

# News etter

Hong Kong Society for HIV Medicine  
香港愛滋病醫學會

## MESSAGE FROM PRESIDENT

Issue 6 November 2019



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E-mail: [leungws4@ha.org.hk](mailto:leungws4@ha.org.hk)

### Improving sexual health of PLWH

Re-emergence of syphilis was reported among HIV-infected individuals in the 2000s in many western countries, especially among men having sex with men (MSM). Similar situation was also found in Asia including Hong Kong. There was a high incidence of syphilis sero-conversion among patients enrolled in the TREAT Asia HIV Observational Database cohort, with higher incidence in MSM than non-MSM (7.64/100 PY vs. 2.44/100 PY,  $p < 0.001$ ).<sup>(1)</sup> In addition, an observational cohort study in the Netherlands identified significant proportion (33%) of asymptomatic syphilis in HIV-infected individuals which justified routine screening.<sup>(2)</sup>

There was also increasing incidence or outbreaks of sexually transmitted hepatitis A and C viruses. Locally, Lin et al reported increasing incidence of HCV among HIV-infected MSM non-injecting drug users in Hong Kong. <sup>(3)</sup> A literature review showed increased sexual risk behavior among a portion of HIV-infected MSM. <sup>(4)</sup> This situation has been fueled by recreational drug use and chemsex, and easily accessible internet and mobile Apps which facilitated connection to multiple sex partners.

Thus, regular sexual health check-ups are recommended for people living with HIV (PLWH). Regarding the service model, HIV service can collaborate with public and community sexual health

services. On the other hand, it is also common to see an integrated model worldwide. HIV care providers will discuss sexual history, give information about safer sex, and provide referrals to other services such as drug addiction counselling service. Sexually transmitted infection (STI) screening in PLWH will be provided, which is important to identify asymptomatic infections. Vaccination for hepatitis A and B is also an effective measure to prevent sexual transmissions and outbreaks of the viruses.

In the coming Annual Scientific Meeting of Hong Kong Society for HIV Medicine (HKSHM), a sexual health symposium will be held, which is jointly organized with Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) and the Hong Kong Society of Dermatology and Venereology (HKSDV). Very important and relevant topics such as STI testing strategies, reaching and promoting the sexual health of young people, and expanded HIV testing for early diagnosis are included. I hope you will enjoy the programme.

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transmitted hepatitis C. *J Int AIDS Soc* 2014; 17: 19663.

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*Dr MCP Lee*

*President, HKSHM*

## Action

### Paediatric HIV service in Hong Kong

**Dr. Felix Yat-Sun Yau**

#### History

In late 80's, paediatricians in Hong Kong (HK) started to encounter HIV infected children. Those were haemophilia patients who acquired HIV infection through contaminated blood products. Because of long disease latency, most of these HIV infected patients were not on antiretroviral therapy (ART), but just managed conservatively and later passed to adult HIV specialist for further care. In fact, paediatric HIV service in HK only started to develop in 90s' after the birth of the first mother-to-child-transmission (MTCT) infected baby in 1994. In the era of zidovudine monotherapy, this baby soon died of opportunistic infection. Now this tragedy is largely prevented by the introduction of universal antenatal HIV screening since 2001. The programme was further up-scaled in 2008 by providing point-of-care HIV testing during labor to all women who miss HIV screening during early pregnancy. With the success of this preventive programme, we seldom see local born HIV infected children now.

#### Paediatric HIV centres in Hong Kong

Paediatric HIV service is now centralized in 2 HA hospitals under Hospital Authority, Queen Mary Hospital (QMH) and Queen Elizabeth Hospital (QEH). Up to October 2019, there are a total 24 patients who are on put on ART and followed up in these 2 centres. They acquired the infection mainly through the MTCT route, either because they were

born outside HK, or because of the failed screening and preventive measures. Other than MTCT, there are increasing numbers of young HIV infected MSM coming for service in the past few years. The youngest one was only 14 years old.

