

REFERENCES

- Aderaye, G., Bruchfeld, J., Assefa, G., Feleke, D., Kallenius, G., et al. (2004). The relationship between disease pattern and disease burden by chest radiography, M.tuberculosis Load, and HIV status in patents with pulmonary tuberculosis in Addis Ababa. Infection. 32, 6, 333-8.
- An Giang TB program. An Giang report on TB. (2004), unpublished report.
- An Giang HIV program. An Giang report on HIV. (2005), unpublished report.
- An Giang's people committee. An Giang statistic data. (2004). An Giang: An Giang publish house.
- Angela Naomi Atomiya, David Emerso Ulip and Olavo Henreque Munhoz Leite. (2002). Evaluation off disease patterns, treatment and prognosis of tuberculosis in AIDS patients. Braz J Infect Dis. 6, 1, 29-39.
- Anunnatsiri, S., Chetchotisakd, P., Wanke, C. (2005). Factors associated with treatment outcomes in pulmonary tuberculosis in northeastern Thailand. Southeast Asian J Trop Med Public Health. 36, 2, 324-30.
- Connolly, C., Daies, GR. and Wilkinson, D. (1998). Impact of the human immunodeficiency virus epidemic on mortality among adults with tuberculosis in rural South Africa, 1991-1995. Int J Tuberc Lung Dis. 2, 11, 919-25.
- Dean, GL., Edwards, et al. (2002). Treatment of tuberculosis in HIV infected persons in the era of highly active antiretroviral therapy (HAART). AIDS. 16, 1, 75-83.

- Diez Ruiz-Navarro, M., Hernan'andez Espinosa, J.A. et al. (2005). Effects of HIV status and other factors on outcome of tuberculosis treatment in Spain. Arch Broncomeumol. 41, 7, 363-70.
- Day, John H., Grant, Alison D. et al. (2004). Does Tuberculosis increases HIV load? The Journal of Infectious Diseases . 190,9, 1677-84
- Girardi, E., Palmierzi, F. et al. (2001). Changing clinical presentation and survival in HIV-associated tuberculosis after highly active antiretroviral therapy. J Acquir Immune Defic Syndr. 26, 4, 326-31.
- Huong, N.T. et al. (2005). Establishment and development of the National Tuberculosis Control Programme in Vietnam. INT J Tuberc Lung Dis. 9, 2, 151-156.
- Louie, JK., Chi, NH. et al. (2004). Opportunistic infections in hospitalized HIV-infected adults in Ho Chi Minh City, Vietnam: a cross-sectional study. International of STD & AIDS. 15,11, 758-761.
- Juffermans, NP., Speelman, P., Verbon, A., Veenstra, J., Jie, C. (2001). Patients with active Tuberculosis have increased expression of HIV coreceptors CXCR4 and CCR5 on CD+T cells. Clinical Infectious diseases. 32, 4, 650-2.
- KNCV (2004). 30th MCNV/KNCV Vietnam NTP program support visit. Paper presented at joined meeting in Hanoi, May 10-22, 2004
- Lawn, SD. and Acheampong, JW. (1999). Pulmonary tuberculosis in adults: factors associated with moratlity at Ganaian Teaching hospital. West Afr J Med. 18, 4, 270-4.

