Review of epidemiology for Ethnic Minorities (EM) in Hong Kong

**Definition**

1. In this article, ethnic minorities (EM) refers to the non-Chinese non-White population. Our discussion mainly focus on the non-Chinese Asians and Africans.

**Population Structure**

2. Based on 2011 Population Census\(^1\), out of over seven million resident population in Hong Kong, around 395,000 (5.6%) belonged to the non-Chinese and non-White population. Most were non-Chinese Asians, including Indonesian (1.9%) and Filipino (1.9%), followed by Indian, Pakistani, Nepalese, Japanese, Thai, and other Asians (Figure 1).

![Figure 1. Population by ethnicity, 2001, 2006, 2011.](image)

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3. The majority of ethnic minorities were female aged 20-49 years, largely attributable to the foreign domestic helpers (Figure 2)².

**Figure 2. Age distribution of ethnic minorities in Hong Kong (2011)**

**HIV Epidemiology**

**Newly reported HIV infection cases**

4. New HIV cases were reported to the Department of Health through the HIV/AIDS reporting system. The number attributed to the non-Chinese Asians and Africans has remained stable over the last decade (Figure 3).

**Figure 3. New case reporting of HIV infection 2005-2014**

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5. From 2011-2014, non-Chinese Asians constituted 11% of the total new HIV infection cases, while Caucasians 6% and Africans 3%. Similar trend is seen in newly reported AIDS cases (Figure 4A & B). These figures are disproportionally higher than the 5.6% of EM among HK population.

Figure 4A & B. Distribution of ethnicity for HIV and AIDS cases, 2011-2014

6. The majority of non-Chinese Asian were Indonesian (20%), followed by Filipino (15%), Thai (14%), Nepalese (10%) and Vietnamese (9%) (Figure 5).

Figure 5. Distribution of ethnicities among Asian HIV cases, 2011-2014
**Age and gender distribution**

7. Non-Chinese Asians and Africans HIV cases had similar age distribution, i.e. mainly in the range of 20-49 years.

8. The male-to-female ratio for non-Chinese Asians was around 1:1 (similarly affected) while that for Africans was 1:2 (more female) (Figure 6A & B).

**Figure 6A & B. Age and gender distribution of non-Chinese Asian and African HIV infection cases**

![Age & Gender Distribution of Asian and African HIV Cases](image)

**Route of transmission**

9. For non-Chinese Asians, around 40% were infected through heterosexual contact, followed by homosexual or bisexual contact (~25%) which has been increasing over the past few years. Injecting drug use only accounted for around 5%. Africans were mostly infected through heterosexual contact (Figure 7).

10. Among the five most commonly reported non-Chinese Asian HIV infection cases, heterosexual contact was the most important route of transmission, while injecting drug use was more commonly seen in Vietnamese and Nepalese (Figure 7).

**Figure 7. Route of transmission of non-Chinese Asian and African**

![Exposure Category of HIV Cases in EM 2011-2014](image)
Suspected location of HIV infection

11. From 2011 to 2014, over 40% of non-Chinese Asians cases acquired HIV infection in HK. Most Africans and Vietnamese cases, however, acquired the infection in “other” places, probably their home countries (Figure 8).

Figure 8. Suspected location of HIV infection among ethnic minorities, 2011-2014

Source of referral of HIV infection

12. Public healthcare services such as those under the Hospital Authority remained the most important source of referral of HIV cases, followed by private hospitals or clinics, Special Preventive Programme (SPP) of DH, Social Hygiene Clinics (SHC) of DH, NGO, drug rehabilitation services (DRS) and Hong Kong Red Cross (HKRC) (Figure 9).

Figure 9. Source of referral of HIV cases among EM, 2011-2014

Sero-surveillance and Behavioural surveillance

13. In the past few years, very few researches have been conducted targeting EM. The following were results involving EM extracted from other HIV sero-surveillance and behavioural surveillance.
Surveillance on Female sex workers (Table 1)

- *Condom use rate*: satisfactory and stable at over 96% (CRiSP 2006, 2009 and HARiS 2013, 2014);
- *HIV testing rate*: gradually increased over the years.
- *HIV prevalence*: varied greatly. e.g. from 4.7% to 0% in Thai FSW. Probably due to the high mobility in this population and different sampling method across studies.

