Prevention targeting HIV positive

(adopted from the HIV Manual 3rd Edition 2013)

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Introduction

In the past, efforts to prevent HIV infection have focused on reducing HIV infection risk among individuals with HIV negative or unknown status. With the availability of HIV testing and antiretroviral therapy, many people living with HIV know their status and are living longer and leading healthier lives. Following a recent rise in the number of new diagnoses, infection among the major at-risk populations is still clearly a cause for concern. In this connection, the US CDC has recommended a series of activities targeting HIV positive with an objective of reducing onward transmission of the virus. These activities are to: (a) perform brief screening for the risk of HIV transmission, (b) communicate prevention messages, (c) discuss sexual and drug-use behaviour, (d) provide positive reinforcement to safer behaviour, (e) facilitate partner notification, counselling and testing, and (f) identify and treat other sexually transmitted diseases. These activities provide a framework for a systematic approach to be developed to enhance prevention efforts.

In targeting HIV positive persons, effort is needed to integrate HIV prevention messages and services into HIV care and treatment settings as well as HIV testing and counselling programmes. Such "positive prevention programme" should be available to provide comprehensive care to people living with HIV/AIDS (PLWHA). In practice, a combination of approaches is recommended, including partner counselling and referral, risk reduction counselling, drug adherence counselling, screening of STI. This chapter provides an overview of the approach adopted by Department of Health at its Integrated Treatment Centre. Drug adherence is dealt with separately in Chapter 11.

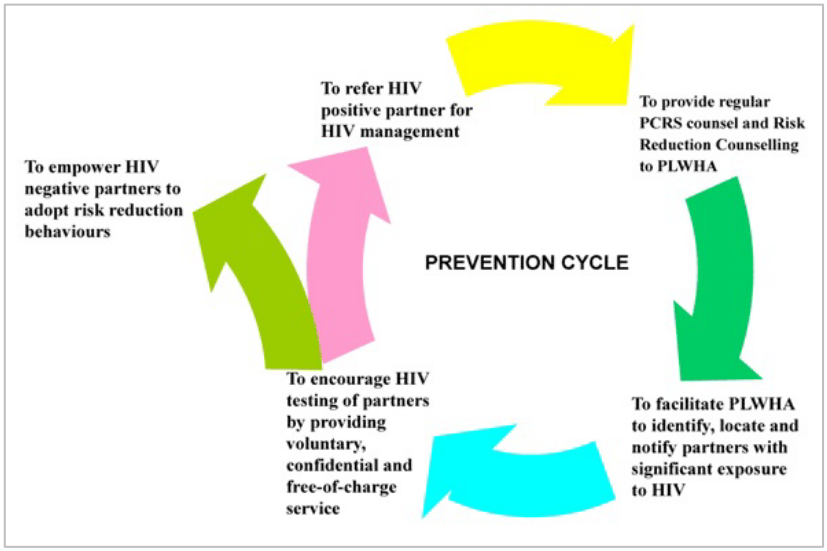
Partner counselling and referral

Partner Counselling and Referral Services (PCRS) as an HIV prevention programme involves a series of well-defined disease prevention activities.(Box 7.1) By working with HIV-infected clients, PCRS identifies, locates, and notifies partners at risk of infection.

Upon notification, partners are offered HIV counselling, testing, and specialist referrals whenever necessary. The purpose of HIV counselling is to empower a partner, regardless of HIV status, with knowledge of HIV prevention. HIV testing enables HIV-infected partners, who may have hitherto been unaware of their status, to seek expeditious medical care.

Currently, HIV status disclosure is central to debates in partner counselling because of its potential for HIV prevention on one hand, and its links to privacy and confidentiality as human-rights issues on the other. Recent studies revealed that few people kept their status completely secret, while disclosure tended to be iterative and was higher in high-income countries. Stigmatization increases the fears of disclosure and also discourages patients from seeking medical care. Making services available could facilitate HIV disclosure and are as important as individual approaches and counselling.

Box 7.1 PCRS Prevention Cycle



Based on the likelihood of infection, risk of rapid spread and the window of intervention, priorities are set in a PCRS action plan. Pregnant contact is, for example, one example of priority. A contact who engages in high risk activity such as needle-sharing is another. In the absence of such, PCRS generally begins with current or the most recent partners.