- Le, HD., Trinh, TT. et al (2001). Clinical manifestations of HIV-infected patients in the Northern provinces, Vietnam, 2000-2001. Paper presented at International Conference of AIDS in Asia Pacific (ICAAP), October 2001.
- Ministry of Health guidelines on HIV testing strategy. (2004). Hanoi: Medicine Publish House.
- Mohamad, Z., Naing, NN. (2004). Characteristics of HIV-infected tuberculosis patients in Kota Bharu Hospital, Kelantan from 1998 to 2001. Southeast Asia J. Trop. Med Public Health. 35, 1, 140-3.
- Mwaungulu, FB., Floyd S et al. (2004). Cotrimoxazole prophylaxis reduces mortality in human immunodeficiency virus-positive tuberculosis patients in Karonga District, Malawi. Bull World Health Organ 2004 May. 82, 5, 354-63.
- National TB program. National report on TB. (2005). Unpublished report.
- Quy, H.T., Buu, T.N., Lan N.T., Cobelens, F.G., Borgdorff, M.W., Lambregts, K.S. (2006). Treatment outcomes by drug resistance and HIV status among smear-positive tuberculosis patients in Ho Chi Minh city, Vietnam, 1998-2000. INT J Tuberc Lung Dis. 10, 2, 160-166.
- Romo-Garcia, J., Del Rio-Chiriboga, C., Blumberg, H., Leonard, M. (2004). Risk factor for death in HIV patients with extrapulmonary tuberculosis. Paper presented at World AIDS Conference, Bangkok, Thailand, 11-16 July 2004.
- Rustomje, R., Levin, J.B, Onyebujoh, P.C., Sangweni, P., Gray, C.M. The effect of HIV/TB co-infection on TB treatment outcome. Paper presented at World AIDS Conference, Bangkok, Thailand, 7/2004.
- The World Factbook. (2006). Retrieved August 20 from <https://www.cia.gov/cia/publications/factbook/geos/vm.html>

- Trinh, TT., O'reilly, M., Siriayaporn, P. et al. (2006). Situational Analysis on HIV/TB co-infection in Vietnam. Paper presented at Training Programs in Epidemiology and Public Health Intervention network, INC (TEPHINET) Scientific Conference, Chengnai, India, January 2006.
- United Nation AIDS [UNAIDS]. (2004). Report on global AIDS Epidemiology 2004. Geneva: UNAIDS
- United Nation AIDS [UNAIDS]. (2002). Report on global AIDS Epidemiology 2002. Geneva: UNAIDS
- United Nation AIDS [UNAIDS]. (2000). Report on global AIDS Epidemiology 2000. Geneva: UNAIDS
- United Nation AIDS [UNAIDS]. (1998). Report on global AIDS Epidemiology 1998. Geneva: UNAIDS
- Viet Nam at a Glance. Retrieved information including date of across, from <http://www.undp.org.vn/undplive/content/UNDP/AboutVietnam>
- Vietnam National TB Program. (2003). Actual tuberculosis situation and control activities in Vietnam. Paper present at Join Evaluation of the National Tuberculosis control program for the period 1997-2002, Hanoi August 11-22, 2003.
- Vietnam Ministry of Health. (1994-2004). Sentinel Surveillance Data, 1994-2004. Unpublished report.
- Zhang, Y., Nakata, K., Weiden, M., Rom, WN. (1995). Mycobacterium tuberculosis enhances human immunodeficiency virus-1 replication by transcriptional activation at the long terminal repeat. J Clin. Invest. 95, 5, 2324-2331.

- World Health Organization [WHO]. (2006). WHO report 2006: Global Tuberculosis Control: surveillance, planning, financing. Geneva: WHO
- World Health Organization [WHO]. (2005). WHO report 2005: Global Tuberculosis Control: surveillance, planning, financing. Geneva: WHO
- World Health Organization [WHO]. (2004). Tuberculosis and HIV, a framework to address TB/HIV co-infection in Western Pacific Region. Manila: WHO
- World Health Organization [WHO]. (2004). WHO report 2004: Global Tuberculosis Control: surveillance, planning, financing. Geneva: WHO
- World Health Organization [WHO]. (2003). WHO report 2003: Global Tuberculosis Control: surveillance, planning, financing. Geneva: WHO
- World Health Organization [WHO]. (2002). WHO report 2002: Global Tuberculosis Control: surveillance, planning, financing. Geneva: WHO
- Witor, SZ. et al. (1999). Efficacy of trimethoprim-sulphamethoxazole (co-trimoxazole) prophylaxis to decrease morbidity and mortality in HIV-infected patients with tuberculosis in Abidja, Cote d'Ivoire: a randomize controlled trail. The Lancet. 353,9163,1469-75.
- Wobeser, W., Yuan, L., Naus, M. (1999). Outcome of pulmonary tuberculosis treatment in the tertiary care setting-Toronto 1992/1993. CMAJ. 160, 6, 821-2

