13% of the cases were female but close to two-thirds of them were reported after 1994. The male-to-female ratio for newly reported cases now narrows to 4-6:1. The number of patients infected via transfusion of blood or blood products has remained stable. Also, HIV prevalence among drug users in Hong Kong is still low. Locally, the first case of perinatally acquired HIV infection was reported in July 1994 and there are now 4 known cases in total. The number of AIDS cases has increased markedly during the past 2 years as patients infected years ago gradually progress to AIDS.

- The HIV/AIDS pandemic continues to grow
- Heterosexual transmission of HIV is becoming increasingly important globally and locally
- Female infections are becoming more common

5. Surveillance & Reporting

HIV/AIDS is not a notifiable disease in Hong Kong. Instead, a voluntary reporting system has been adopted since 1984. It forms an integral component of the local surveillance mechanism co-ordinated by AIDS Unit of the Department of Health. Doctors are urged to report HIV infection and AIDS cases using a standard HIV/AIDS report form (DH2293, see below). All information is treated in strict confidence. In case of query, one can contact medical staff of the AIDS Unit (Tel:27808622).

In mid-1995, the Scientific Committee of the Advisory Council on AIDS has formulated a document - Classification system for HIV infection and surveillance case definition for AIDS in adolescents and adults in Hong Kong. The local AIDS definition is adapted from that of the Centers for Disease Control & Prevention of the United States (CDC), with some modifications to meet local needs. Basically a case of AIDS is diagnosed if an HIV-infected person presents with evidence of marked immune deficiency, often an opportunistic infection or malignancy. Twenty-seven conditions are defined as AIDS indicator illnesses locally. Penicillium marneffei infection is an AIDS-defining condition in Hong Kong not included in the CDC's criteria, whereas pulmonary tuberculosis is considered only if one's CD4 count falls below 200/ul.

- Voluntary reporting of HIV/AIDS for epidemiological & statistical purpose
- \bullet Local HIV/AIDS classification system and definitions, for surveillance and medical management

DEPARTMENT OF HEALTH

HIV/AiDS Report Form

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6. Clinical Profile of HIV Disease

HIV infection results in a disease spectrum, with varying rates of progression and clinical presentations in infected individuals. After acute (can be clinical or subclinical) infection, HIV disease enters its chronic phase which classically comprises several stages, each of variable duration, - asymptomatic to mildly symptomatic, late symptomatic (usually with AIDS), terminal and finally death.

Diagnosis of underlying HIV infection in a patient presenting with clinical disease usually requires a high index of suspicion. Assessment of patients with HIV/AIDS should include a full medical, social and sexual history, physical examination, blood testing and other appropriate supplementary investigations. Staging of patients is useful as this influences the management plan and prognosis. The 1993 US CDC classification system used both clinical criterion and immunologic criterion - CD4 level - for staging.

The concept of natural history of HIV infection has been revolutionised in 1995/96. It was found that the infection is a very dynamic process even during the early asymptomatic stage. The lack of symptoms is not paralleled by viral latency but accompanied by HIV replication in lymph nodes. Dr. David Ho of the Aaron Diamond AIDS Research Center further demonstrated that the overall intensity of viral replication in the body is much greater than previously thought. He showed that the replication of HIV-1 in vivo is continuous and highly productive, causing the rapid turnover of CD4 lymphocytes. It has been estimated that the mean half-life of free virions is some 6 hours while that of an infected cell is 1.55 days. Some 10 billion virions are produced and released into the extracellular fluid everyday while an equivalent number is removed; thus giving a constant plasma HIV level during the steady state. These basic scientific findings have great implications on the treatment of HIV infection.

The natural history of HIV infection in terms of CD4 and plasma viral load changes and their correlation with the clinical condition is depicted in Figure 1.

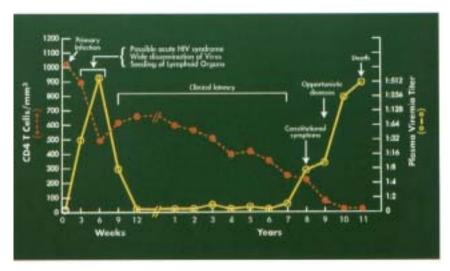


Figure 1. Typical course of HIV infection.
Republished with permission from Pantaleo G, Graziosi C, Fauci AS. N Engl J Med 1993;328(5):327-35. Copyright 1993 Massachusetts Medical Society. All rights reserved.