#### Mother-to-child transmission

According to the recent CHP HIV surveillance report, the screening coverage in all HA antenatal attendance was more than 98%. Every year there are few HIV positive women being picked up by this screening programme. Some of these pregnancies were terminated, and the rest were provided with MTCT prophylaxis. This is a 3-arm treatment composed of a combination ART during the antenatal period, intrapartum intravenous zidovudine if suboptimal maternal virological control, and a 4-6 weeks course of postnatal ART.

Antenatal HIV screening is provided in all HA obstetric departments while HIV MTCT prophylactic treatment is available in all paediatric units with newborn service in HK. Since the introduction of the service in 2001, there are 6 local born children infected by MTCT route. Most of these 6 MTCT transmissions were not picked up by the screening as the maternal primary HIV infection probably occurred after the antenatal HIV blood testing. Therefore no prophylaxis was given. In order to reduce this lapse, repeated antenatal HIV screening is now offered to pregnant ladies who have high risk behavior such as drug addiction or unprotected sex during pregnancy.

#### HIV subtype and opportunistic infection in children

A review of the data from QEH, subtype B is the commonest HIV subtype. Similar to other parts of



the world, *Pneumocystis jiroveci* is the commonest opportunistic infection in among HIV infected children in HK. Because of the universal BCG vaccination in our locality, few patients presented with disseminated BCG infection. Not surprisingly, due to endemicity, there was a patient infected by *Talaromyces marneffeii* (*Penicillium marneffeii*). (Fig. 1)

**Paediatric antiretroviral therapy in Hong Kong**

One of the big challenges in the treatment of paediatric HIV infection in HK is the limitation in the choices of ART. Many antiretroviral drugs, which are using in adult patients, are not recommended in children due to lack of safety data. Moreover, a lot of palatable formulations using in other parts of the world are not available in HK because of the profit consideration by the pharmaceutical companies. Only five palatable formulation are registered and available in HK and

they are zidovudine, lamivudine, abacavir, nevirapine, and lopinavir/ritonavir.

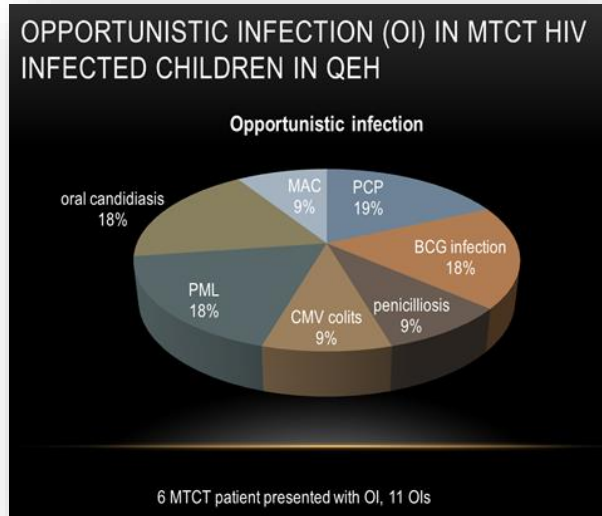


Fig 1. Opportunistic infections in MTCT HIV infected children in QEH.

**Activities of the Society**

**HIV meeting and symposium**

**Symposium on “HCV micro-elimination in HIV/HCV co-infected population” (May 2019)**



Dr. Owen Tsang

At the symposium on 27 May 2019, Dr. Owen Tsang first presented the local epidemiology and management of HIV/HCV co-infection in Hong Kong.

Dr. David Iser from Australia was then invited to share the experiences of different strategies targeting micro-elimination of HCV infection in various HIV co-infected population in his country.



Dr. David Iser



### Queen Elizabeth Hospital/ Centre for Health Protection Joint Clinical Meeting on HIV management (September 2019)

**Dr. Heather Ki-Wai To**

The joint clinical meetings are held regularly in Queen Elizabeth Hospital. In the most recent meeting held on 20 September 2019, Dr. Heather Ki-Wai To from Special Preventive Programme, Department of Health, delivered a talk on “Updates in the prevention of perinatal HIV transmission”, which was summarized below.