Surveillance on Injecting drug users (Table 2)

- *Condom use rates*: slightly improved among Nepalese IDU.
- *Drug injecting behaviours*: 26 out of 28 Vietnamese IDU had injected drugs in the past one month; 17 (65.4%) had shared needles with others.

Surveillance on Men who have sex with men (MSM)

- *Surveys on MSM such as PRiSM and HARiS had only included a few EM, i.e. less than 30. Sub-group analysis is impossible.*
Table 1. Behavioural indicators and HIV prevalence in Asian FSW.

<table>
<thead>
<tr>
<th></th>
<th>Sample size</th>
<th>Condom use in last sex (%)</th>
<th>HIV test in last 1 year (%)</th>
<th>HIV prevalence (%)</th>
</tr>
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<tbody>
<tr>
<td><strong>CRiSP 2006</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Overall</td>
<td>996</td>
<td>92.8</td>
<td>44.9</td>
<td>0.19</td>
</tr>
<tr>
<td>Asian</td>
<td>205</td>
<td>96.6</td>
<td>51.2</td>
<td>-</td>
</tr>
<tr>
<td>Filipino</td>
<td>96</td>
<td>99.0</td>
<td>41.7</td>
<td>0.00</td>
</tr>
<tr>
<td>Thai</td>
<td>106</td>
<td>94.3</td>
<td>59.4</td>
<td>4.72</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>3</td>
<td>100.0</td>
<td>66.7</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>CRiSP 2009</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Overall</td>
<td>986</td>
<td>97.6</td>
<td>52.8</td>
<td>0.05</td>
</tr>
<tr>
<td>Asian</td>
<td>177</td>
<td>96.5</td>
<td>52.5</td>
<td>-</td>
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<tr>
<td>Filipino</td>
<td>89</td>
<td>94.6</td>
<td>41.6</td>
<td>1.12</td>
</tr>
<tr>
<td>Thai</td>
<td>80</td>
<td>98.3</td>
<td>65.0</td>
<td>1.25</td>
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<tr>
<td>Vietnamese</td>
<td>6</td>
<td>100.0</td>
<td>50.0</td>
<td>0.00</td>
</tr>
<tr>
<td>Indonesian</td>
<td>2</td>
<td>100.0</td>
<td>50.0</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>HARiS 2013</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>616</td>
<td>98.5</td>
<td>99.3</td>
<td>61.7</td>
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<tr>
<td>Asian</td>
<td>62</td>
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<td>54.8</td>
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<tr>
<td>Filipino</td>
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<td>55.3</td>
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<td>Thai</td>
<td>23</td>
<td>91.3</td>
<td>95.7</td>
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<tr>
<td>Vietnamese</td>
<td>1</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>HARiS 2014</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>407</td>
<td>93.6</td>
<td>98.1</td>
<td>74.7</td>
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<tr>
<td>Asian</td>
<td>41</td>
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<td>Filipino</td>
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<td>Thai</td>
<td>17</td>
<td>84.6</td>
<td>100.0</td>
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</table>
Table 2. Behavioural indicators and HIV prevalence in Asian IDU.

<table>
<thead>
<tr>
<th>Survey</th>
<th>Sample size</th>
<th>Condom use in last sex (%)</th>
<th>HIV test in last 1 year (%)</th>
<th>Needle sharing in last month (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Regular</td>
<td>Casual</td>
<td>Commercial</td>
</tr>
<tr>
<td>NDUS 2011</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDUS 2013</td>
<td>90</td>
<td>52.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HARIS 2013</td>
<td>22</td>
<td>36.4</td>
<td>85.7</td>
<td></td>
</tr>
<tr>
<td>Nepalese</td>
<td>112</td>
<td>66.0</td>
<td>86.7</td>
<td></td>
</tr>
<tr>
<td>Vietnamese</td>
<td>28</td>
<td>65.2</td>
<td>92.9</td>
<td></td>
</tr>
</tbody>
</table>

Note: in the 2011 Survey, type of sex partner was not specified.