• HIV infection is a highly dynamic process

Acute/primary HIV infection

Upon infection with HIV, there is an intense replication of the virus and rapid upsurge of HIV level in the blood. The body mounts an immune response which tries to contain the virus. Plasma viral load then drops precipitously to a steady level - set point - about 3-6 months after the infection. The higher the set point, the poorer the prognosis. An acute flu-like illness of 1-2 weeks' duration can occur in up to half of the patients within six weeks of exposure to and infection by HIV. It is also called seroconversion illness as it is associated with the generation of HIV

antibodies. Classical symptoms include high fever, skin rash, sore throat and swollen glands. In severe cases, central nervous and gastrointestinal system may also be affected. Diagnosis rests on a high index of suspicion and appropriate investigations. Presence of seroconversion illness, especially severe cases, is associated with faster disease progression.

• Seroconversion illness or a high set point of plasma viral load is associated with poorer prognosis

Disease progression

During the chronic phase of HIV disease, the patient generally remains well (clinically latent) for a few years before symptoms/signs manifest. This is usually predated by a progressive fall in CD4 level and likely a rise in plasma viral load. Clinical presentation depends on which organ/system is involved and the stage of the disease. There is no single specific clinical feature for HIV/AIDS though some disease complications are more common.

Opportunistic infections from a variety of agents, e.g. *Pneumocystis carnii* pneumonia (PCP) (Figure 2) and tuberculosis (Figure 3), are the most frequent complications. Malignancies, e.g. Kaposi's sarcoma, lymphoma, or conditions directly related to HIV, e.g. AIDS dementia complex, are sometimes seen. In general, relatively minor diseases precede major life -threatening AIDS-defining illnesses. Classical examples of pre-AIDS illnesses are mucocutaneous conditions such as herpes zoster (Figure 4), oral thrush (Figure 5), and oral hairy leucoplakia which all predict faster disease progression. Overall, the respiratory system, gastrointestinal system, and central nervous system are common sites of complications in HIV/AIDS. The usual symptoms/signs referrable to these organs are expected. Systemic symptoms due to disseminated infections are also not uncommon. The frequency of primary AIDS-defining illnesses in Hong Kong is shown in Figure 6.

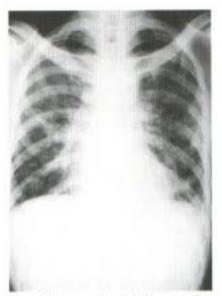


Figure 2. Pneumocyatia carinii pneumonia classical AIDS-defining illness, can be prevented by effective prophylaxis



Figure 3. Pulmonary TB - increasingly common in local HIV patients, could enable early HIV diagnosis



Figure 4. Herpes zoster - early manifestation of HIV disease, commonly seen in local patient.



Figure 5. Oral thrush- a good marker of worsening immunosuppression, predicts major complications

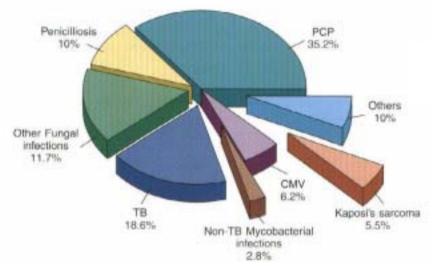


Figure 6. Cumulative frequency of primary AIDS- defining illnesses in Hong Kong from 1985 to September 1997 (n=290)

- HIV infection results in a disease spectrum with progressive but variable rate of clinical and immunologic deterioration
- Clinical manifestations of HIV disease are diversified

7. Management of HIV/AIDS

The objectives of HIV management are to minimise negative impacts, maintain optimal health, reduce complications, facilitate early detection of complications, and improve quality of life and survival. The care programme includes the following components.

Health Maintenance & Psychosocial Support

Advice for health maintenance at all stages of HIV infection is as essential as medical therapy. The patient should be encouraged to adopt a healthy life style with adequate rest, nutrition and appropriate exercise. He/she should also be advised to refrain from habits/ behaviours that may adversely affect the course of the disease e.g. stress, smoking, co-infection with sexually transmitted diseases, use of illicit drugs. Prevention of spread of HIV to others should be emphasised. This may mean a change in life style and risk behaviour modifications, which require good psychosocial support. The need for such support tends to be greater towards advanced stage. Confidentiality has to be ensured at all time.