PCRS referral plan

After setting the priority, the counsellor helps the index client to work out his/her individual PCRS referral plan. To tie in with each client's unique circumstances and request, referral may be simultaneous or sequential, and may involve more than one referral method.

a. Client referral - When a client initiates the referral, it is important that he/she is able to make prompt contact with his/her partners, disclose or not disclose explicitly his/her own HIV status, and refer his/her partners to HIV counselling and testing services. The counsellor should help sum up the notification plan(s) and emphasize on the necessary precautions.

b. Dual referral - When client and provider initiate the referral together, they work on a plan to bring the partner to counselling and testing service. Partner's emotions and confidentiality is a prime concern in such circumstance.

c. Provider referral, and in some cases, contract referral - When the provider initiates the referral, written consent shall be obtained before contact of partners by the provider is pursued. In the case of contract referral, contact is made when the client has failed to refer his partners. While such requirement may apparently limit the number of partner notifications, it may actually enhance a client's trust and hence the overall success of PCRS.

Follow up and working with partners

In subsequent counselling sessions, the index client is followed up on the progress of partner notification and referral, unless in the case of provider-referral. The PCRS cycle ends at one year after its initiation. Another cycle is started whenever the index client has a new episode of at-risk contact with his partner(s). Thus, at any one time, nil or multiple PCRS cycles may be operative. When working with partners, the following are noted:

a. As part of PCRS, partners are to receive HIV counselling and undertake testing. They have the options of using any available services.

b. There is no 'standard' approach to PCRS. For each category of partners, adjustments are made in order to achieve the highest degree of success.

   - Marital spouse and regular sex partner - Sexual relationship with the index client may have been continued in spite of knowledge of the latter's positive HIV status. Besides encouraging partner to use condom correctly and consistently, an annual HIV screening is also advisable.

   - Non-regular, non-commercial sex partners - Risk reduction counselling should be tailor-made for the individual and which should be, above all, realistic. Although safer sex is the goal, the counsellor is reminded that behavioural modification does not necessarily follow knowledge. Individuals with multiple sex partners and unprotected sex should be advised to have regular HIV screening.

   - Regular or non-regular needle-sharing partners - Harm reduction is the key to success. These individuals would benefit from knowledge of safe drug use with sterile injection equipment and proper disposal of needles. Specifically they are also advised against reuse of needles, syringes, and other injection equipment. They are also offered referral to methadone treatment programme or other drug treatment services.

   - Offspring - Children born to an HIV positive mother or breast fed by a mother who seroconverted before giving birth need to be tested for HIV as they are at risk of HIV transmission. Children without risk may also be offered HIV test to allay anxiety of the index client. However, such testing is not part of PCRS.

Handling 'resistant' client

PCRS is not a straightforward process with certain clients, notably those who continue to put others at risk, despite the fact that they understand the potential consequences and have received intensive risk reduction counselling. Rarely, the client may confess to a malicious attempt of transmitting the infection to others.

Involuntary PCRS is a confrontational option of last resort, being beset with enormous implications, among which are a breakdown of communication with the client, evaporation of trust of other clients, and possibly deterring clients from seeking medical care. Besides, involuntary PCRS is feasible only if the partner's contact information is both available and reliable.

Prevention of sexual transmission

Among those who are infected with HIV, STI (sexually transmitted infection) are common, and immunosuppression may further increase STI risk. In turn, the presence of an STI increases the risk of HIV transmission. Since 2001, syphilis (all stages) has become one most important common STI among PLWHA in Hong Kong, especially among men having sex with men (MSM).[1] Many MSM preferred a supportive group intervention that addresses other coping challenges as well as sexual risk reduction.[2] The amount of time and sessions spent in counselling is important for enhancing safer sex self-efficacy and safer sexual practices among PLWHA. Moreover, motivational interviewing based prevention programmes may be needed to facilitate behaviour change.[3]

To prevent sexual transmission of HIV and STI, sexual behaviours of PLWHA are monitored on a regular, for example, yearly basis, through the following means.

a. Assessment with standardized questionnaire:
The counsellors assess patients' sexual behaviours regularly. Intensive behavioural counselling and PCRS is provided if there are reports of unprotected sex, multiple or anonymous sex partners and symptoms of STIs. They are then monitored and reassessed for sexual risks, progress of behavioural change and needs on an ongoing basis. Multiple sessions of HIV risk reduction counselling and the offering of positive reinforcement may be necessary to maintain patients' preventive behaviours. For those patients whose sexual risk is related to emotion or substance abuse, referral to supportive services such as psychological treatment, substance abuse treatment, STI treatment and appropriate social services are considered.

b. Screening for STIs:
Routine Venereal Diseases Research Laboratory carbon antigen test (VDRL) screening for syphilis is provided to new patients and then yearly. More frequent screening to detect early syphilis may be necessary for MSM. Urine screening for gonorrhea and chlamydia is performed for patients who are asymptomatic and sexually active. Yearly cervical examinations is indicated for female patients with screening and culture of endocervical swabs for gonorrhea and chlamydia. The subject of STI screening is elaborated in Chapter 28.

c. Treatment and management of symptomatic patient and patient diagnosed STIs (refers to Chapter 28).