APPENDIX

APPENDIX A

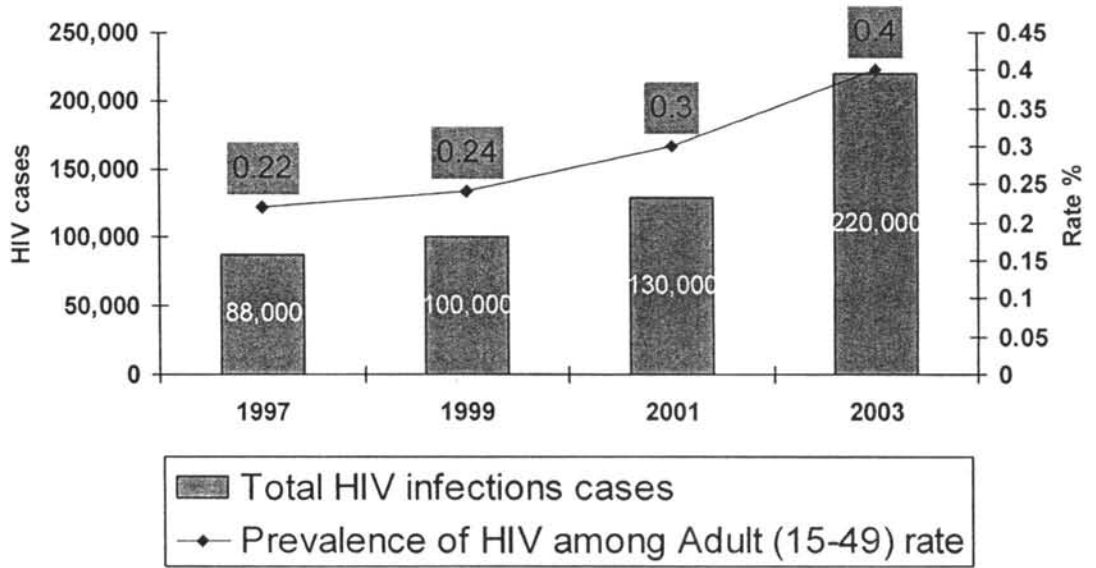


Figure A1 Estimated HIV infections in Vietnam by year

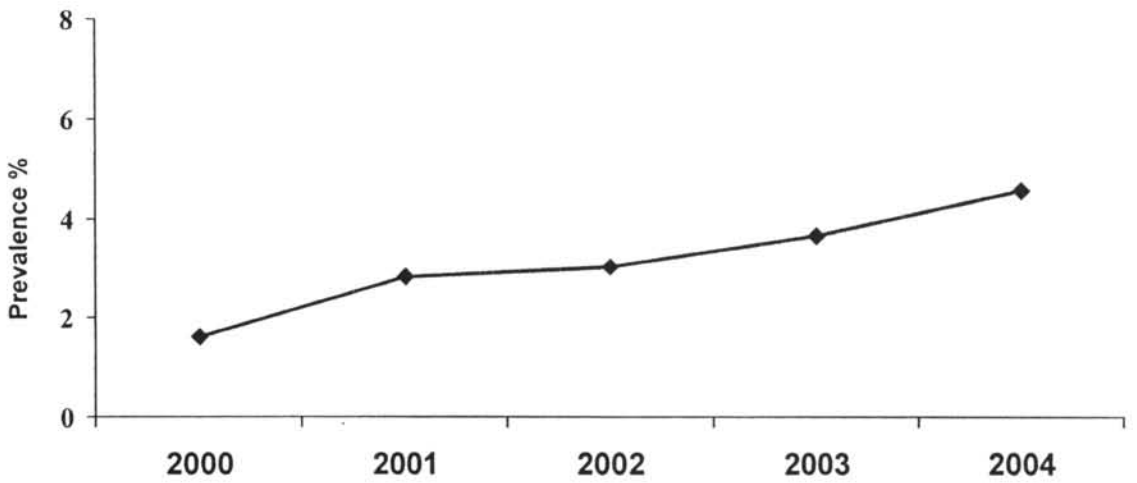


Figure A2 HIV prevalence among TB patients, Vietnam

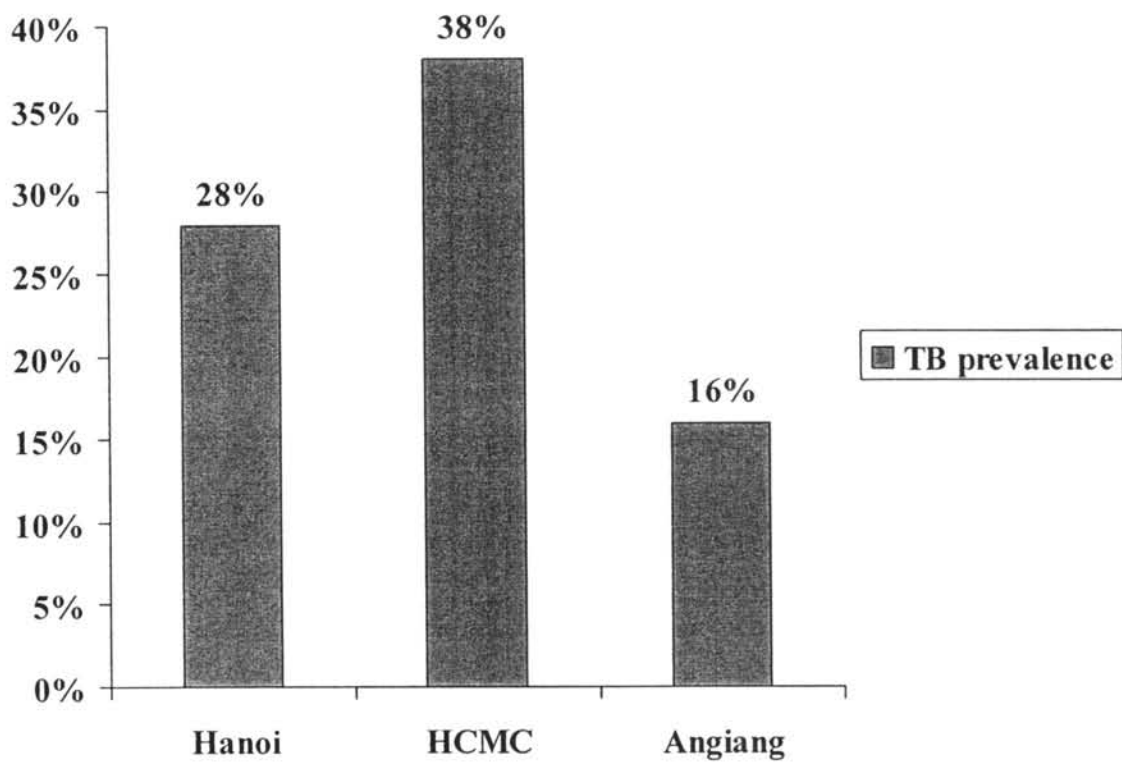


Figure A3 TB prevalence among HIV patients

APPENDIX B

An Giang Province, TB/HIV Evaluation Data Input Form

SURVEY IDENTIFICATION NUMBER

NAME OF PERSON ABSTRACTING CHARTS

DATE / /

PATIENT CLASSIFICATION

HIV-INFECTED PATIENT WHO DIAGNOSED TB THROUGH A **SCREENING CXR** [1]

TB PATIENT DIAGNOSED WITH HIV-INFECTION BY **ROUTINE TESTING** [2]

HIV-INFECTED PATIENT DIAGNOSED WITH TB WHEN PRESENTED WITH SYMPTOMS OF TB [3]