With the use of effective antiretroviral therapy (ART), perinatal HIV transmission is highly preventable. The risk of transmission is greatly reduced from 40-45% without any intervention, to less than 1% after timely medical therapy. Universal antenatal HIV testing programme (UATP) was launched in Hong Kong since 2001, with that all pregnant women are offered HIV testing as part of their integral care and they can decline the test via opt out basis. Since its implementation, it has been widely accepted with an excellent uptake rate. However, there were still reported cases of perinatal HIV transmission in which the mother had a

documented HIV negative testing result under UATP. The perinatal HIV transmission is suspected to be occurred at the late antepartum, intrapartum or postpartum period through breastfeeding. In view of such, the Scientific Committee of AIDS and STI has added a new recommendation on consideration of HIV retesting at the late pregnancy period for individuals with continuing risks for new HIV acquisition. The use of antepartum, intrapartum and postpartum ART has also been revised in lieu with the latest scientific evidences.

Caring for women living with HIV requires special attention in terms of the ART side effects and pregnancy concerns. Certain antiviral drugs are associated with an elevated risk of osteoporosis, which may require special attention especially in post-menopausal women. Pregnancy plans and contraceptive use should be discussed regularly. Some antiviral drugs are not safe to be used at conception and therefore should be avoided in women trying to conceive. Other drugs may interact with oral hormonal contraceptives resulting in reduced efficacy. Individualised counselling should be offered in accordance to their family planning and physical conditions.

### 3rd HKSHM Annual Scientific Meeting

**Due to the COVID-19 pandemic, the 3rd HKSHM Annual Scientific Meeting postponed to 18 April 2020 will be cancelled.**

**Please accept our apologies for any inconvenience caused**

Organizer:  香港愛滋病醫學會  
HONG KONG SOCIETY FOR HIV MEDICINE

Co-organizers:  **ashminternational**  
Supporting the HIV, Viral Hepatitis and Sexual Health Workforce

 Hong Kong College of Medical Nursing

 THE HONG KONG SOCIETY OF DERMATOLOGY & VENEREOLOGY

**3<sup>rd</sup> Hong Kong Society for HIV Medicine Annual Scientific Meeting**  
**Cancelled due to the COVID-19 pandemic**  
September 2019





## Programme Highlights

**Sexual Health Symposium**  
(co-organized by HKSHM & ASHM & HKSDV)  
(10:35 – 12:50)

- **Public STI service in Hong Kong**  
**Dr. Chi-Wing Chow**

Medical and Health Officer, Social Hygiene Service, Department of Health, HKSAR

- **STI testing strategies and management**  
**Dr. Janet Knox**

Specialist, Sexual and Reproductive health (SRH) and HIV Management, Australia

- **Reaching and promoting the sexual health of young people**  
**Dr. Heather McNamee**

Director of Sexual Health, Cairns Doctors, Australia

- **Expanded HIV testing for...**  
**Dr. ...**

Deputy Director, Monash Infectious Disease, Australia

**Cancelled due to the COVID-19 pandemic**

- **Management**  
(sponsored by GSK)

**Christine Katlama**  
Prof. of Infectious Disease  
at the HIV Clinical Research Unit, Dept. of Infectious Disease  
Hôpital Pitié-Salpêtrière, France

- **Updates on co-morbidities management in PLWH**  
(sponsored by Gilead Sciences)

**Prof. Andrew Carr**  
Head, Clinical Research Program, Centre for Applied Medical Research  
Prof. of Medicine, University of New South Wales, Australia

- **Management of TB-HIV co-infections**  
**Dr. Chi-Kuen Chan**

Consultant Chest Physician i/c, Tuberculosis and Chest Service, Public Health Services Branch,  
Centre for Health Protection, Dept. of Health H.K.