• HIV care encompasses responding to physical, psychological and social needs

Regular Monitoring of HIV Disease

The progress of an HIV/AIDS patient has to be followed regularly through monitoring of his/her clinical, immunologic and virologic status. This is achieved by medical check-ups and laboratory investigations. CD4 level is the single most important immunologic marker for HIV infection as it falls in parallel with deteriorating immune function. Generally it is checked every 3-4 months. It serves as a prognostic marker as well as an indicator for medical intervention. CD4 testing can be arranged with the Institute of Pathology of the Department of Health (Enquiry: 2859 8280, 2857 4053).

In the past 1 year, plasma viral load assessment has quickly become another standard of HIV management. Unlike CD4, it looks at the virus, and thus disease, itself. This marker is found to be useful for (a) gauging disease prognosis, and (b) the assessment of efficacy/ failure of antiretroviral treatment. Again, regular monitoring by polymerase chain reaction (PCR), branched (b-) DNA, or less commonly nucleic acid sequence based amplification (NASBA) at 3-4 months' interval is recommended. Measurement is also indicated prior to and 1-2 months after change of antiretroviral treatment. Studies have confirmed that use of both CD4 and plasma viral load compound their value in HIV management.

• Regular monitoring of clinical, immunologic and virologic status of HIV-infected patients

Medical Treatment & Prophylaxis of infections

The two major treatment areas for HIV/AIDS are: (a) antiretroviral therapy, and (b) treatment and prophylaxis of opportunistic infections. There have been recent advances in these areas, in particular the former. Nowadays, patients who receive regular care and appropriate intervention generally fare better than before.

(i) Antiretroviral therapy

Antiviral agents inhibit HIV replication by attacking the virus at different stages of its life cycle. Currently approved antivirals in clinical practice are all inhibitors of its two crucial enzymes - reverse transcriptase and protease. Nucleoside analogue reverse transcriptase inhibitors (NRTI), e.g. AZT, ddI, ddC, are the first drugs introduced for treating HIV. They can potentially improve the immune function, slow disease progression, lower the chance of secondary infections and improve quality of life. However, the drugs have to be withdrawn in some patients due to toxicity. Previously they were used singly and their benefits are usually transient. It is now clear that they only achieve a modest viral suppression when used alone.

Recent advances in antiretroviral therapy have been marked by (a) proven clinical benefits of combination treatment, and (b) emergence of more and new antiviral drugs, viz protease inhibitor (PI), non-nucleoside analogue reverse transcriptase inhibitors (NNRTI) and other NRTI agents. PI is characterised by its great potency against HIV. Today monotherapy is regarded as suboptimal. Combination antiretroviral therapy (Table 1) has become the standard of care. Some authorities have recommended triple therapy for all patients where treatment is indicated. The ideal goal is achievement of plasma viral level for as low and as long as possible and thus minimising drug resistance. In general, antiretroviral therapy should be considered for (a) symptomatic HIV disease or AIDS and (b) HIV disease with a low CD4 count and/or high plasma HIV RNA level.

The improved therapy also means that the patients are now on more drugs and probably more complex regimen. Adverse drug interactions have to be borne in mind. Most importantly, drug compliance needs to be ensured as emergence of resistance is of concern. Prior to initiation of therapy, thorough discussion with the patient is a must. It is unwise to rush into therapy if the patient is not yet prepared to comply with this long-term treatment.

- Monotherapy is suboptimal for treating HIV/AIDS
- Combination therapy has become the standard of antiretroviral treatment
- Monitoring of drug tolerance and compliance of patients is essential

Table 1. Commonly used antiviral drugs in Hong Kong

Drug	Common side effects	
Zidovudine (AZT)	anaemia, neutropaenia, gastrointestinal upset, CNS	
	symptoms, myalgia/myositis deranged liver function	
Didanosine (ddI)	pancreatitis, peripheral neuropathy, diarrhoea	
Zalcitabine (ddC)	peripheral neuropathy, pancreatitis, rash, mouth	
	ulcers	
Stavudine (d4T)	peripheral neuropathy, deranged liver function	
Lamivudine (3TC)	headache, fatigue, neutropaenia, pancreatitis,	
	peripheral neuropathy, anemia, GI upset	
Saquinavir (SQV)	nausea, diarrhoea, abdominal discomfort	
Ritonavir (RTV)	nausea, diarrhoea, vomiting, weakness, taste	
	disturbance, loss of appetite, circumoral & peripheral	
	paraesthesia	
Indinavir (IDV)	nausea, renal stone, unconjugated hyperbilirubinemia	