Prevention of virus transmission through needle-sharing

For IDUs, transmission of HIV can occur through direct or indirect sharing. Direct sharing means injecting drugs with a syringe already used by another IDU. Indirect sharing happens when drug solution is contaminated during mixing or distribution. Drug use may also increase the likelihood of engaging in unsafe sexual behaviours.[2] Studies suggested that IDUs overseas may use alcohol and/or crack cocaine, which is often associated with increased frequencies of unprotected sex. Some of them may lack the awareness of treatment STI. On the other hand, drug use may affect adherence to antiretroviral therapy (ART). Some illicit drugs also interact with antiretroviral drugs. Poor adherence can lead to treatment failure, resistance to antiretroviral drugs, increase of viral load leading to ongoing HIV transmission.

Assessment

HIV positive IDU should be engaged in a personalized assessment of one's own risk behaviours. They should be helped to (a) identify trigger points that keep them from changing their risk behaviours, i.e. barriers to quit illicit drug use, (b) identify resources available to help change behaviours, and (c) formulate specific and achievable strategies to protect themselves and others.

Identification of the pros and cons of illicit drug use is particularly important. The counsellor must understand the role of illicit drug use in the context of patients' life. Given the opportunity to discuss the positive aspects of their illicit drug use, patients may express their concerns honestly instead of feeling obliged to say what they believe the counsellor would want to hear. Building a better rapport is crucial.

Intervention

Effective prevention requires more than simply passing out information. It must be tailored for each patient. Intervention targeting injection risk must address not only the sharing of syringes, but also injection equipment. Sharing of equipment presents a potential route of HIV infection. Sharing drug solutions poses also a significant, but frequently overlooked, HIV transmission risk. Targeted intervention can enable IDUs to reduce the risks associated with sharing injection equipment and drug

solutions. IDUs and their sex partners should be counselled about sexual risks for HIV and the importance of avoiding unprotected sex. PCRS activities should be offered if there is report of sharing of needles or unprotected sex. Advice on harm reduction treatment such as methadone maintenance is needed to reduce drug injection and risk of HIV spread.

Prevention of mother-to-child transmission

Perinatal transmission can occur during pregnancy (intrauterine), during labour and delivery (intrapartum), or after delivery through breast-feeding (postpartum). Breastfeeding by an infected mother increases the risk of transmission. Mother-to-child transmission (MTCT) of HIV can be prevented by addressing the prevention needs in women, identifying HIV infection before pregnancy or as early as possible during pregnancy for appropriate interventions (refer to Chapter 32).

Pre-conceptional counselling should be provided to HIV infected women, which includes family planning counselling and supports to make decisions on conception and contraception. HIV infected pregnant women should receive information about all reproductive options. Reproductive counselling should be nondirective while termination of pregnancy could be discussed as an option in a noncoercive and supportive manner. Health care providers should be aware of the complex issues that HIV infected women must consider when making decisions about their reproductive options and should be supportive of any decision made by the woman. Whatever, the woman's choice, the counsellor must understand her reproductive intentions and perspective before making any contraceptive recommendations. There should be a discussion of various methods of contraception. The client will need information on the advantages and disadvantages of each method, her responsibilities in preventing future unwanted pregnancies, and available help in initiating and following through on a programme of effective contraception. Interventions to reduce MTCT are discussed in Chapter 32.

Treatment as prevention

Treatment as prevention has emerged to become a hot area of research, discussion and application in HIV field. Early epidemiological studies and ecologic studies had confirmed the importance of plasma HIV-1 viral load in transmission and the role of highly active antiretroviral therapy (HAART) in averting HIV epidemic. More recently, HPTN 052 study, a multi-centre randomized controlled trial with over half of the study subjects recruited from Africa, reported a 96% reduction of linked HIV transmission in stable HIV serodiscordant couples who were prescribed early HAART when CD4 was 350-550/μL vs delayed therapy when CD4 fell to <250/μL.[4] Importantly, all study participants were given ongoing counselling on risk behaviours reduction, condom use, and sexually transmitted infection diagnosis and treatment. WHO has already issued guidance on treatment as prevention for serodiscordant couples, supporting the role of HAART as a public health measure to prevent HIV infection. The impact of such tool in combination with other prevention modalities for the course of HIV epidemic in each country remains to be determined.

