

Health Research Symposium 2007: Building bridges between research, practice & policy

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Abstract Title

Late Diagnosis of Human Immunodeficiency Virus (HIV) Infections in the HAART Era - Who are They?

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Abstract (not more than 1 page with font Time New Roman size 12)

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Background: Highly-active anti-retroviral therapy (HAART) became available in Hong Kong since 1997, leading to a universal decline in morbidity and mortality of HIV-infected persons. Most of the AIDS cases we encountered nowadays are patients being diagnosed to have HIV infection at a late stage and hence missed opportunities for earlier care. We conducted a retrospective study to determine the epidemiological characteristics of patients with delayed diagnosis.

Methods: We analysed data from the Voluntary HIV Reporting System of the Department of Health (DH) from 1997-2006. Reported cases with HIV diagnosis ≤ 3 months preceding AIDS diagnosis (late-testers) were compared with HIV cases without known progression to AIDS (controls). Perinatal infections and cases subsequently progressed to AIDS after 3 months of HIV diagnosis were excluded. We performed logistic regression to identify factors associated with delayed HIV diagnosis.

Results: As of 30 April 2007, 593 of 2422 HIV infections newly reported during 1997-2006 were known to have progressed to AIDS. 540 out of the 2422 HIV reports (22.3%) developed AIDS within 3 months of their HIV diagnosis, representing an annual average of 54 late-presenting HIV infections (range=45-61). 537 late-testers and 1818 controls were included in the analyses. The late-testers were relatively older with a median age of 39 years (range=19-81) as compared with 34 years (range=10-82) for controls. A larger proportion was male (82% versus 77%, $p = 0.0094$). The median CD4 lymphocyte count at HIV diagnosis was 33/uL (range=1-487) for late-testers versus 303/uL (range=1-1683) for controls. Late-testers were more likely to have confirmatory test done in hospital laboratories (31% versus 14%, odds ratio (OR)=2.73) rather than DH's laboratory which receives specimens from both out-patient and in-patient settings. In logistic regression analyses, factors associated with late testing for HIV infection were: male (OR=1.63, 95% confidence interval (CI)=1.24-2.14); age >40 years (OR=1.58, 95% CI=1.27-1.96); Chinese (OR=1.46, 95% CI=1.14-1.86) and HIV acquisition through heterosexual contact (OR=2.97, 95% CI=2.30-3.83).

Conclusions: About one-fifth of reported HIV cases were late-testers. Targeted efforts to promote heightened awareness on HIV/AIDS and HIV testing will benefit both the infected persons and the society. For earlier HIV diagnosis, clinicians play a key role to routinely offer HIV test for clients at risk, particularly in out-patient settings.

Key words: HIV Infections, Acquired Immunodeficiency Syndrome, Diagnosis