- Nepalese Drug Users Survey (NDUS) 2011, 2013 recruited Nepalese participants from the vicinity of methadone clinics;
- HARIS 2013 recruited Nepalese IDU participants who were ex-prisoners and newly discharged;
- In 2014, the NDUS was incorporated into HARiS. IDU of other ethnicities are recruited from different settings (eg. MC, ex-prisoners, on the streets).

**Sexually transmitted infection (STI) surveillance**

- In 2011-2014, the overall STI pattern among EM was similar to that of all attendees in SHC (Figure 10A).
- The 3 commonest STIs were (Figure 10B):
  - Male: (1) non-gonococcal urethritis; (2) gonorrhoea; and (3) genital warts.
  - Female: (1) non-specific genital infection; (2) genital warts; and (3) trichomonas & others.

*“Trichomonas & others” included trichomonas, pubic lice and HIV; the majority being trichomonas.*
Current response in HIV treatment, care and support for Ethnic Minorities (EM)

In this article, ethnic minorities (EM) refer to the non-Chinese non-White population, which are mainly non-Chinese Asians and Africans. Compared to the general Chinese population, EM may experience more difficulties to access HIV-related services due to language or cultural barriers. The current response of HIV control and prevention for EM mainly targets the at-risk population of injecting drug users (IDU), although some prevention efforts are also directed to the general EM communities, male sex workers (MSW), female sex workers (FSW) and foreign domestic helpers. The current response is summarised in the box below.

**Box 1. Summary of current response in HIV prevention among EM**

1. Condom distribution
2. HIV voluntary counseling and testing (VCT) service
3. Methadone treatment programme and Universal HIV antibody urine testing (MUT) programme
4. Health education through hotlines, pamphlets and DVDs in different languages
5. Health promotion activities and community partnership
6. Targeted programmes for IDU, MSW and FSW by NGOs
7. Capacity building for NGO workers
8. Treatment of sexually transmitted infections (STIs) and HIV infection

**1. Condom distribution**

*Through various NGOs to:*

- Asylum seekers (mainly Africans) - large-size condoms have been specially produced. Over 15,000 condoms have been distributed from 2010 to June 2015.

- Domestic helpers during Hong Kong Expo and AIDS Festival - in 2011, 1,100 condoms were distributed, but not generally welcomed by the target group.

*Through DH at public clinics: e.g. Social Hygiene Clinics, Methadone Clinics and HIV Clinics.*
2. **HIV voluntary counseling and testing (VCT) service**

*By DH:*

- The AIDS Counselling and Testing Service (ACTS) offers free and anonymous VCT service to EM with language assistance upon request (Figure 1).
- 2011–2014: 2.5% and 0.6% of ACTS users were non-Chinese Asians and Africans respectively.

*By NGOs:*

- Through centre-based or outreach VCT to target groups such as Filipino and Thai FSW, Thai MSW, African asylum seeker and Nepalese IDU.

*Figure 1. DH ACTS attendance by ethnic minorities*

3. **Methadone treatment programme (MTP) and Universal HIV antibody urine testing (MUT) programme**

- MTP offers holistic services to opiate abusers, such as methadone maintenance or detoxification therapy, counselling and social support services, referral to other drug treatment service agencies, HIV tests and free condoms.
- Universal HIV antibody urine testing (MUT) programme conducted in all Methadone Clinics (MC) offers free annual HIV test to every MC attendee.
- In 2011-2014, EM constituted 9.1% of all attendees at MCs, with Nepalese (53%) and Vietnamese (18%) accounted most (Figure 2A).
• The testing rate of Chinese was around 70%, and that of EM ranged around 50-70%.