References:

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Test paper - Prevention targeting HIV positive

Expiration Date: 09 April 2015

CME [#] ***/ CNE point: 1 / PEM point: 1*** *(Healthcare related which contributes to the enhancement of professionalism of midwives/nurses)*

- Please indicate one answer to each question.
- Answer these on the answer and make submission by fax to Special Preventive Programme, Department of Health.

 # Please contact respective authorities directly for CME/CPD accreditation if it is not on listed below.

Accreditors	CME Point
Department of Health *(for practising doctors who are not taking CME programme for specialists)*	1

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1. Why is HIV prevention targeting infected people important?
   (a). HIV infected people are living longer with the effective treatment
   (b). Prevention measures targeting uninfected people alone is inadequate to achieve optimal control of HIV epidemic
   (c). HIV testing of at-risk people can lead to earlier HIV diagnosis and ensuing interventions
   (d). None of the above
   (e). All of the above

2. Which of the following is not a recommended component of prevention targeting HIV positive?
   (a). Partner counseling and referral
   (b). Screening of sexually transmitted infections
   (c). Assessment and counseling on risk of onward transmission
   (d). Antiretroviral treatment adherence support
   (e). None of the above

3. Which of the following is not true about prevention of sexual HIV transmission for infected people?
   (a). Regular systematic assessment of sexual risk, say yearly
   (b). Single session intervention is often effective to enable a sustained preventive sex behaviours
   (c). More intensive counseling on risk reduction is necessary for people with ongoing unsafe sex
   (d). Risk, e.g. substance abuse, associated with unsafe sex should be explored
   (e). Presence of sexually transmitted infection could increase the risk of sexual transmission of HIV

4. Which of the following is not a standard screening for the presence of sexually transmitted infections?
   (a). Urine for gonorrhoea
   (b). Urine for Chlamydia
   (c). Blood for syphilis
   (d). Endocervical swab for Human papillomoavirus
   (e). None of the above

5. Which of the following is not true regarding prevention of mother-to-child transmission?
   (a). Reproductive options and wish of HIV infected female should be respected
   (b). Breast-feeding will not increase the risk of mother-to-child transmission
   (c). Pre-conceptional counselling and support on contraception and conception is important
   (d). Termination of pregnancy is one of the options of unwanted pregnancy
   (e). None of the above

6. Which of the following is not true about HIV transmission among drug users?
   (a). Transmission via direct sharing of needles is not the only means of infection via drug injection
   (b). Using the same solution to mix or distribute drug among users pose risk to cross-infection
   (c). There is the increased risk of sexual transmission if drug abuse potentiates sexual desire and unprotected sex
   (d). None of the above
   (e). All of the above

7. Which of the following is not true about interventions to reduce HIV transmission among drug users?
   (a). Methadone must be detoxification treatment as continued drug use is unacceptable for HIV prevention
   (b). Assessment of drug abuse and behavioural risk needs to be personalised
   (c). Identifying barriers and resources to support adopting protective behaviours is important
   (d). Interventions targeting drug injection has to address injection equipment and settings
   (e). None of the above

8. Which of the following is not true regarding using antiretroviral treatment to help HIV prevention?
   (a). HTPN 052 study has demonstrated an over 90% reduction in risk of HIV transmission among serodiscordant couple by early HAART couple with other measures
   (b). Modification of risk behaviours, e.g. use condom for safer sex, can be discontinued with treatment as prevention
   (c). Treatment contributes to lessening transmission by reduction of viral load
   (d). Treatment as prevention may be employed as a public health tool
   (e). None of the above

9. Which of the following is not a rationale/component of partner counseling and referral service (PCRS)?
   (a). To identify and notify partners who may be HIV infected or at risk of infection
   (b). To offer counseling and HIV testing to the traced partner
   (c). To empower partner to adopt risk reduction measures
   (d). To refer HIV positive partner for care
   (e). None of the above

10. Which of the following is not true about partner counseling and referral (PCRS) plan?
   (a). Client will make contact with his/her partners in client referral and refer for PCRS follow up
   (b). Referral by both client and care provider is one option
   (c). Contract referral means the client will do the PCRS if care provider fails within a defined period of time
   (d). All of the above
   (e). None of the above