- **Travel health in PLWH**  
**Dr. Bonnie Chun-Kwan Wong**  
Specialist in Infectious Disease

### 3rd HKSHM ASM cum sexual health symposium – tentative programme

#### Other upcoming HIV conferences ...

- **Conference on Retroviruses and Opportunistic Infections (CROI) 2020**, 8-11 March 2020 | Boston, USA
- **Asia Pacific AIDS & Co-infections Conference (APACC) 2020**, 4-6 June 2020 | Bangkok, Thailand
- **23rd International AIDS Conference (AIDS 2020)**, 6-10 July 2020 | San Francisco & Oakland, USA
- **HIV Drug Therapy Glasgow 2020**, 4-7 October 2020 | Glasgow, UK

## Alliance

### Stage Specific Occupational Therapy for PLWH **Janice Lui, Occupational Therapist**

Occupational therapists have involved in the care for people living with HIV (PLWH) for long time in the history of HIV management. It is reported that occupational therapy plays a crucial role in assisting PLWH to re-engage in life. Stanton et al. (1994) emphasized the need to address the ability of PLWH to participate in activities of daily living, and stated that “interventions to support independence may be as important as drug therapy in maintaining quality of life”.



The role of occupational therapist is to assess and focus on how the disease impacts on the performance in self care, productivity and leisure. The literature has generally focused on interventions related to use assistive devices, home modification, activities to maintain physical status, prevention of deformity, work simplification and energy conservation, time management, relaxation, stress management and education (Denton, 1987; Pizzi, 1989; Cusack et al, 1990; Barwood et al, 1993; Cusack and Singh, 1994). Treatment approach of occupational therapy changes in recent decade for PLWH. Traditionally, occupational therapist treated patients according to medical model, with the goal to reduce the impairment from the disease. Recently, the role of occupational therapist becomes multifaceted and focuses more on patient empowerment and enabling individuals to achieve occupational competence (Polatajko, 1994). Besides, the service is no longer confined in the hospital setting and the training will not be discontinued simply because the patients are discharged home. The service boundaries are now expanded to include all the environments in which people function (Matthew, 1997).

Stage Specific Occupational Therapy for PLWH (Fig.2). It is believed that every patient will go through five stages to resume highest possible level of life functioning. Appropriate assessment and intervention are provided in order to facilitate the improvement in general wellbeing and to achieve successful occupations and meaningful life after disease (Table 1). With close collaboration with specialized clinical team of HIV clinic, the care model can align with the referral system by the doctors and provide timely referral and comprehensive spectrum of care for occupational therapy. Occupational therapist will provide stage specific intervention in order to facilitate advancement of recovery stages in the shortest time. Occupational therapist starts the interventions during inpatient stage, assist the patients to optimize their physical performance, self care ability and prepare home settlement for the patients. In the outpatient phase, needs assessment will be provided so that therapist can identify which stage they are and plan for appropriate intervention to achieve the next higher stage. Functional training and cognitive training are provided for the residual physical deficits. Vocational rehabilitation and counseling on work plan exploration are given to patients to enhance their opportunities to resume work in the community.

In mid 2014, occupational therapists in Queen Elizabeth Hospital adopted a conceptual model –



Fig. 2. 5-Stage Conceptual Model

Stages	Objectives / Interventions
1. In patient stage	Self care ability optimization, facilitate independent living
2. Home resettlement stage	Pre-discharge preparation, home safety education, instrumental ADL training to facilitate safe discharge
3. Physical rehabilitation and community resettlement stage	Functional training and community living skills training, lifestyle modification
4. Leisure and social life resumption stage	Life coaching and occupational lifestyle redesign program, increase engagement in social and leisure life



5. Work life resumption stage	Work plan exploration, work hardening program and work resettlement
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Table 1. Occupational Therapy for each specific stage

Occupational Lifestyle Redesign (OLSR) is another essential program designed to prepare the patients to resume their life role through therapist coaching. Despite recovery in general condition after treatment and disease monitoring, the disease may still have significant impact on the patient’s quality of life such that they will experience a variety of occupational performance problems which can affect their life and role functioning. Individual and group coaching facilitates patient to strengthen their willpower in accepting and adapting to their functional limitations in order to make personal change.