• Among the testers in 2013, 6,262 (91%) were Chinese and 606 (8.7%) were Asians. However, there were two Asians (0.33%) with HIV infection while only five in Chinese (0.08%).

• Further information showed that EM represented 29% of HIV infection cases identified through the MUT programme in 2004-2013 (Figure 2B), showing that HIV infection is disproportionately high among EM.

4. **Health education through hotlines, pamphlets and DVDs in different languages**

**DH:**

• 24-hour hotlines with pre-recorded information, pamphlets, and DVDs “Knowing AIDS” in different languages (eg. Tagalog, Thai, Vietnamese, Hindi, Indonesian, Nepali, Urdu, Bengali, French) (Figure 3).

• Distribute materials and souvenirs to domestic workers at their gathering places on Sundays, clinics, border control points, and through NGOs.
5. **Health promotion activities and community partnership**

*Mainly by NGOs:*

- annual community carnival from 2004-2013; attended by thousands of participants of different ethnicity.
- a reproductive health programme for Asian migrant workers and sex education workshops for young South Asians.

6. **Targeted programmes for IDU, MSW and FSW by NGOs**

- For specific sub-groups such as Nepalese IDU, Thai MSW, FSW, domestics helpers and asylum seekers.
- Conducted though outreach, support groups, educational groups, community education, peer education and counsellor training, hotline and VCT.

7. **Capacity building for NGO workers**

*By DH:*

- Annual training workshops for NGO workers since 2010 (total 8 courses, 350 attendances).
- Covers HIV and STI knowledge, related DH services, special considerations for selected populations including ethnic minorities.
- Speakers include doctors and NGO representatives.
8. Treatment of sexually transmitted infections (STIs) and HIV infection

- The Social Hygiene Service (SHS) of DH:
  - provides free medical consultation and treatment of STIs for eligible persons.
  - Attendance in 2011-2014: non-Chinese Asians (4.8%) and Africans (0.5%) (Figure 4).

![Figure 4. Social Hygiene Clinic Attendance by Sex](image)

- Three public HIV specialist clinics:
  1. Department of Health - Integrated Treatment Centre (ITC);
  2. Hospital Authority - Queen Elizabeth Hospital; and
  3. Hospital Authority - Princess Margaret Hospital.
  - Highly subsidised HIV management is provided to eligible patients (HK ID Card holder and children < 11 years who are HK residents);
  - Consultation fee: HK$100 at first attendance, HK$60 at subsequent attendance; and prescription fee of $10 per item for 16 weeks; and
  - From 2011-2014, among all new patients in DH HIV clinic, 10.3% were non-Chinese Asians 10.3% (mainly Indonesian, Filipino, Thai, Vietnamese and Nepalese) and 3.2% were Africans.
Figure 5. New attendance by ethnic minorities in ITC, DH

In 2011-2014, ATF has funded over $7.6M to a range of programmes solely or partially targeted at various EM groups (Table 1) attributing to about 6% of the total funding.
### Table 1. ATF funded programmes targeted at EM in 2011–2014.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Target group</th>
<th>Content / Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phoenix Project (2012)</td>
<td>IDU</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>鳳凰計劃</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project PEER – Prevention Education through Ethnicity Rapport (2011, 2014)</td>
<td>Nepalese and other EM IDU EM FSW and their clients</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Advocating for All Vulnerable MSM Sub-Communities Fighting HIV (2014)</td>
<td>MSM</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Male Sex Workers’ community outreaching, VCT programme and empowerment (2012)</td>
<td>Thai male sex workers</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Identifying sexual health behaviours and HIV risk amongst African refugees and asylum seekers in Hong Kong (2012)</td>
<td>African refugees and asylum seekers</td>
<td>✓</td>
</tr>
<tr>
<td>識別在港非洲難民和尋求庇護者的性健康行為和人類免疫缺陷病毒 (HIV) 風險</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To fight against HIV among non-Chinese Asians (2014)</td>
<td>General EM</td>
<td>✓</td>
</tr>
</tbody>
</table>

* “Empower” refers to activities such as peer educator training.*