(ii) Treatment and prophylaxis of opportunistic infections

Opportunistic infections in HIV/AIDS patients are often amenable to treatment though sometimes with difficulty (Table 2). Prolonged or maintenance therapy is usually required due to the underlying immunodeficiency. Early diagnosis and treatment of major complications can reduce morbidity and mortality. Prophylaxis of some of these infections has been shown to be particularly cost-effective. For example, PCP can be largely prevented by drugs like septrin or pentamidine inhalation after an attack of PCP (secondary prophylaxis) or when CD4 count falls below 200/ul (primary prophylaxis). PCP prophylaxis has actually become a cornerstone of HIV management. Compelling evidence is now present for prescribing *Mycobacterium avium* intracellulare (MAI) prophylaxis when CD4 falls below 50/ul.

• Prophylaxis and treatment of opportunistic infections is effective in reducing morbidity and mortality

Table 2. Common AIDS-defining opportunistic infections

Infections	Presentations	Treatment	Side effects of Treatment
Pneumocystis	pneumonia with	1. high dose	1. nausea, vomiting, drug rash,
carinii	fever, sweat, dry	septrin (IV/po)	fever; pancytopaenia
	cough & SOB	2. IV pentamidine	2. hypoglycaemia, hypotension,
			hypocalcaemia, pancreatitis
Toxoplasma gondii	Encephalitis	Pyrimethamine +	bone marrow suppression;
	with focal	Sulphadiazine/	nausea; sensitivity; diarrhoea
	neurological	Clindamycin &	
	deficits, seizure,	folinic acid	
	altered		
	mentation		
Cryptococcus	meningitis with	1. Amphotericin B	1. thrombophlebitis,
	fever, headache,	2. Fluconazole	nephrotoxicity, hypokalaemia,
	nausea &		fever, chills & rigor
	vomiting		2. dyspepsia, headache, liver
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Mycobacterium	fever, cough,	Isoniazid,	hepatitis, neuropathy,
tuberculosis	weight loss,	Rifampicin,	thrombocytopaenia, optic
	pulmonary	Pyrazinamide,	neuritis, hypersensitivity
34 1	shadow dissemination	Ethambutol	reaction
Mycobacterium		Clarithromycin,	liver toxicity, optic neuritis,
avium intracellulare	with fever,	Ethambutol, Rifabutin	hypersensitivity,
(MAI)	anaemia, weight loss, diarrhoea	Ciprofloxacin	thrombocytopenia
Cytomegalovirus	retinitis with	1. Ganciclovir	1 noutropagnia 2
Cytomegalovirus	visual floaters.	2. Forscarnet	1. neutropaenia 2. nephrotoxicity, anaemia;
	blurred vision &	2. Poiscaillet	hypocalcaemia,
	loss of visual		hypomagnesaemia
	field		nypomagnesaemia
Penicillium	dissemination	Amphotericin B,	liver toxicity, nausea,
marneffei*	with fever.	followed by	hypokalaemia
mainejjei	weight loss, skin	Itraconazole	пуроканасния
	lesions.	THEOHELOIC	
	hepatosplenome		
	galy		
	Sury		

a common AIDS-defining illness in Hong Kong, rarely seen in Caucasian countries

8. AIDS Prevention & Education

HIV/AIDS is still an incurable disease and prevention remains the best strategy. Hong Kong's prevention strategy targets the three routes of HIV transmission. Publicity and education are essential components in the prevention and control of HIV infection. It aims to (a) impart correct information on HIV/AIDS, (b) foster positive attitude towards HIV/AIDS patients, and (c) enable risk reduction through behaviour changes. Different approaches and emphases are adopted when targeting people of different background. In this regard, a supportive social environment and sustained effort are crucial.