ENTRY

REVIEWER

Section I: Personal Information and Demographics

Please Print:

Last Name (family name): _____ Middle Name: _____ Name: _____

Street Address: _____
Province: _____ City: _____ District: _____ Commune: _____ Hamlet _____

Age: _____ (years)
(Age in reviewed medical record)

AIDS program code number: _____

TB program code number: _____

Please check ONE for each category:

Sex:

___: Male (1)
___: Female (2)

Religion:

___: None (1); ___: Buddhist
(2)
___: Christian (3); ___:
Protestant (4)
___: Other (88), *Specify*

Educational level :

___: Illiterate (1)
___: Secondary
school (2)
___: High school (3)

Marital Status:

___: Married (1)
___: Single (2)
___: Divorced (3)
___: Widow (4)

Ethnicity:

___: Vietnamese (1)
___: Khmer (2)
___: Chinese (3)
___: Other (88), *Specify*

___: Unknown (99)

Section I: Personal Information and HIV Risk Factors

Date of HIV diagnosis (per client):

___/___/___
day month year

Occupation: Please check only one

- ___: Farmer (1)
- ___: Worker (2), *Specify* _____
- ___: Soldier/Police (3)
- ___: Driver (4)
- ___: Public Servant / Administrator (5)
- ___: Intellectual / Scholar / Professional (6)
- ___: Student (7)
- ___: Unemployed (8)
- ___: Other (88), *Specify* _____
- ___: Unknown (99)

How did the client likely contract HIV: Please check only one

- ___: Homosexual (1)
- ___: Sex with Commercial Sex Worker (2)
- ___: Sex with with a regular partner (3)
- ___: Sex with multiple partners (e.g. CSW) (4)
- ___: Heterosexual contact with spouse (5)
- ___: Injection drug use (6)
- ___: HIV-infected mother (7)
- ___: Other (88), *Specify* _____
- ___: Unknown (99)

Type of Client: Please check only one

- ___: Drug User (1)
- ___: Commercial Sex Worker (2)
- ___: Hotel staff working with

Section II: HIV/AIDS Clinical Manifestations and Treatment

AT THE TIME OF HIV DIAGNOSIS:

Had client had any symptoms related to HIV/AIDS:

- ___ : Yes (1)
- ___ : No (2)
- ___ : Unknown (99)

If yes, what symptoms or diseases (check all that apply):

- ___ : Weight loss > 10% (1)
- ___ : Fever > 1 month (2)
- ___ : Diarrhea > 1 month (3)
- ___ : Tuberculosis (4)
- ___ : Candida esophagitis (5)
- ___ : Neurological disorder (6)
- ___ : Recurrent pneumonias (7)
- ___ : Invasive cervical cancer (8)
- ___ : Cryptococcal meningitis (9)
- ___ : Kaposi sarcoma (10)
- ___ : Generalized herpes infection (11)
- ___ : Others (88), *Specify*

When did these symptoms start?:

____/____

month

Has patient been treated with ARVs:

- ___ : Yes (1)
- ___ : No (2)
- ___ : Unknown (99)

If yes, which ARVs (and dates taken): Check all that apply

___ : AZT (1) Start date: ___/___/___
----- End date: ___/___/___

___ : DDI (2) Start date: ___/___/___
----- End date: ___/___/___

___ : DDC (3) Start date: ___/___/___
----- End date: ___/___/___

___ : Others (88) _____

___ : Unknown (99)

Section III: Tuberculosis Screening with CXR

Did this patient receive a screening chest x-ray (CXR)?

- ___: Yes (1)
- ___: No (2)
- ___: Unknown (99)

If yes, date of screening CXR:

___/___/___
day month year

___/___/___
day month year

Result of screening CXR, according to reading at province:

- ___: Normal (1)
- ___: Abnormal (2)
- ___: Unknown (99)

If CXR is abnormal, location of findings (check all that apply):

- ___: Unilateral (1)
- ___: Bilateral (2)
- ___: Upper lobe (3)
- ___: Middle lobe (4)
- ___: Lower lobe (5)
- ___: Pleural Effusion (6)
- ___: Other (88), Specify _____

Result of screening CXR, according to reading at province:

- ___: Normal (1)
- ___: Abnormal (2)
- ___: Unknown (99)

Section IV: Tuberculosis Diagnosis and Treatment

If abnormal CXR, was patient evaluated for TB disease with AFB sputum smears?

