

## **TRENDS IN MORTALITY OF HUMAN IMMUNODEFICIENCY VIRUS INFECTION IN TAIWAN, 1984-2005.**

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**BACKGROUND / AIMS :** By the end of 2005, there were 10,158 reported cases of HIV infections (nationals only, excluding aliens) in Taiwan, of them, 2,403 had developed full blown AIDS, and 1,333 had died. This study analyzed the mortality of HIV/AIDS patients in 1984 to 2005 and evaluated the effect of highly active antiretroviral therapy to the causes of death.

**METHODOLOGY:** Using reported HIV/AIDS case datas from Taiwan CDC, all AIDS report records and death certifications were reviewed. The patients were divided into before 1997 and after 1997 according to the year of HIV diagnosis.

**RESULT:** There were 632 deaths that accounted for 41% of all HIV/AIDS patients diagnosed before 1997. After the introduction of HAART in 1997, there were only 716 deaths that accounted for 8% of all HIV/AIDS patients diagnosed after 1997, with a significant decline in compared to the prior period ( $p < 0.0001$ ). The overall mortality rate was 0.052 deaths/person-year before 1997 and 0.039 deaths/person-year after 1997. AIDS related diseases such as opportunistic infections and AIDS-related cancer showed a marked decline after HAART, AIDS related death was 0.036 deaths/person-year before 1997 and 0.019 deaths/person-year after 1997 ( $p < 0.05$ ). Besides AIDS-related illness, the leading cause of death was sepsis, the proportion of sepsis increased from 8.5% to 25.6% after 1997 ( $p < 0.001$ ), especially deaths due to infective endocarditis which increased dramatically. Death due to suicide also had a significant increase after 1997, 3.2% vs. 6.1% ( $p < 0.05$ ).

**DISCUSSION/CONCLUSIONS:** HAART is associated with a marked decline in the mortality of HIV/ AIDS patients, especially AIDS-related death. But the sharp increase in HIV infection in intravenous drug users changed the pattern of mortality.

**Key Words:** HIV/ AIDS, mortality, HAART