• HIV infection is preventable

Sexual transmission

The risk of sexual transmission of HIV increases with having multiple sexual partners and unprotected penetrative sex. Apart from abstinence or maintaining a mutuallymonogamous sexual relationship, minimising the number of sexual partners, and consistent use of quality condom are effective ways to reduce the risk. Other safer sex practices that express love without penetrative sex and exchange of body fluid during contact should be stressed. Prompt diagnosis and treatment of sexually transmitted diseases is also important.

- Condom use can reduce sexual transmission of HIV
- Early treatment of sexually transmitted diseases helps HIV prevention

Transmission during Injecting Drug Use

HIV transmission through sharing of needles/syringes during drug injection is best prevented by avoiding or stopping drug abuse. However, drug use is a complex personal, family and social issue that is influenced by multiple factors. The interim goal, before achievement of drug detoxification or maintenance with methadone, is thus risk and harm reduction - use of sterile syringe and avoid sharing. Some drug users are also exposed to HIV through unsafe sex. Counselling drug users should therefore bring in both issues of drug and sex.

Safeguarding of Blood and Blood Products

The Hong Kong Red Cross Blood Transfusion Service (HKRCBTS) has adopted donor deferral (since 1983) and screening of donor for HIV (since 1985) to safeguard blood and blood products. In addition, heat/solvent treatment has been introduced to inactivate the virus in the preparation of blood products since 1985. In Hong Kong, only one new case of HIV infection has probably occurred through blood transfusion since then. Genuine though small risk exists if recently infected individuals donate blood during the "window period". The public should be warned against donating blood for the purpose of HIV screening. They should be advised to go to HIV testing services.

Perinatal transmission

The most effective way of preventing perinatal transmission rests on preventing infection of mother. Pregnant women at higher risk of HIV infection because of her or spouse's behaviour should be offered HIV testing, after adequate counselling and with consent. Interventions can be offered if HIV infection is diagnosed. HIV positive women should be counselled about the risk of transmission to infants and its potential consequences, and the pros and cons of continuing/terminating the pregnancy if already pregnant. Studies have proven that antiviral treatment (AZT, and possibly others) can reduce risk of perinatal infection. Antivirals including AZT should be given for those who have decided to carry on the pregnancy. Caesarean section remains an unproven preventive strategy. Breast feeding should be avoided after delivery.

• Perinatal HIV transmission can be reduced by the use of antiretroviral treatment

Health Care Setting

Universal precaution is the gold principle to prevent transmission of HIV and other blood-borne diseases. All blood and tissue should be treated as potentially infectious and precautions taken according to the need of each procedure, irrespective of the known diseases of patients. Barriers e.g. glove, mask, should be used as appropriate to avoid accidental exposure. Sharps should be handled with extreme caution to avoid injury. Used needles are not to be re-sheathed and should be disposed of properly in sharp boxes. Contaminated items and environment should be disinfected with appropriate disinfectant.

In case of occupational exposure to HIV-infected blood or body fluids, counselling and risk assessment should be done to consider the use of post-exposure prophylaxis (PEP). PEP with antiretroviral agents has been shown to reduce the risk of transmission in such setting. Advice could be sought from the nearby A&E Department or AIDS Unit of the Department of Health.

- Universal precaution is the best way of preventing HIV transmission in health care setting
- Post-exposure prophylaxis could help in case of occupational exposure to HIV

9. Role of Primary Care Doctors

The unique role of primary care doctors place them in an important position in providing AIDS prevention and care in the local setting. Primary care doctors are contributing in the following aspects: (1) health education to reduce HIV spread for infected/at-risk people, (2) diagnosis of STDs and HIV/AIDS, (3) contribution towards epidemiological surveillance through reporting of HIV/AIDS cases, and (4) management and care of patients with STDs or HIV/AIDS.

Early diagnosis of an HIV-infected individual is becoming more relevant nowadays, both for the good of the patients and the society. Intervention is available to reduce the risk of perinatal transmission from an infected mother to her baby. Improved antiretroviral therapy means that the patients are having a better outlook than before. It has been shown that the need for hospitalisation is reduced and the role of out-patient care becoming more important. Patients can go back to work and become integrated in the society. Needless to say, primary care doctors can, in the future, contribute more towards the prevention, care and control of HIV/AIDS as a result of these changes.