- ___: Yes (1)
- ___: No (2)
- ___: Unknown (99)

Date Started TB Treatment:

___ / ___ / ___
day month year

Case Disease Status:

- ___: Pulmonary, smear-positive (1)
 - ___: Pulmonary, smear-negative (2)
 - ___: Extrapulmonary (3), *Specify*
- _____

Registration status:

- ___: New (1)
- ___: Relapse (2)
- ___: Treatment after failure (3)
- ___: Treatment after default (4)
- ___: Transfer in (5)
- ___: Other (88), *Specify*

Initial Treatment Regimen:

- ___: 2HRZE/6HE (1)
- ___: 2HRZS/HE (2)
- ___: 2HRZES/1HRZE/5HRE (3)
- ___: 3HRZS/6HR (4)
- ___: 2HRZE/4HR (5)
- ___: Other (88), (*Specify*) _____
- _____ : Unknown (99)

Section IV (continued): Tuberculosis Diagnosis and Treatment

Did initial TB treatment regimen change?

- ___: Yes (1)
- ___: No (2)
- ___: Unknown (99)

New TB treatment regimen.
Specify: _____

Date TB Treatment regimen changed:

___ / ___ / ___
day month year

Why did initial TB treatment regimen change?:

- ___: Adverse drug event (1)
- ___: Incorrect initial drug regimen (2)
- ___: New diagnosis with HIV (3)
- ___: Change in national TB treatment guidelines (4)
- ___: Other (88), Specify _____
- ___: Unknown (99)

Were there adverse drug events during initial or continuation phase of TB treatment?

- ___: Yes (1)
- ___: No (2)
- ___: Unknown (99)

Type of adverse drug event:

- ___: Rash (1)
- ___: Peripheral neuropathy (2)
- ___: Abdominal pain/nausea (3)
- ___: Jaundice/Hepatitis (4)
- ___: Fever (5)
- ___: Arthralgia (6)
- ___: Other (88), Specify _____
- ___: Unknown (99)

Date Stopped TB Treatment:

___ / ___ / ___

Section V: Clinical Status and Past TB History

Symptoms of TB at diagnosis (check all that apply):

___: Cough (1)

If yes, duration of cough:

less than 1 week (1) 1-2 weeks (2) more than 2 weeks (3)

more than 3 weeks (4) more than 4 weeks (5) unknown (99)

___: Hemoptysis (2)

___: Shortness of breath (3)

___: Chest pain (4)

If yes, duration of chest pain

less than 1 week (1) 1-2 weeks (2) more than 2 weeks (3)

more than 3 weeks (4) more than 4 weeks (5) unknown (99)

___: Fever (5)

If yes, duration of fever

less than 1 week (1) 1-2 weeks (2) more than 2 weeks (3)

more than 3 weeks (4) more than 4 weeks (5) unknown (99)

___: Weight loss (6)

If yes, number of kgs in past 1 month _____

Previous history of TB diagnosis:

___: Yes (1)

___: No (2)

___: Unknown (99)

Date of previous TB diagnosis:

___/___/___
day month year

Previous history of TB treatment:

___: Yes (1)

___: No (2)

___: Unknown (99)

Date of previous TB treatment start:

___/___/___
day month year

Duration of previous TB treatment: _____
(months)

Last Treatment Regimen:

___: 2HRZE/6HE (1)

___: 2HRZS/HE (2)

___: 2HRZES/1HRZE/5HRE (3)

___: 3HRZS/6HR (4)

___: 2HRZE/4HR (5)

___: Other (88), (Specify)