In mid 2017, a study on the feasibility of providing stage specific occupational therapy for newly diagnosed HIV patients was conducted in Queen Elizabeth Hospital for one year. The result is now under statistical analysis and will be available in the near future. According to the clinical team and patients, the overall feedback is positive. This care model allows our care team to have early detection of the problems our patients encountered so that they can receive suitable intervention timely. Most of the patients can resume their life roles and enjoy a meaningful life afterwards.



**References:**

- Polatajko HJ. Dreams, dilemmas, and decisions for occupational therapy practice in a new millennium: a Canadian perspective. American Journal of Occupational Therapy. 1994; 48 (7), 590-594.
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# Academic corner

**Highlights from IAS 2019**

**Dr. Man-Chun CHAN**



**IAS 2019**

10TH IAS CONFERENCE ON HIV SCIENCE  
Mexico City, Mexico 21-24 July 2019

The 10th International AIDS Society Conference (IAS) was held in Mexico City on 21 to 24 July 2019. This biennial conference presented the latest advances in basic, clinical and operational research on HIV Medicine. The conference was started by an official opening from the Honourable Minister Jorge Alocer Varela, Secretary of Health for Mexico. Here are some highlights from the conference.



- **New enhanced HIV prevention options**

Currently, the only available modality for HIV prevention is daily or on-demand use of oral TDF/3TC. New modes of delivery or dosing strategies will facilitate HIV prevention policy in different countries. The ImPREP study assessed the same day PreP with TDF/FTC in homosexual men and transgender women in Latin America. The study reported high early continuation (79.6%) and adherence rates (97.2%). The use of Tenofovir alafenamide (TAF)/3TC versus TDF/3TC for PreP was also presented. The DISCOVER trial is a phase III randomized control trial assessing the HIV incidence, adherence and STI incidence among the two groups. The adherence was comparable between arms with a median of 95%. The steady state tenofovir diphosphate (TFV) levels were 6.3-fold higher with TAF/3TC groups. The STI incidence was also comparable between the two arms.

- **Dolutegravir consideration in woman**

In 2018, there was alert on association of dolutegravir (DTG) with neural tube defects (NTD) from the Tsepamo study in Botswana. The prevalence of NTD was reported as 0.94% who conceived while taking DTG. At the IAS conference, updated analysis revealed the prevalence of 0.30%, with 1 NTD among additional 1257 women exposed. This prevalence remained higher than the 0.10% incidence of NTD observed in women receiving non-DTG ART regimen during conception. However, with the benefits of better viral suppression, less maternal deaths and mother-to-child transmission, WHO updated the guideline and reconfirmed the use of DTG-based ART as preferred first-line and second-line therapy. Women at childbearing ages should be counselled on the benefits and risks of taking DTG-based ART regimen.

- **Long-acting (LA) injectable ART**

During IAS conference, ATLAS and FLAIR pooled analysis was presented. Both studies compared intramuscular injection of LA cabotegravir (CAB) plus rilpivirine (RPV) every 4 weeks with daily oral 3-drug ART. The pooled analysis revealed that less than 2% of patients experiencing virological failure with either treatment arm. This supported the non-inferior efficacy of monthly injectables. For patient acceptance issue, the ATLAS trial also revealed good treatment satisfaction. 97% of survey respondents preferred the LA injectable over daily oral pills.

- **Heavily treatment-experienced adults with multi-drug resistant HIV**

The week 96 data of BRIGHT study was released. This is a double-blinded phase III trial assessing Fostemsavir use in treatment experienced patients. Fostemsavir is a first-in-class attachment inhibitor that blocks viral entry into CD4+ T-cells via HIV gp120 binding and stabilization. This analysis of the ongoing trial revealed that virologic suppression rates and CD4+ cell counts continued to improve in heavily treatment-experienced patients receiving fostemsavir add-on therapy. The virologic suppression rate at week 96 was 60% in randomized cohort and 37% in nonrandomized cohort. It was concluded that fostemsavir is worth further developed for this particular group of patients.

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## **A**pplication for membership of HKSHM

Membership registration form can be downloaded from the HKSHM website : <http://hivmed.hk/membership.php>. Please visit our website for more information.