• Primary care doctors can contribute to both care and prevention of HIV/AIDS

10. Sources of Advice

Source	Way to contact	Advice
1. Advisory Council on AIDS Secretariat	Tel: 2304 6100 Fax: 2337 0897	Strategy for AIDS prevention, care and control
2. AIDS Unit, Department of Health	AIDS Hotline (Tel: 2780 2211) Special Medical Clinic (Tel: 2780 8622) Website: http://www.info.gov.hk/aids	Clinical & support service, hotline & counselling service, HIV screening,
3. Special Medical Service, Queen Elizabeth Hospital	Tel: 2958 6571	Clinical & support service
4. Virus Unit, QMH Dr. WL Lim, Consultant Enquiries	Tel: 2855 4112 Tel: 2855 4121	HIV antibody test
5. Pathology Institute, Sai Ying Pun Polyclinic Senior Medical Technologist/ Medical Technologist i/c	Tel: 2859 8280, 2857 4053	CD4/CD8 lymphocyte subset test
6. Red Ribbon Centre	2/F, Wang Tau Hom Jockey Club Clinic, 200 Junction Road East, Kowloon, Hong Kong Tel: 2304 6268 Fax: 2338 0534	AIDS resource, education and research centre

11. List of local documents on HIV/AIDS

A. List of professional guidelines and protocols established by the Advisory Council on AIDS and its committees

- 1. Virus inactivation for clotting factor concentrates Scientific Working Group on AIDS 1991
- Disease notification in the context of HIV/AIDS Scientific Working Group on AIDS 1992
- 3. Guidelines on Consent for HIV testing Scientific Working Group on AIDS 1992
- 4. Procedures for management of needlestick injury or mucosal contact with blood or body fluids: recommended guidelines for HIV and hepatitis B prevention Scientific Working Group on AIDS and Scientific Working Group on Viral Hepatitis Prevention 1992, revised in 1995 (Hepatitis C prevention included) & 1997 (with Chinese version too)
- 5. Prevention of transmission of HIV in health care settings: guidelines and practices Scientific Working Group on AIDS 1992, Scientific Committee on AIDS 1995
- Proposed revised specification for clotting factor concentrates Scientific Working Group on AIDS1993
- 7. Recommended guidelines for undertaking anonymous screening for public health surveillance of HIV infection in Hong Kong *Scientific Working Group on AIDS 1993*
- 8. HIV infection and health care workers : recommended guidelines Advisory Council on AIDS 1994
- Guidelines on management of HIV infection in children Scientific Committee on AIDS 1994, 1995
- 10. HIV antibody testing: recommended measures to generate quality results Scientific Committee on AIDS 1994
- 11. The choice of safe clotting factor concentrates for treatment of haemophilia in Hong Kong: recommended guidelines Scientific Committee on AIDS 1994
- 12. Classification system for HIV infection and surveillance case definition for AIDS in adolescents and adults in Hong Kong Scientific Committee on AIDS 1995
- 13. Consensus statement on antiretroviral therapy for HIV infection in Hong Kong Scientific ommittee on AIDS 1997

B. List of reports and information papers of the Advisory Council on AIDS

- 1. Strategies for AIDS prevention, care and control in Hong Kong July 1994
- 2. A review of services provided to people with HIV/AIDS in Hong Kong AIDS Services Development Committee July 1994
- 3. Report of the study group on HIV infection of haemophiliacs through blood products in Hong Kong (submitted to the Health & Welfare Branch) May 1993
- 4. Estimation and projection of HIV infection and AIDS cases in Hong Kong report of the AIDS Scenario & Surveillance Research Project, initiated and monitored by the *Scientific Committee on AIDS 1994*
- 5. Prevention and management of tuberculosis in HIV-infected patients: an information paper Scientific Committee on AIDS 1995
- 6. Unlinked anonymous Screening for HIV surveillance in Hong Kong 1990-1996 Scientific Committee on AIDS 1997
- 7. AIDS and the Law: the Hong Kong Experience Advisory Council on AIDS 1997

C. Manuals for doctors and nurses published by the Department of Health

- 1. Information on AIDS for doctors and dentists Medical & Health Department 1987, Department of Health 1992
- 2. Information on AIDS for nurses Medical & Health Department 1988, Department of Health 1993 [Chinese & English]
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